



MOBILITY SOLUTIONS TO HELP YOU  
**PUSH, PULL & LIFT WITH EASE**

**CATALOGUE 42.0**



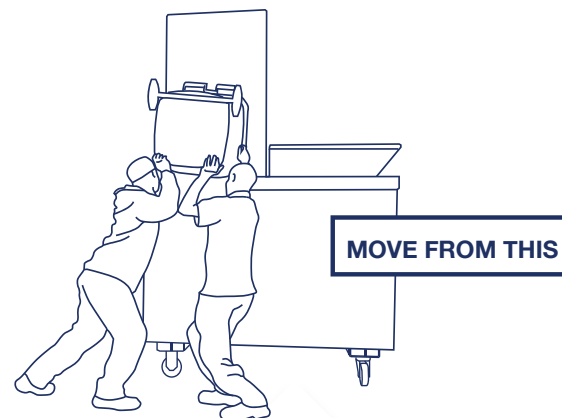
## 35% of all serious injuries are caused by pushing, pulling or lifting\*

We can help you, and your staff, stay safe by providing solutions that eliminate manual materials handling from your workplace. With our range of castors and materials handling equipment, a single operator can move up to 20 tonnes safely, without risk of back or shoulder strain. Furthermore, as a solutions provider, we can design and build everything to suit your particular workplace. This means that you, and your staff can do more with less—more productivity, less risk to injury.

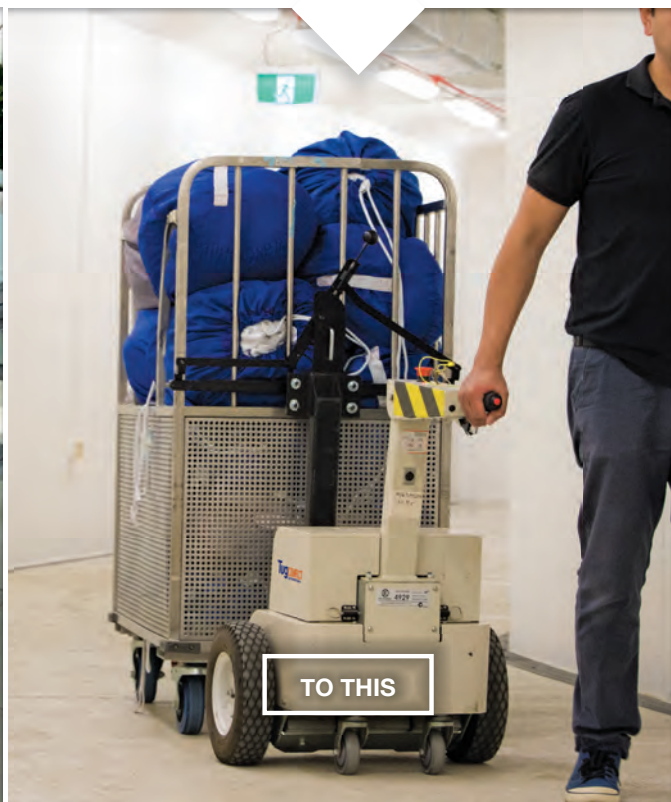
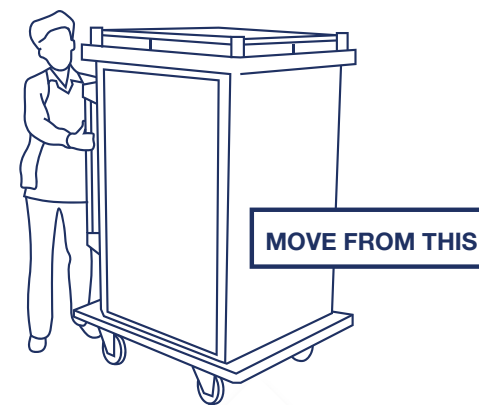
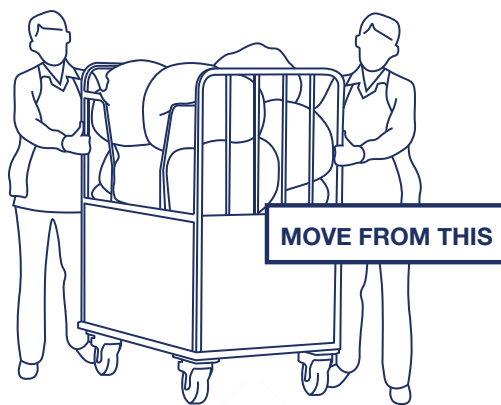
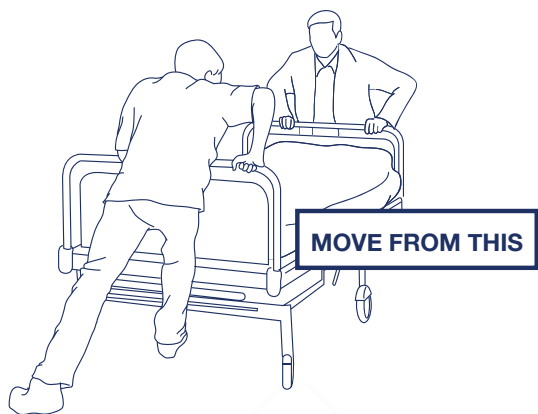


\* Safe Work Australia 2014 statistics on worker's compensation claims.

## We can help you









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**Fallshaw**  
GROUP

## Mobility solutions to help you push, pull & lift with ease

We are a single-source solution provider in mobility solutions. As experts in mindful moving, we help our customers improve safety, productivity and profit in any process that involves pushing, pulling or lifting.

- We work with healthcare, commercial and industrial original equipment manufacturers (OEM) to offer components or complementary products that either reduce the lowest total cost of ownership or provide enhanced product features that increase the saleability or value of their OEM equipment.
- We work with healthcare facilities to improve outcomes in their push-pull processes and patient safety.
- We work with industrial end users to improve their move-safe processes.

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# Fallshaw

## Wheels and castors

Proudly designed and made in Australia

For over 55 years, Fallshaw have been designing and manufacturing high quality wheels and castors for use throughout Australia and the world.

We design our castors to steer true, give a smooth ride, require minimal push effort, and have brakes that work every time.

From castors for your office chairs, to medical equipment, and all the way to heavy industrial applications, we make castors for a wide variety of load ratings, features, mount options and styles that seamlessly integrate with your furniture or equipment, across all industries.

Our design philosophy is simple. Make castors that you can forget about. Which is why with minimal and easy preventative maintenance, you won't have to worry about our castors. They will perform every time. And we back that up with a three year warranty on the castors we make.



# Choosing the right castor or wheel

## 1 Choose the range based on what you are using it for and how much load it will carry

### Light to medium duty—L, Twin, N, Metal ball, K, M and Big M

Load rating: 25–200 kg

Suitable for:

- Trolleys and carts
- Shop fittings and displays
- Mobile storage



### General duty to heavy duty—J, Y and O Series

Load rating: 200–500 kg

Suitable for:

- Linen carts
- Work platforms
- Roll cages
- Stock trolleys



### Very heavy duty—W, X, V and A Series

Load rating: 500–3500 kg

Suitable for:

- Stock trolleys for automotive plants
- Shipping containers
- Multi-purpose industrial trolleys



### Medical—Trinity and Trinity EBC, Central locking, Wheelchair

Load rating: 100–150 kg

- Medical equipment, hospital beds and other applications that need an automatic or accessible brake
- Recliner chairs
- Mobile computer tables



## 2 Choose a wheel based on the floor surface it will be travelling on

### Outdoors and rough ground

Bouncy, elastic tyres help get over bumps. That's why wheelbarrows and other applications that involve rough ground use pneumatic or rubber tyres.



### Soft and smooth floors

Hard wheels have high load bearing capacity and reduce push effort on carpet and soft surfaces, but are very noisy on tiles and other hard surfaces and can also leave indentations on wooden floors.



### Variable floor surfaces

Road cases are a classic example of tyres that need to adapt to a wide range of floor surfaces. When bands are on the move, their equipment needs to travel over bitumen, carpet, lino, wood and over curbs and stairs. These wheels go everywhere!



### Specialised applications

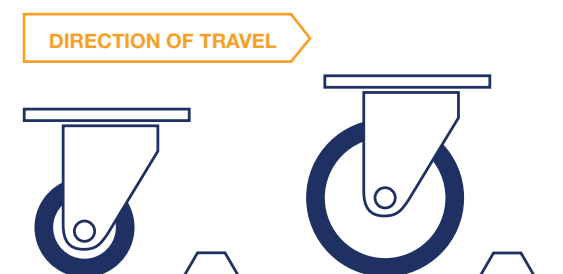
Some applications have specific requirements, and we have a wide range of wheels to suit, including high and low temperature, wheelie bin wheels, central locking castors, antistatic wheels and many, many more!



## 3 Choose the wheel's diameter

The larger the wheel, the easier to push and the better the ride comfort (ability to pass over bumps and to minimize vibration).

**Why? The larger the wheel, the smaller obstacles are in proportion to the wheel's diameter, resulting in greater momentum.**



Wheel diameter should be maximised, bearing in mind that:

- As a rule of safety a maximum height of 1400 mm is recommended (including the goods being carried) to enable a clear line of sight.
- Small wheels are sometimes used to reduce the centre of gravity to address tip hazards due to top-heavy loads.



## 4 Choose the bearing type

### Ball

Used in applications where heat can build up due to friction caused by constant movement and/or higher speeds—all towing applications use precision bearings (as the high tolerance and hardened steel used in the sealed and greased bearings reduces heat build-up that can cause weakening of the wheel). Ball bearings offer the lowest friction and therefore the lowest push effort—they are also the most expensive type of bearing in our range.



### Roller

Used in high impact applications (the large surface area of the bearing spreads load and therefore protects against high impact). Not suitable for high speed (more than 6 km/h).

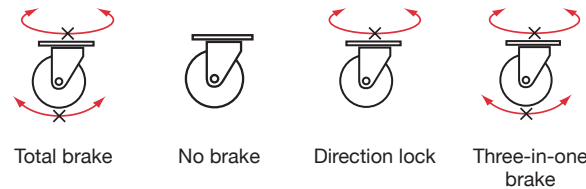


### Plain bush (or bore)

Used in corrosive environments (polymer bearings won't rust). Also used to reduce cost (the cheapest kind of 'basic' bush).



## 5 Choose the type of brake and castor configuration

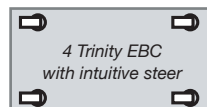


### Castor configuration options

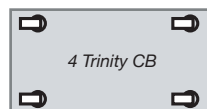
#### Traditional



#### World's best practice



Trinity EBC with intuitive steer, automatically apply the steering device in the right direction, with the use of a motion sensor.



Trinity complete brake (CB) castors have a 3-in-1 brake that includes a direction lock option to steer from either end.

DIRECTION OF TRAVEL

## 6 Choose fittings

### Bolt hole

Suitable for installing into tubular legs. We have a full range of expanding adaptors, pintle bolts, threaded tube ends, grip neck and friction stems and solid pintles, all designed to work seamlessly with any bolt hole castor.



### Washer mount (for bolt hole)

Suitable for mounting bolt hole castors into equipment that do not have tubular legs.



### Plate mount

Suitable for mounting onto equipment that have smooth flat surfaces, such as sheet metal or wood.



More information on fitting options can be found from page 64.

# General castors

## Light to medium duty castors

- L Series, Twin Series, N Series, Metal ball castors, K Series, M Series and Big M Series

## General to heavy duty castors

- Y Series, J Series, O Series and H Series

## Very heavy duty castors

- W Series, X Series, V Series and A Series





# L Series 30 kg



## Features

- Thermoplastic elastomer (TPE) or hard nylon wheels
- Nickel coated forks
- Suitable for furniture and light duty trolleys
- Bolt hole pintle sold separately (see page 64)

## Wheels



**LJP**  
TPE, plain bearing



**LNN**  
Hard nylon, plain bearing

## Forks



**LKP**  
Plate with swivel



**LKPBR**  
Plate with swivel and wheel brake



**LKF**  
Fixed plate, no swivel



**LKH**  
Bolt hole swivel



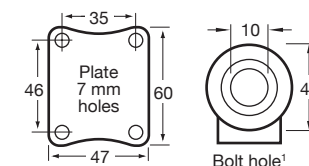
**LKHBR**  
Bolt hole swivel and wheel brake

## Specifications

Wheel	Max load (kg)	Diameter x tread (mm)	Hub x bore (mm)
LJP50	30	50 x 20	25 x 6
LNN50	30	50 x 20	25 x 6

Forks	Wheel size (mm)	Mount height (mm)	Turning radius (mm)
LKP/LKH/LKF*	50	65	47
LKPBR	50	65	60
LKHBR	50	65	67

## Castor mount options (mm)



## Order codes

Wheel	Castor
LJP50	LJP50/LKP
	LJP50/LKPBR
	LJP50/LKF
	LJP50/LKH
	LJP50/LKHBR
LNN50	LNN50/LKP
	LNN50/LKPBR
	LNN50/LKF
	LNN50/LKH
	LNN50/LKHBR

\* LKF—fixed plate has no turning radius.

<sup>1</sup> Grip-neck pintles also available (see page 64).

GENERAL CASTORS

Twin Series 40 kg



Features

- Twin wheel plastic castors with or without wheel brake
- Suitable for office equipment and light trolleys

Castors



**TW50P**  
Plate with swivel



**TW50PBR**  
Plate with swivel and wheel brake



**TW5038**  
Threaded 3/8 pintle



**TW5038BR**  
Threaded 3/8 pintle with wheel brake

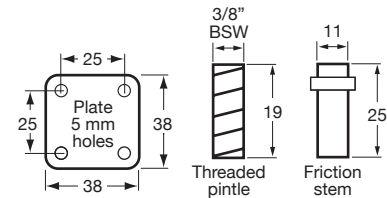


**TW50CJ**  
Friction stem

Order codes and specifications

Castor code	Diameter (mm)	Height (mm)	Turning radius (mm)	Max load (kg)
TW50P	50	61	46	40
TW50PBR	50	61	60	40
TW5038	50	61	46	40
TW5038BR	50	61	60	40
TW50CJ	50	61	46	40

Castor mount options (mm)



N Series 90 kg



Features

- White nylon wheels in zinc plated forks, Chicago screw axles, with or without wheel brake
- Ultra-low mount height for heavy furniture and refrigerators

Castors



**NNN40/NZP**  
Plate with swivel

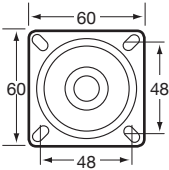


**NNN40/NZPBR**  
Plate with swivel and wheel brake

Order codes and specifications

Castor code	Max load (kg)	Diameter x tread (mm)	Hub x bore (mm)	Mount height (mm)	Turning radius (kg)
NNN40/NZP	90	40 x 44	53 x 6	62	40
NNN40/NZPBR	90	40 x 44	53 x 6	62	71

Castor mount (mm)





# Metal ball castors



## Castors



**BUA70**

70 mm diameter metal ball castor with PU wheel



**BUA100**

100 mm diameter metal ball castor with PU wheel

Castor	Max load (kg)	Diameter (mm)	Mount height (mm)
BUA70	40	70	80
BUA100	70	100	105

## Mount types

		Order code
BUA70	38 mm square plate	BUA70/BCPSQ38
	Threaded 3/8" UNF x 20 mm long	BUA70/BC38UX20
	Threaded 3/8" UNF x 50 mm long	BUA70/BC38UX50
	8 mm gripneck	BUA70/BCJ
	Threaded 3/8" BSW x 20 mm long	BUA70/BC38BX20
	Threaded 5/16" BSW x 25 mm long	BUA70/BC516BX25
	11 mm circlip	BUA70/BCC
BUA100	38 mm square plate	BUA70/BCPSQ45
	45 mm square plate	BUA100/BCPSQ45
	Threaded 1/2" UNF x 25 mm long	BUA100/BC12UX25
	Threaded 3/8" UNF x 50 mm long	BUA100/BC38UX50

## Features

- Available with 70 or 100 mm non-marking polyurethane (PU) wheels
- Chrome plated finish
- Ball castors are sold as two left-facing and two right-facing castors.

**Please note:** Ball castors cannot be sold as individuals—such as a single left facing or a single right facing castor. Four castors must be purchased.

# K Series 50–100 kg



## Features

- Thermoplastic elastomer (TPE), grey rubber, hard nylon or polyurethane (PU) wheels
- Swivel, fixed plate and bolt hole zinc plated Core Coat™ forks with or without total brake
- Available with Chicago screw axles and alternate colourways
- Excellent corrosion resistance at three times the Australian Standard
- Made in Australia

## Wheels



- KJQ\***  
TPE, precision bearing, thread guard
- KSA**  
Grey rubber, plain bearing, optional thread guard<sup>1</sup>
- KNN**  
Hard nylon, plain bearing
- KUQ\***  
PU, precision bearing, optional thread guard<sup>1</sup>

Wheel	Max load (kg)	Diameter x tread (mm)	Hub x bore (mm)
KJQ65G	50	65 x 23	30 x 8
KJQ75G	50	75 x 23	30 x 8
KJQ100G	50	100 x 23	30 x 8
KSA65	50	65 x 23	30 x 12
KSA75	50	75 x 23	30 x 12
KSA100	50	100 x 23	30 x 12
KNN65	50	65 x 23	30 x 8
KNN75	65	75 x 23	30 x 8
KNN100	70	100 x 23	30 x 8
KUQ75	100	75 x 23	30 x 8
KUQ100	100	100 x 23	30 x 8

\* Wheels also available with plain bearings—KJA, KUA.  
Note that plain bearing bore is 12 mm.  
<sup>1</sup> For optional thread guards, add **G** at the end of wheel code.

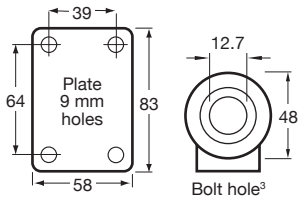
## Forks



- KZP**  
Plate with swivel
- KZPTB**  
Plate with swivel and total brake
- KZF**  
Fixed plate, no swivel
- KZH**  
Bolt hole swivel
- KZHTB**  
Bolt hole swivel and total brake

Fork	Wheel size (mm)	Mount height (mm)	Turning radius (mm)
KZP/KZH/KZF <sup>2</sup>	65	96	63
	75	104	69
	100	131	82
KZPTB/KZHTB	65	96	89
	75	104	89
	100	131	89

## Fork mounts



<sup>2</sup> KZF—fixed plate has no turning radius.  
<sup>3</sup> Bushes available to reduce bolt hole to 8 and 10 mm.  
Grip-neck pintles also available (see page 64).



## Colourway and axle options

### Colourways



#### Standard

Default castor colourway

#### Red

Add **R** to castor code

Example:  
KJQ65G/KZPTBR

#### Grey

Add **G** to castor code

Example:  
KJQ65G/KZPTBG

### Chicago screw axle (optional)



To upgrade to a Chicago screw axle, add **C** to the end of castor code (after any colourway options)

Example:  
KJQ65G/KZPTBRC

## Order codes

Wheel	Fork	Castor	Wheel	Fork	Castor
KJQ65G	K65ZP	KJQ65G/KZP	KNN65	K65ZP	KNN65/KZP
	K65ZPTB	KJQ65G/KZPTB		K65ZPTB	KNN65/KZPTB
	K65ZF	KJQ65G/KZF		K65ZF	KNN65/KZF
	K65ZH	KJQ65G/KZH		K65ZH	KNN65/KZH
	K65ZHTB	KJQ65G/KZHTB		K65ZHTB	KNN65/KZHTB
KJQ75G	K75ZP	KJQ75G/KZP	KNN75	K75ZP	KNN75/KZP
	K75ZPTB	KJQ75G/KZPTB		K75ZPTB	KNN75/KZPTB
	K75ZF	KJQ75G/KZF		K75ZF	KNN75/KZF
	K75ZH	KJQ75G/KZH		K75ZH	KNN75/KZH
	K75ZHTB	KJQ75G/KZHTB		K75ZHTB	KNN75/KZHTB
KJQ100G	K100ZP	KJQ100G/KZP	KNN100	K100ZP	KNN100/KZP
	K100ZPTB	KJQ100G/KZPTB		K100ZPTB	KNN100/KZPTB
	K100ZF	KJQ100G/KZF		K100ZF	KNN100/KZF
	K100ZH	KJQ100G/KZH		K100ZH	KNN100/KZH
	K100ZHTB	KJQ100G/KZHTB		K100ZHTB	KNN100/KZHTB
KSA65	K65ZP	KSA65/KZP	KUQ75	K75ZP	KUQ75/KZP
	K65ZPTB	KSA65/KZPTB		K75ZPTB	KUQ75/KZPTB
	K65ZF	KSA65/KZF		K75ZF	KUQ75/KZF
	K65ZH	KSA65/KZH		K75ZH	KUQ75/KZH
	K65ZHTB	KSA65/KZHTB		K75ZHTB	KUQ75/KZHTB
KSA75	K75ZP	KSA75/KZP	KUQ100	K100ZP	KUQ100/KZP
	K75ZPTB	KSA75/KZPTB		K100ZPTB	KUQ100/KZPTB
	K75ZF	KSA75/KZF		K100ZF	KUQ100/KZF
	K75ZH	KSA75/KZH		K100ZH	KUQ100/KZH
	K75ZHTB	KSA75/KZHTB		K100ZHTB	KUQ100/KZHTB
KSA100	K100ZP	KSA100/KZP			
	K100ZPTB	KSA100/KZPTB			
	K100ZF	KSA100/KZF			
	K100ZH	KSA100/KZH			
	K100ZHTB	KSA100/KZHTB			

# M Series 85–200 kg



### Features

- Thermoplastic elastomer (TPE), blue high resilience (hi-res) rubber, grey rubber, polyurethane (PU) or hard nylon wheels with an 8 mm bore diameter
- Swivel, fixed plate and bolt hole zinc plated Core Coat™ forks with or without total brake or direction lock
- Available with Chicago screw axles and alternate colourways
- Excellent corrosion resistance at three times the Australian Standard
- Made in Australia

### Wheels

<b>MJQ*</b> TPE, precision bearing, thread guard	<b>STQ</b> Grey rubber, round profile, precision bearing, thread guard	<b>MSQ¹</b> Grey rubber, flat profile, precision bearing, thread guard	<b>CBQ</b> Blue hi-res rubber, precision bearing, thread guard	<b>MBQ</b> Blue hi-res rubber, precision bearing, thread guard	<b>MNN²</b> Hard nylon, plain bearing	<b>DNQ³</b> Hard nylon, precision bearing	<b>QUQ¹</b> PU, precision bearing, thread guard

### Forks

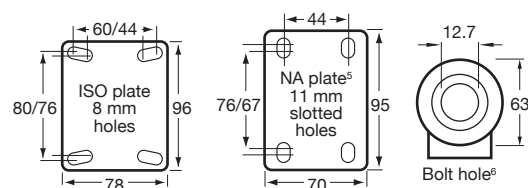
<b>MZF</b> Fixed plate, no swivel	<b>MZPTB</b> Plate with swivel and total brake	<b>MZPDL</b> Plate with swivel and direction lock	<b>MZF</b> Fixed plate, no swivel	<b>MZH</b> Bolt hole swivel	<b>MZHTB</b> Bolt hole swivel and total brake	<b>MZHDL</b> Bolt hole swivel and direction lock

Wheel	Max load (kg)	Diameter x tread (mm)	Hub x bore (mm)
MJQ75G	85	75 x 32	40 x 8
MJQ100G	85	100 x 32	40 x 8
MJQ125G	85	125 x 32	40 x 8
STQ75G	100	75 x 32	40 x 8
STQ100G	100	100 x 32	40 x 8
STQ125G	100	125 x 32	40 x 8
MSQ100G	140	100 x 34	40 x 8
MSQ125G	150	125 x 34	40 x 8
CBQ75G	85	75 x 33	40 x 8
CBQ100G	100	100 x 33	40 x 8
CBQ125G	100	125 x 33	40 x 8

Wheel	Max load (kg)	Diameter x tread (mm)	Hub x bore (mm)
MBQ100G	140	100 x 32	40 x 8
MBQ125G	150	125 x 32	40 x 8
MNN75	150	75 x 32	40 x 8
MNN100	150	100 x 32	40 x 8
MNN125	150	125 x 32	40 x 8
DNQ125	200	125 x 32	40 x 8
QUQ75G	200	75 x 32	40 x 8
QUQ100G	200	100 x 32	40 x 8
QUQ125G	200	125 x 32	40 x 8

Fork	Wheel size (mm)	Mount height (mm)	Turning radius (mm)
MZP/MZH/MZF <sup>4</sup>	75	106	71
	100	135	91
	125	161	103
MZPTB/MZPDL/ MZHTB/ MZHDL	75	106	118
	100	135	128
	125	161	128

## Fork mounts



## Colourway and axle options

## Colourway



## Standard

Default castor colourway

## Black

Add **B** to castor codeExample:  
CBQ75G/MZPTBB

## Grey

Add **G** to castor codeExample:  
CBQ75G/MZPTBG

## Chicago screw axle (optional)

To upgrade to a Chicago screw axle, add **C** to the end of castor code (after any colourway options)Example:  
CBQ75G/MZPTBBC

## Order codes

Wheel	Fork	Castor
CBQ75G	M75ZP	CBQ75G/MZP
	M75ZPTB	CBQ75G/MZPTB
	M75ZPDL	CBQ75G/MZPDL
	M75ZF	CBQ75G/MZF
	M75ZH	CBQ75G/MZH
	M75ZHTB	CBQ75G/MZHTB
	M75ZHDL	CBQ75G/MZHDL
CBQ100G	M100ZP	CBQ100G/MZP
	M100ZPTB	CBQ100G/MZPTB
	M100ZPDL	CBQ100G/MZPDL
	M100ZF	CBQ100G/MZF
	M100ZH	CBQ100G/MZH
	M100ZHTB	CBQ100G/MZHTB
	M100ZHDL	CBQ100G/MZHDL
CBQ125G	M125ZP	CBQ125G/MZP
	M125ZPTB	CBQ125G/MZPTB
	M125ZPDL	CBQ125G/MZPDL
	M125ZF	CBQ125G/MZF
	M125ZH	CBQ125G/MZH
	M125ZHTB	CBQ125G/MZHTB
	M125ZHDL	CBQ125G/MZHDL
DNQ125	M125ZP	DNQ125/MZP
	M125ZPTB	DNQ125/MZPTB
	M125ZPDL	DNQ125/MZPDL
	M125ZF	DNQ125/MZF
	M125ZH	DNQ125/MZH
	M125ZHTB	DNQ125/MZHTB
	M125ZHDL	DNQ125/MZHDL
MBQ100G	M100ZP	MBQ100G/MZP
	M100ZPTB	MBQ100G/MZPTB
	M100ZPDL	MBQ100G/MZPDL
	M100ZF	MBQ100G/MZF
	M100ZH	MBQ100G/MZH
	M100ZHTB	MBQ100G/MZHTB
	M100ZHDL	MBQ100G/MZHDL

Wheel	Fork	Castor
MBQ125G	M125ZP	MBQ125G/MZP
	M125ZPTB	MBQ125G/MZPTB
	M125ZPDL	MBQ125G/MZPDL
	M125ZF	MBQ125G/MZF
	M125ZH	MBQ125G/MZH
	M125ZHTB	MBQ125G/MZHTB
	M125ZHDL	MBQ125G/MZHDL
MJQ75G	M75ZP	MJQ75G/MZP
	M75ZPTB	MJQ75G/MZPTB
	M75ZPDL	MJQ75G/MZPDL
	M75ZF	MJQ75G/MZF
	M75ZH	MJQ75G/MZH
	M75ZHTB	MJQ75G/MZHTB
	M75ZHDL	MJQ75G/MZHDL
MJQ100G	M100ZP	MJQ100G/MZP
	M100ZPTB	MJQ100G/MZPTB
	M100ZPDL	MJQ100G/MZPDL
	M100ZF	MJQ100G/MZF
	M100ZH	MJQ100G/MZH
	M100ZHTB	MJQ100G/MZHTB
	M100ZHDL	MJQ100G/MZHDL
MJQ125G	M125ZP	MJQ125G/MZP
	M125ZPTB	MJQ125G/MZPTB
	M125ZPDL	MJQ125G/MZPDL
	M125ZF	MJQ125G/MZF
	M125ZH	MJQ125G/MZH
	M125ZHTB	MJQ125G/MZHTB
	M125ZHDL	MJQ125G/MZHDL

<sup>\*</sup> MJQ also available in conductive—MAQ, or plain bearing—MJA.<sup>1</sup> Wheels also available with plain bearing—MSA, QUA.<sup>2</sup> MNN actual bore size is 12 mm reduced to 8 mm with an axle bush. Also available in white—MNN...W.<sup>3</sup> DNQ also available in white—DNQ125W.<sup>4</sup> MZF—fixed plate has no turning radius.<sup>5</sup> North American plate. Add **N** at the end of fork code to purchase (e.g. CBQ75G/MZPNTB).<sup>6</sup> Bushes available to reduce bolt hole to 8 and 10 mm. Grip-neck pintles also available (see page 64).



Wheel	Fork	Castor
MNN75	M75ZP	MNN75/MZP
	M75ZPTB	MNN75/MZPTB
	M75ZPDL	MNN75/MZPDL
	M75ZF	MNN75/MZF
	M75ZH	MNN75/MZH
	M75ZHTB	MNN75/MZHTB
	M75ZHDL	MNN75/MZHDL
MNN100	M100ZP	MNN100/MZP
	M100ZPTB	MNN100/MZPTB
	M100ZPDL	MNN100/MZPDL
	M100ZF	MNN100/MZF
	M100ZH	MNN100/MZH
	M100ZHTB	MNN100/MZHTB
	M100ZHDL	MNN100/MZHDL
MNN125	M125ZP	MNN125/MZP
	M125ZPTB	MNN125/MZPTB
	M125ZPDL	MNN125/MZPDL
	M125ZF	MNN125/MZF
	M125ZH	MNN125/MZH
	M125ZHTB	MNN125/MZHTB
	M125ZHDL	MNN125/MZHDL
MSQ100G	M100ZP	MSQ100G/MZP
	M100ZPTB	MSQ100G/MZPTB
	M100ZPDL	MSQ100G/MZPDL
	M100ZF	MSQ100G/MZF
	M100ZH	MSQ100G/MZH
	M100ZHTB	MSQ100G/MZHTB
	M100ZHDL	MSQ100G/MZHDL
MSQ125G	M125ZP	MSQ125G/MZP
	M125ZPTB	MSQ125G/MZPTB
	M125ZPDL	MSQ125G/MZPDL
	M125ZF	MSQ125G/MZF
	M125ZH	MSQ125G/MZH
	M125ZHTB	MSQ125G/MZHTB
	M125ZHDL	MSQ125G/MZHDL

Wheel	Fork	Castor
QUQ75G	M75ZP	QUQ75G/MZP
	M75ZPTB	QUQ75G/MZPTB
	M75ZPDL	QUQ75G/MZPDL
	M75ZF	QUQ75G/MZF
	M75ZH	QUQ75G/MZH
	M75ZHTB	QUQ75G/MZHTB
	M75ZHDL	QUQ75G/MZHDL
QUQ100G	M100ZP	QUQ100G/MZP
	M100ZPTB	QUQ100G/MZPTB
	M100ZPDL	QUQ100G/MZPDL
	M100ZF	QUQ100G/MZF
	M100ZH	QUQ100G/MZH
	M100ZHTB	QUQ100G/MZHTB
	M100ZHDL	QUQ100G/MZHDL
QUQ125G	M125ZP	QUQ125G/MZP
	M125ZPTB	QUQ125G/MZPTB
	M125ZPDL	QUQ125G/MZPDL
	M125ZF	QUQ125G/MZF
	M125ZH	QUQ125G/MZH
	M125ZHTB	QUQ125G/MZHTB
	M125ZHDL	QUQ125G/MZHDL

Wheel	Fork	Castor
STQ75G	M75ZP	STQ75G/MZP
	M75ZPTB	STQ75G/MZPTB
	M75ZPDL	STQ75G/MZPDL
	M75ZF	STQ75G/MZF
	M75ZH	STQ75G/MZH
	M75ZHTB	STQ75G/MZHTB
	M75ZHDL	STQ75G/MZHDL
STQ100G	M100ZP	STQ100G/MZP
	M100ZPTB	STQ100G/MZPTB
	M100ZPDL	STQ100G/MZPDL
	M100ZF	STQ100G/MZF
	M100ZH	STQ100G/MZH
	M100ZHTB	STQ100G/MZHTB
	M100ZHDL	STQ100G/MZHDL
STQ125G	M125ZP	STQ125G/MZP
	M125ZPTB	STQ125G/MZPTB
	M125ZPDL	STQ125G/MZPDL
	M125ZF	STQ125G/MZF
	M125ZH	STQ125G/MZH
	M125ZHTB	STQ125G/MZHTB
	M125ZHDL	STQ125G/MZHDL

# Big M Series 200 kg



- Grey rubber wheel with round profile, precision bearing and thread guard (plain bearing wheel also available)
- Swivel, fixed plate and bolt hole zinc plated Core Coat™ forks with total brake or direction lock
- Available with Chicago screw axles and alternate colourways
- Excellent corrosion resistance at three times the Australian Standard
- Made in Australia

## Castor options

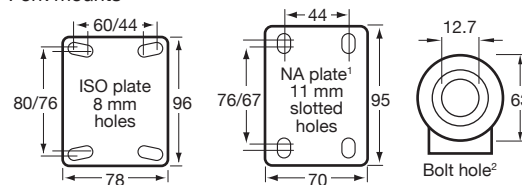


Wheel	Max load (kg)	Diameter x tread (mm)	Hub x bore (mm)
QTQ150G	200	150 x 34	40 x 8
QTQ175G	200	175 x 34	40 x 8

Fork	Wheel size (mm)	Mount height (mm)	Turning radius (mm)
MZP/MZH/	150	187	130
	175	214	145
MZFN	150	187	-
MZPTB/MZPDL	150	187	153
MZHTB/MZHDL	175	214	153

### Fork mounts



## Colourway and axle options

### Colourway

TB Pedal	Seal	TB Pedal	Seal	TB Pedal	Seal
Standard		Black		Grey	
Default castor colourway		Add <b>B</b> to castor code		Add <b>G</b> to castor code	
		Example: QTQ150G/MZPTBB		Example: QTQ150G/MZPTBG	

### Chicago screw axle (optional)



To upgrade to a Chicago screw axle, add **C** to the end of castor code (after any colourway options)

Example:  
QTQ150G/MZPTBBC

## Order codes

Wheel	Fork	Castor
QTQ150G	M150ZP	QTQ150G/MZP
	M150ZPTB	QTQ150G/MZPTB
	M150ZPDL	QTQ150G/MZPDL
	M150ZFN	QTQ150G/MZFN
	M150ZH	QTQ150G/MZH
	M150ZHTB	QTQ150G/MZHTB
QTQ175G	M150ZHD	QTQ150G/MZHD
	M175ZP	QTQ175G/MZP
	M175ZPTB	QTQ175G/MZPTB
	M175ZPDL	QTQ175G/MZPDL
	M175ZH	QTQ175G/MZH
	M175ZHTB	QTQ175G/MZHTB
	M175ZHD	QTQ175G/MZHD

\* Wheel also available with plain bearing—QTA.

<sup>1</sup> North American plate. Add **N** at the end of fork code to purchase (e.g. QTQ175G/MZPNTB).

<sup>2</sup> Bushes available to reduce bolt hole to 8 and 10 mm.

# Y Series 50–180 kg



## Features

- Available with puncture-proof neoprene tyres on steel rims or traditional pneumatic neoprene tyres on steel or polypropylene rims, in non-marking grey or black
- Swivel or fixed plate zinc plated forks

## Steel rim wheels



**YPRIB200**  
Puncture-proof grey tyre, precision bearing



**YPLUG250/ YSLUG250**  
Puncture-proof or pneumatic black tyre, deep groove ball bearing



**YPSTR350/ YSSTR350**  
Puncture-proof or pneumatic black tyre, precision bearing



**YPKNO400/ YSKNO400**  
Puncture-proof or pneumatic black tyre, B deep groove ball bearing



**YSHWY400**  
Pneumatic black tyre, Q ball precision bearing

## Polypropylene rim wheels



**YRIB200**  
Grey tyre, precision bearing



**YLUG250**  
Black tyre, deep groove ball bearing



**YLGG250**  
Grey tyre, deep groove ball bearing



**YSTR350**  
Black tyre, precision bearing



**YKNO400**  
Black tyre, B deep groove ball bearing

## Specifications

Wheel	Type	Max load (kg)	Diameter x tread (mm)
YPRIB200	Puncture-proof	50	<b>200</b> x 50
YPLUG250	Puncture-proof	75	<b>220</b> x 54
YPSTR350	Puncture-proof	100	<b>265</b> x 70
YPKNO400	Puncture-proof	120	<b>400</b> x 100
YSLUG250	Pneumatic, steel	120	<b>220</b> x 54
YSSTR350	Pneumatic, steel	180	<b>265</b> x 70
YSKNO400	Pneumatic, steel	220	<b>400</b> x 100
YSHWY400	Pneumatic, steel	360	<b>400</b> x 100
YRIB200	Pneumatic, plastic	75	<b>200</b> x 50
YLUG250	Pneumatic, plastic	100	<b>220</b> x 54
YLGG250	Pneumatic, plastic	100	<b>220</b> x 54
YSTR350	Pneumatic, plastic	140	<b>265</b> x 70
YKNO400	Pneumatic, plastic	200	<b>400</b> x 100



## Forks

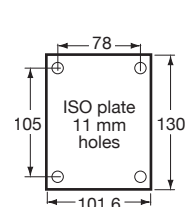
**YZP**

Plate with swivel

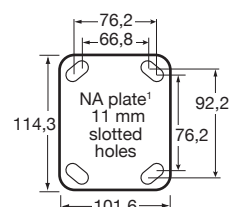
**YZF**Fixed plate,  
no swivel

Forks	Nominal size	Mount height (mm)	Turning radius (mm)
YZP/YZF*	200	238	155
	250	250	200
	350	315	223
	400	490	328

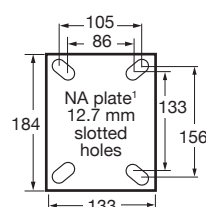
### Fork mounts



**Standard:**  
ISO plate for 200,  
250 and 350 mm  
wheel sizes.



**Optional:**  
NA plate for 250 mm  
wheel sizes.  
<sup>1</sup> For North American  
plate add **N** to end of  
fork code to purchase  
(eg. YRIB250/YZPN).



**Standard:**  
NA plate for 400 mm  
(400X8) wheel sizes.

\* YZF fixed fork has no turning radius.

## Order codes

Wheel code	Fork code	Castor code
<b>YPRIB200</b>	Y200ZP	YPRIB200/YZP
	Y200ZF	YPRIB200/YZF
<b>YPLUG250</b>	Y250ZP	YPLUG250/YZP
	Y250ZF	YPLUG250/YZF
<b>YPSTR350</b>	Y350ZP	YPSTR350/YZP
	Y350ZF	YPSTR350/YZF
<b>YPKNO400</b>	Y400ZP	YPKNO400/YZP
	Y400ZF	YPKNO400/YZF
<b>YSLUG250</b>	Y250ZP	YSLUG250/YZP
	Y250ZF	YSLUG250/YZF
<b>YSSTR350</b>	Y350ZP	YSSTR350/YZP
	Y350ZF	YSSTR350/YZF
<b>YSKNO400</b>	Y400ZP	YSKNO400/YZP
	Y400ZF	YSKNO400/YZF
<b>YSHWY400</b>	Y400ZP	YSHWY400/YZP
	Y400ZF	YSHWY400/YZF
<b>YRIB200</b>	Y200ZP	YRIB200/YZP
	Y200ZF	YRIB200/YZF
<b>YLUG250</b>	Y250ZP	YLUG250/YZP
	Y250ZF	YLUG250/YZF
<b>YLGG250</b>	Y250ZP	YLGG250/YZP
	Y250ZF	YLGG250/YZF
<b>YSTR350</b>	Y350ZP	YSTR350/YZP
	Y350ZF	YSTR350/YZF
<b>YKNO400</b>	Y400ZP	YKNO400/YZP
	Y400ZF	YKNO400/YZF

# J Series 150–300 kg



## Features

- Blue high resilience (hi-res) rubber, cast iron, polyurethane (PU) or hard nylon wheels with a 20 mm bore diameter, reduced to 10 mm with an axle bush
- Swivel, fixed plate and bolt hole zinc plated Core Coat™ forks with or without total brake
- Made in Australia

## Wheels



- JBR\***  
Blue hi-res rubber, roller bearing, optional thread guard<sup>1</sup>
- JCR\*<sup>2</sup>**  
Cast iron, roller bearing
- JNR\*<sup>3</sup>**  
Hard nylon, roller bearing, optional thread guard<sup>1</sup>
- JUR\***  
PU, roller bearing, optional thread guard<sup>1</sup>

Wheel	Max load (kg)	Diameter x tread (mm)	Hub x bore (mm)
JBR100	150	100 x 32	45 x 10
JBR125	180	125 x 32	45 x 10
JCR100	230	100 x 38	45 x 10
JNR100	300	100 x 35	45 x 10
JNR125	300	125 x 35	45 x 10
JUR100	300	100 x 32	45 x 10
JUR125	300	125 x 38	45 x 10

\* Wheels also available with plain bearings—JBA, JCI, JNN, JUA.  
<sup>1</sup> For optional thread guards, add **G** at the end of wheel code.  
<sup>2</sup> JCR wheel is not compatible with total brake forks.  
<sup>3</sup> JNR, JNN actual bore size is 12.7 mm reduced to 10 mm with an axle bush.

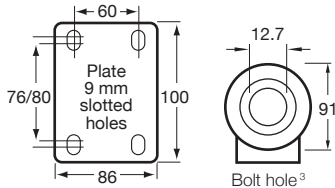
## Forks



- JZP**  
Plate with swivel
- JZPTB**  
Plate with swivel and total brake
- JZF**  
Fixed plate, no swivel
- JZH**  
Bolt hole swivel
- JZHTB**  
Bolt hole swivel and total brake

Forks	Wheel size (mm)	Mount height (mm)	Turning radius (mm)
JZP/JZH/JZF <sup>2</sup>	100	129	90
	125	155	106
JZPTB/JZHTB	100	129	122
	125	155	122

### Fork mounts



<sup>2</sup> JZF—fixed plate has no turning radius.  
<sup>3</sup> Bushes available to reduce bolt hole to 8 and 10 mm.  
Also available with a 16 mm bolt hole fork as a custom order.



## Order codes

Wheel code	Fork code	Castor code
JBR100	J100ZP	JBR100/JZP
	J100ZPTB	JBR100/JZPTB
	J100ZF	JBR100/JZF
	J100ZH	JBR100/JZH
	J100ZHTB	JBR100/JZHTB
JBR125	J125ZP	JBR125/JZP
	J125ZPTB	JBR125/JZPTB
	J125ZF	JBR125/JZF
	J125ZH	JBR125/JZH
	J125ZHTB	JBR125/JZHTB
JCR100	J100ZP	JCR100/JZP
	J100ZF	JCR100/JZF
	J100ZH	JCR100/JZH

Wheel code	Fork code	Castor code
JNR100	J100ZP	JNR100/JZP
	J100ZPTB	JNR100/JZPTB
	J100ZF	JNR100/JZF
	J100ZH	JNR100/JZH
	J100ZHTB	JNR100/JZHTB
JNR125	J125ZP	JNR125/JZP
	J125ZPTB	JNR125/JZPTB
	J125ZF	JNR125/JZF
	J125ZH	JNR125/JZH
	J125ZHTB	JNR125/JZHTB

Wheel code	Fork code	Castor code
JUR100	J100ZP	JUR100/JZP
	J100ZPTB	JUR100/JZPTB
	J100ZF	JUR100/JZF
	J100ZH	JUR100/JZH
	J100ZHTB	JUR100/JZHTB
JUR125	J125ZP	JUR125/JZP
	J125ZPTB	JUR125/JZPTB
	J125ZF	JUR125/JZF
	J125ZH	JUR125/JZH
	J125ZHTB	JUR125/JZHTB

# O Series 230–500 kg



### Features

- Blue high resilience (hi-res) rubber, grey rubber, polyurethane (PU), or hard nylon wheels with a 20 mm bore diameter, reduced to 12.7 mm with an axle bush
- Swivel or fixed plate zinc plated Core Coat™ forks with or without total brake or direction lock
- Made in Australia

### Wheels



HBR* <sup>1</sup>	OBQ	HSR* <sup>1</sup>	HUR*	ONR*
Blue hi-res rubber, roller bearing, optional thread guard <sup>2</sup>	Blue hi-res rubber, round profile, precision bearing	Grey rubber, roller bearing, optional thread guard <sup>2</sup>	PU on nylon, roller bearing	Hard nylon, roller bearing

Wheel	Max load (kg)	Diameter x tread (mm)	Hub x bore <sup>3</sup> (mm)
HBR150 <sup>2</sup>	230	150 x 40	60 x 12.7
HBR200 <sup>2</sup>	250	200 x 50	60 x 12.7
OBQ100	300	100 x 50	60 x 12.7
OBQ125	350	125 x 50	60 x 12.7
OBQ150	400	150 x 50	60 x 12.7
OBQ200	400	200 x 50	60 x 12.7
HSR200 <sup>2</sup>	250	200 x 50	60 x 12.7
HUR100	300	100 x 40	60 x 12.7
HUR125	350	125 x 40	60 x 12.7
HUR150 <sup>2</sup>	450	150 x 40	60 x 12.7
HUR200	500	200 x 48	60 x 12.7
ONR100	350	100 x 40	60 x 12.7
ONR125	400	125 x 40	60 x 12.7
ONR150	450	150 x 40	60 x 12.7
ONR200	500	200 x 40	60 x 12.7

\* Wheels also available with plain bearings—HBA, HSA, HUA, ONA.  
<sup>1</sup> HBR, HBA, HSR, HSA wheels are not compatible with total brake fork.  
<sup>2</sup> For optional thread guards, add **G** at the end of wheel code.  
<sup>3</sup> Bore size is reduced to 12.7 mm with a spacer before fitting into a fork.

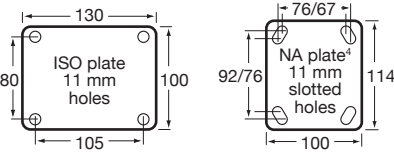
### Forks



OZP	OZPTB	OZPDL	HZF
Plate with swivel	Plate with swivel and total brake	Plate with swivel and direction lock	Fixed plate, no swivel

Forks	Wheel size (mm)	Mount height (mm)	Turning radius (mm)
OZP/HZF <sup>3</sup>	100	138	96
	125	162	109
	150	189	121
	200	239	152
OZPTB/OZPDL	100	138	140
	125	162	140
	150	189	140
	200	239	162

### Fork mounts



<sup>3</sup> HZF—fixed plate has no turning radius.  
<sup>4</sup> North American plate. Add **N** at the end of fork code to purchase (e.g. HBR150/OZPNTB).



## Order codes

Wheel code	Fork code	Castor code
HBR150	O150ZP	HBR150/OZP
	H150ZF	HBR150/HZF
	O150ZPTB	HBR150/OZPTB
	O150ZPDL	HBR150/OZPDL
HBR200	O200ZP	HBR200/OZP
	H200ZF	HBR200/HZF
	O200ZPDL	HBR200/OZPDL
HSR200	O200ZP	HSR200/OZP
	H200ZF	HSR200/HZF
	O200ZPDL	HSR200/OZPDL
HUR100	O100ZP	HUR100/OZP
	H100ZF	HUR100/HZF
	O100ZPTB	HUR100/OZPTB
	O100ZPDL	HUR100/OZPDL
HUR125	O125ZP	HUR125/OZP
	H125ZF	HUR125/HZF
	O125ZPTB	HUR125/OZPTB
	O125ZPDL	HUR125/OZPDL
HUR150	O150ZP	HUR150/OZP
	H150ZF	HUR150/HZF
	O150ZPTB	HUR150/OZPTB
	O150ZPDL	HUR150/OZPDL
HUR200	O200ZP	HUR200/OZP
	H200ZF	HUR200/HZF
	O200ZPTB	HUR200/OZPTB
	O200ZPDL	HUR200/OZPDL

Wheel code	Fork code	Castor code
OBQ100	O100ZP	OBQ100/OZP
	H100ZF	OBQ100/HZF
	O100ZPTB	OBQ100/OZPTB
	O100ZPDL	OBQ100/OZPDL
OBQ125	O125ZP	OBQ125/OZP
	H125ZF	OBQ125/HZF
	O125ZPTB	OBQ125/OZPTB
	O125ZPDL	OBQ125/OZPDL
OBQ150	O150ZP	OBQ150/OZP
	H150ZF	OBQ150/HZF
	O150ZPTB	OBQ150/OZPTB
	O150ZPDL	OBQ150/OZPDL
OBQ200	O200ZP	OBQ200/OZP
	H200ZF	OBQ200/HZF
	O200ZPTB	OBQ200/OZPTB
	O200ZPDL	OBQ200/OZPDL

Wheel code	Fork code	Castor code
ONR100	O100ZP	ONR100/OZP
	H100ZF	ONR100/HZF
	O100ZPTB	ONR100/OZPTB
	O100ZPDL	ONR100/OZPDL
ONR125	O125ZP	ONR125/OZP
	H125ZF	ONR125/HZF
	O125ZPTB	ONR125/OZPTB
	O125ZPDL	ONR125/OZPDL
ONR150	O150ZP	ONR150/OZP
	H150ZF	ONR150/HZF
	O150ZPTB	ONR150/OZPTB
	O150ZPDL	ONR150/OZPDL
ONR200	O200ZP	ONR200/OZP
	H200ZF	ONR200/HZF
	O200ZPTB	ONR200/OZPTB
	O200ZPDL	ONR200/OZPDL

# H Series 400–600 kg



### Features

- Blue high resilience (hi-res) rubber, grey rubber, cast iron, hard nylon or polyurethane (PU) wheels with a 20 mm bore diameter, reduced to 12.7 mm with an axle bush
- Swivel or fixed plate zinc plated Core Coat™ forks with or without total brake or direction lock
- Made in Australia

### Wheels



<b>OBQ*</b> Blue hi-res rubber, round profile, precision bearing	<b>WCI¹</b> Cast iron, plain bearing	<b>WNQ</b> Hard nylon, precision bearing	<b>WUQ</b> PU, precision bearing
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Wheel	Max load (kg)	Diameter x tread (mm)	Hub x bore (mm)
OBQ150	400	150 x 50	60 x 12.7
OBQ200	400	200 x 50	60 x 12.7
WCI150	400	150 x 50	60 x 12.7
WNQ150	600	150 x 40	60 x 12.7
WNQ200	600	200 x 40	60 x 12.7
WUQ150	600	150 x 40	60 x 12.7
WUQ200	600	200 x 40	60 x 12.7

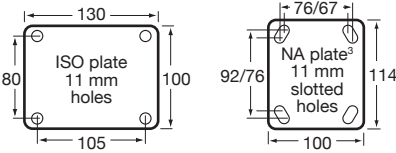
### Forks



<b>HZP</b> Plate with swivel	<b>HZPTB</b> Plate with swivel and total brake	<b>HZPDL</b> Plate with swivel and direction lock	<b>HZF</b> Fixed plate, no swivel
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Forks	Wheel size (mm)	Mount height (mm)	Turning radius (mm)
HZP/HZF²	150	189	121
	200	239	155
HZPTB/HZPDL	150	189	165
	200	239	165

### Fork mounts



\* OBQ wheel is not compatible with direction lock fork.  
¹ WCI wheel is not compatible with total brake fork.  
² HZF—fixed plate has no turning radius.  
³ North American plate. Add **N** at the end of fork code to purchase (e.g. OBQ150/HZPNTB).

## Order codes

Wheel code	Fork code	Castor code
OBQ150	H150ZP	OBQ150/HZP
	H150ZF	OBQ150/HZF
	H150ZPTB	OBQ150/HZPTB
OBQ200	H200ZP	OBQ200/HZP
	H200ZF	OBQ200/HZF
	H200ZPTB	OBQ200/HZPTB
WCI150	H150ZP	WCI150/HZP
	H150ZF	WCI150/HZF
	H150ZPDL	WCI150/HZPDL
WNQ150	H150ZP	WNQ150/HZP
	H150ZF	WNQ150/HZF
	H150ZPTB	WNQ150/HZPTB
	H150ZPDL	WNQ150/HZPDL
WNQ200	H200ZP	WNQ200/HZP
	H200ZF	WNQ200/HZF
	H200ZPTB	WNQ200/HZPTB
	H200ZPDL	WNQ200/HZPDL
WUQ150	H150ZP	WUQ150/HZP
	H150ZF	WUQ150/HZF
	H150ZPTB	WUQ150/HZPTB
	H150ZPDL	WUQ150/HZPDL
WUQ200	H200ZP	WUQ200/HZP
	H200ZF	WUQ200/HZF
	H200ZPTB	WUQ200/HZPTB
	H200ZPDL	WUQ200/HZPDL

## Scaffold castors

	Mount type	Wheel diameter (mm)	Max load (kg)	Castor code	Mount code
	HUR wheel in zinc plated fork with 51 mm socket mount to fit over tubes	150	360	HUR150/HZHTB <sup>2</sup>	SC08
		200	500	HUR200/HZHTB	SC13
	HUR wheel in zinc plated fork with 38 mm solid stem with fully welded cup	150	360	HUR150/HZPTB <sup>2</sup>	SC62
		200	500	HUR200/HZPTB	SC15
	HUR wheel in zinc plated fork with 38 mm stem mount to fit into tubes	150	360	HUR150/HZHTB <sup>2</sup>	SC30
		200	500	HUR200/HZHTB	SC11
	HUR wheel in zinc plated fork with ISO plate (130 x 100 mm)	150	360	HUR150/HZPTB <sup>2</sup>	SC61
		200	500	HUR200/HZPTB	SC18




# W Series 500–750 kg




## Features

- Cast iron, hard nylon or polyurethane (PU) wheels with a 20 mm bore diameter, reduced to 12.7 mm with an axle bush
- Swivel or fixed plate zinc forks with or without total brake

## Wheels




**WCI**  
Cast iron, plain bearing



**WNQ**  
Hard nylon, precision bearing



**WUQ**  
PU, precision bearing



**XUQ**  
PU on cast iron, precision bearing

Wheel	Max load (kg)	Diameter x tread (mm)	Hub x bore (mm)
WCI150	500	150 x 50	60 x 12.7
WNQ150	600	150 x 40	60 x 12.7
WUQ150	600	150 x 40	60 x 12.7
XUQ150	750	152 x 40	62 x 12.7

## Forks



**WZP**  
Plate with swivel



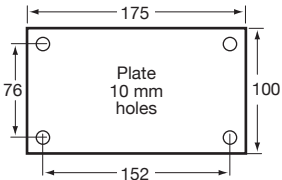
**WZPTB**  
Plate with swivel and total brake



**WZF**  
Fixed plate, no swivel

Forks	Wheel size (mm)	Mount height (mm)	Turning radius (mm)
WZP/WZF*	150	194	130
WZPTB	150	194	176

Fork mount



\* WZF—fixed plate has no turning radius

## Order codes

Wheel code	Fork code	Castor code
WCI150	W150ZP	WCI150/WZP
	W150ZF	WCI150/WZF
	W150ZPTB	WCI150/WZPTB
WNQ150	W150ZP	WNQ150/WZP
	W150ZF	WNQ150/WZF
	W150ZPTB	WNQ150/WZPTB
WUQ150	W150ZP	WUQ150/WZP
	W150ZF	WUQ150/WZF
	W150ZPTB	WUQ150/WZPTB
XUQ150	W150ZP	XUQ150/WZP
	W150ZF	XUQ150/WZF
	W150ZPTB	XUQ150/WZPTB

## Dumper bin sets

Castor sets comprising two fixed and two swivel castors can be purchased for dumper bin applications. Please note that as rubbish trucks often drop dumper bins after tipping, using these castors in such applications reduce the warranty period to six months.

Wheel code	Order code
WCI150	SETDUMPERWCI
WNQ150	SETDUMPERWNQ
WUQ150	SETDUMPERWUQ
XUQ150	SETDUMPERXUQ

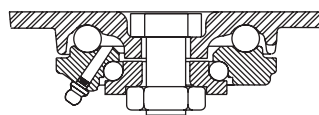
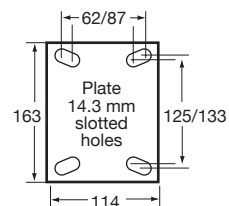
# X Series 450–1000 kg



## Features

- Cast iron or polyurethane (PU) on cast iron wheels
- Swivel and fixed plate zinc forks with wheel brake or direction lock
- Kingpin construction

Fork mount



Kingpin construction

## Wheels



**XCQ**  
Cast iron,  
precision  
bearing



**XUQ**  
PU on cast iron,  
precision bearing

Wheel	Max load (kg)	Diameter x tread (mm)	Hub x bore (mm)
XCQ100	450	102 x 48	62 x 12.7
XCQ125	590	127 x 48	62 x 12.7
XCQ150	630	152 x 48	62 x 12.7
XCQ200	820	203 x 50	62 x 12.7
XUQ100	600	102 x 50	62 x 12.7
XUQ125	800	127 x 50	62 x 12.7
XUQ150	1000	152 x 50	62 x 12.7
XUQ200	1000	203 x 50	62 x 12.7

## Forks



**XZP**  
Plate with  
swivel



**XZPBR**  
Plate with swivel  
and wheel brake



**XZPDL**  
Plate with swivel  
and direction lock



**XZF**  
Fixed plate,  
no swivel

Forks	Wheel size	Mount height (mm)	Turning radius (mm)
XZP/XZPDL XZF*	100	143	95
	125	167	108
	150	193	137
	200	257	162
XZPBR	100	143	219
	125	167	242
	150	193	266
	200	257	291

## Order codes

Wheel code	Fork code	Castor code
XCQ100	X100ZP	XCQ100/XZP
	X100ZF	XCQ100/XZF
	X100ZPBR	XCQ100/XZPBR
	X100ZPDL	XCQ100/XZPDL
XCQ125	X125ZP	XCQ125/XZP
	X125ZF	XCQ125/XZF
	X125ZPBR	XCQ125/XZPBR
	X125ZPDL	XCQ125/XZPDL
XCQ150	X150ZP	XCQ150/XZP
	X150ZF	XCQ150/XZF
	X150ZPBR	XCQ150/XZPBR
	X150ZPDL	XCQ150/XZPDL
XCQ200	X200ZP	XCQ200/XZP
	X200ZF	XCQ200/XZF
	X200ZPBR	XCQ200/XZPBR
	X200ZPDL	XCQ200/XZPDL
XUQ100	X100ZP	XUQ100/XZP
	X100ZF	XUQ100/XZF
	X100ZPBR	XUQ100/XZPBR
	X100ZPDL	XUQ100/XZPDL
XUQ125	X125ZP	XUQ125/XZP
	X125ZF	XUQ125/XZF
	X125ZPBR	XUQ125/XZPBR
	X125ZPDL	XUQ125/XZPDL
XUQ150	X150ZP	XUQ150/XZP
	X150ZF	XUQ150/XZF
	X150ZPBR	XUQ150/XZPBR
	X150ZPDL	XUQ150/XZPDL
XUQ200	X200ZP	XUQ200/XZP
	X200ZF	XUQ200/XZF
	X200ZPBR	XUQ200/XZPBR
	X200ZPDL	XUQ200/XZPDL

\* XZF—fixed plate has no turning radius.

# V Series 2000–2450 kg



### Features

- Polyurethane (PU) on cast iron, or high impact polymer wheels
- Swivel or fixed plate zinc forks with or without wheel brake or direction lock
- Kingpinless construction

### Wheels



**VUQ**  
PU on cast iron, precision bearing



**VXQ**  
High impact polymer, precision bearing

Wheel	Max load (kg)	Diameter x tread (mm)	Hub x bore (mm)
VUQ200	2000	203 x 75	89 x 20
VUQ250	2000	254 x 75	89 x 20
VXQ200	2450	200 x 75	89 x 20
VXQ250	2450	250 x 75	89 x 20

### Forks



**VZP**  
Plate with swivel



**VZPBR**  
Plate with swivel and wheel brake



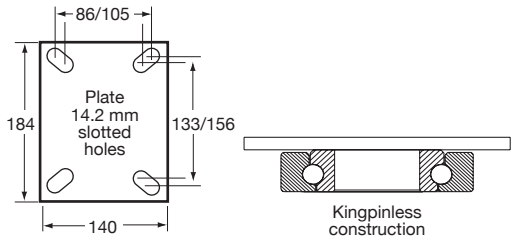
**VZPDL**  
Plate with swivel and direction lock



**VZF**  
Fixed plate, no swivel

Forks	Wheel size	Mount height (mm)	Turning radius (mm)
VZP/VZPDL/VZF*	200	267	165
	250	318	190
VZPBR	200	267	317
	250	318	353

### Fork mount



### Order codes

Wheel code	Fork code	Castor code
<b>VUQ200</b>	V200ZP	VUQ200/VZP
	V200ZF	VUQ200/VZF
	V200ZPBR	VUQ200/VZPBR
	V200ZPDL	VUQ200/VZPDL
<b>VUQ250</b>	V250ZP	VUQ250/VZP
	V250ZF	VUQ250/VZF
	V250ZPBR	VUQ250/VZPBR
	V250ZPDL	VUQ250/VZPDL
<b>VXQ200</b>	V200ZP	VXQ200/VZP
	V200ZF	VXQ200/VZF
	V200ZPBR	VXQ200/VZPBR
	V200ZPDL	VXQ200/VZPDL
<b>VXQ250</b>	V250ZP	VXQ250/VZP
	V250ZF	VXQ250/VZF
	V250ZPBR	VXQ250/VZPBR
	V250ZPDL	VXQ250/VZPDL

\* VZF—fixed plate has no turning radius.



# A Series 3000–3500 kg



## Features

- Polyurethane (PU) on cast iron wheel
- Swivel or fixed plate zinc forks with or without wheel brake or direction lock
- Kingpinless construction

## Wheels



**AUQ**  
PU on cast iron, precision bearing

Wheel	Max load (kg)	Diameter x tread (mm)	Hub x bore (mm)
AUQ200	3000	200 x 102	109 x 30
AUQ250	3500	250 x 102	109 x 30

## Forks



**AZP**  
Plate with swivel



**AZPBR**  
Plate with swivel and wheel brake



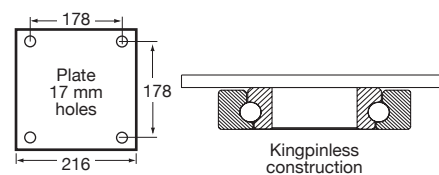
**AZPDL**  
Plate with swivel and direction lock



**AZF**  
Fixed plate, no swivel

Forks	Wheel size	Mount height (mm)	Turning radius (mm)
AZP/AZPDL/AZF*	200	279	172
	250	330	197
AZPBR	200	279	317
	250	330	353

## Fork mount



\* AZF—fixed plate has no turning radius.

## Order codes

Wheel code	Castor code
<b>AUQ200</b> Diameter: 200 mm	AUQ200/AZP
	AUQ200/AZF
	AUQ200/AZPBR
	AUQ200/AZPDL
<b>AUQ250</b> Diameter: 250 mm	AUQ250/AZP
	AUQ250/AZF
	AUQ250/AZPBR
	AUQ250/AZPDL

# Specialised castors

## M Powder-coat castors

Specially designed for corrosive environments (particularly shower chair applications). Zinc plated and then powder-coated for better corrosion resistance from substances such as alkaline soaps and other cleaning agents, these castors have stainless steel bottom races and twin ball races with stainless steel balls, covered by a diaphragm shroud to stop water entering from above). The wheels are available with a plain PBT (corrosion free) bush or a stainless steel precision bearing with thread guards to prevent the build-up of hair and lint.

## M & O Stainless steel castors

Our stainless steel castors are the premium castors for corrosive environments. 100% corrosion free, with a wide range of styles and load capacities available.

## High & low temperature castors

While our standard wheels and castors have a working temperature range of 5°C to 60°C, we also make specialised high temperature castors designed to withstand temperatures of baking ovens, and low temperature castors that can survive in freezing rooms.

## Self-aligning castors

Self-aligning castors for Automated Guided Vehicle (AGV) carts ensure that the castors align with the AGV's direction of travel when it is lifted off the ground. This ensures that the castor avoids coming into contact with walls, pedestrians or the AGV itself.



# M Powder-coat



## Features

- Powder-coated zinc plated bolt hole forks with or without total brake or direction lock in Interpon Anodic Natural Matte colour
- M Series thermoplastic elastomer (TPE), white nylon, grey rubber, or polyurethane (PU) on polypropylene (PP) wheels with stainless steel (SS) bearings
- Resistant to corrosion from alkaline soaps and cleaning agents, making them suitable for shower chairs and similar applications
- Made in Australia

See page 71 for more information about chemical resistance.

## Wheels



**MJC\***  
TPE, SS precision bearing, thread guard



**MNN...W**  
White nylon, plain bearing



**DNC**  
White nylon, SS precision bearing



**QTC<sup>1</sup>**  
Grey rubber, SS precision bearing, thread guard



**MSC<sup>1</sup>**  
Grey rubber, SS precision bearing, thread guard



**QUC<sup>1</sup>**  
PU on PP, SS precision bearing, thread guard

## Forks



**MPH**  
Bolt hole swivel



**MPHTB**  
Bolt hole swivel and total brake

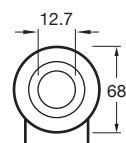


**MPHDL**  
Bolt hole swivel and direction lock

Wheel	Max load (kg)	Diameter x tread (mm)	Hub x bore (mm)
MJC125G	85	125 x 32	40 x 8
MNN125W	150	125 x 32	40 x 8
DNC125	200	125 x 32	40 x 8
QTC150G	150	150 x 34	40 x 8
QTC175G	150	175 x 34	40 x 8
MSC125G	150	125 x 34	40 x 8
QUC125G	200	125 x 32	40 x 8

Forks	Wheel size (mm)	Mount height (mm)	Turning radius (mm)
MPH	125	161	103
	150	187	130
	175	214	145
MPHTB/MPHDL	125	161	128
	150	187	153
	175	214	153

Fork mounts



Bolt hole<sup>2</sup>

Buffer options



**-BUF22:** Suit -ER19 or -AR19

**-BUF25:** Suit -ER22 or -AR22

**-BUF28:** Suit -ER28 or -AR28

**-BUF32:** Suit 33 mm OD of hollow stem

**-BUF33.5:** Suit 34 mm OD of hollow stem

## Order codes

Wheel code	Fork code	Castor code
<b>DNC125</b>	M125PH	DNC125/MPH
	M125PHTB	DNC125/MPHTB
	M125PHDL	DNC125/MPHDL
<b>MJC125G</b>	M125PH	MJC125G/MPH
	M125PHTB	MJC125G/MPHTB
	M125PHDL	MJC125G/MPHDL
<b>MNN125W</b>	M125PH	MNN125W/MPH
	M125PHTB	MNN125W/MPHTB
	M125PHDL	MNN125W/MPHDL
<b>MSC125G</b>	M125PH	MSC125G/MPH
	M125PHTB	MSC125G/MPHTB
	M125PHDL	MSC125G/MPHDL
<b>QTC150G</b>	M150PH	QTC150G/MPH
	M150PHTB	QTC150G/MPHTB
	M150PHDL	QTC150G/MPHDL
<b>QTC175G</b>	M175PH	QTC175G/MPH
	M175PHTB	QTC175G/MPHTB
	M175PHDL	QTC175G/MPHDL
<b>QUC125G</b>	M125PH	QUC125G/MPH
	M125PHTB	QUC125G/MPHTB
	M125PHDL	QUC125G/MPHDL

\* Wheel also available in conductive—MAC, or plain bearing—MJA.

<sup>1</sup> Wheels also available with plain bearings—QTA, MSA, QUA.

<sup>2</sup> Bushes available to reduce bolt hole to 8 and 10 mm.



# M Stainless



## Features

- 100% corrosive-free stainless steel castors in plate or bolt hole configurations, with or without total brake or direction lock
- M Series thermoplastic elastomer (TPE), white nylon, grey rubber, or polyurethane (PU) on polypropylene (PP) wheels with stainless steel (SS) bearings
- Standard Chicago screw axles<sup>2</sup>.
- Option for regular nut and bolt, or stainless steel Chicago screw
- Chicago screw axle type 304
- Fork and ball bearings type 304
- Axle, bolt and nut type 304
- Rivet and axle bush type 303
- TB spring type 301 full hard
- Made in Australia

See page 71 for more information about chemical resistance.

## Wheels



**MJC\***  
TPE, SS precision bearing, thread guard



**MNN...WS**  
White nylon, plain bearing



**DNC**  
White nylon, SS precision bearing



**MSC<sup>1</sup>**  
Grey rubber, SS precision bearing, thread guard



**QUC<sup>1</sup>**  
PU on PP, SS precision bearing, thread guard

## Forks



**MSP**  
Plate with swivel



**MSPTB**  
Plate with swivel and total brake



**MSPDL**  
Plate with swivel and direction lock



**MSF**  
Fixed plate, no swivel



**MSH**  
Bolt hole swivel



**MSHTB**  
Bolt hole swivel and total brake



**MSHDL**  
Bolt hole swivel and direction lock

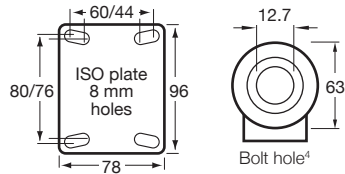
Wheel	Max load (kg)	Diameter x tread (mm)	Hub x bore (mm)
MJC75G	85	75 x 32	40 x 8
MJC100G	85	100 x 32	40 x 8
MJC125G	85	125 x 32	40 x 8
MNN75WS	150	75 x 32	40 x 8
MNN100WS	150	100 x 32	40 x 8
MNN125WS	150	125 x 32	40 x 8
DNC125	200	125 x 32	40 x 8
MSC100G	140	100 x 34	40 x 8
MSC125G	150	125 x 34	40 x 8
QUC75G	200	75 x 32	40 x 8
QUC100G	200	100 x 32	40 x 8
QUC125G	200	125 x 32	40 x 8

\* Wheel also available in conductive—MAC, or plain bearing—MJA.

<sup>1</sup> Wheels also available with plain bearings—MSA, QUA.

Forks <sup>2</sup>	Wheel size (mm)	Mount height (mm)	Turning radius (mm)
MSP/MSH/MSF <sup>3</sup>	75	106	71
	100	135	91
	125	161	103
MSPTB/MSPDL/MSHTB/MSHDL	75	106	118
	100	135	128
	125	161	128

### Fork mounts



<sup>2</sup> To replace Chicago screw axles with regular hex bolt axles, add **-B** to the end of fork code.

<sup>3</sup> MSF—fixed plate has no turning radius.

<sup>4</sup> Bushes available to reduce bolt hole to 8 and 10 mm.

## Order codes

Wheel	Fork code	Castor code
<b>DNC125W</b>	M125SP	DNC125W/MSP
	M125SPTB	DNC125W/MSPTB
	M125SPDL	DNC125W/MSPDL
	M125SF	DNC125W/MSF
	M125SH	DNC125W/MSH
	M125SHTB	DNC125W/MSHTB
	M125SHDL	DNC125W/MSHDL
<b>MJC75G</b>	M75SP	MJC75G/MSP
	M75SPTB	MJC75G/MSPTB
	M75SPDL	MJC75G/MSPDL
	M75SF	MJC75G/MSF
	M75SH	MJC75G/MSH
	M75SHTB	MJC75G/MSHTB
	M75SHDL	MJC75G/MSHDL
<b>MJC100G</b>	M100SP	MJC100G/MSP
	M100SPTB	MJC100G/MSPTB
	M100SPDL	MJC100G/MSPDL
	M100SF	MJC100G/MSF
	M100SH	MJC100G/MSH
	M100SHTB	MJC100G/MSHTB
	M100SHDL	MJC100G/MSHDL
<b>MJC125G</b>	M125SP	MJC125G/MSP
	M125SPTB	MJC125G/MSPTB
	M125SPDL	MJC125G/MSPDL
	M125SF	MJC125G/MSF
	M125SH	MJC125G/MSH
	M125SHTB	MJC125G/MSHTB
	M125SHDL	MJC125G/MSHDL

Wheel	Fork code	Castor code
<b>MNN75WS</b>	M75SP	MNN75WS/MSP
	M75SPTB	MNN75WS/MSPTB
	M75SPDL	MNN75WS/MSPDL
	M75SF	MNN75WS/MSF
	M75SH	MNN75WS/MSH
	M75SHTB	MNN75WS/MSHTB
	M75SHDL	MNN75WS/MSHDL
<b>MNN100WS</b>	M100SP	MNN100WS/MSP
	M100SPTB	MNN100WS/MSPTB
	M100SPDL	MNN100WS/MSPDL
	M100SF	MNN100WS/MSF
	M100SH	MNN100WS/MSH
	M100SHTB	MNN100WS/MSHTB
	M100SHDL	MNN100WS/MSHDL
<b>MNN125WS</b>	M125SP	MNN125WS/MSP
	M125SPTB	MNN125WS/MSPTB
	M125SPDL	MNN125WS/MSPDL
	M125SF	MNN125WS/MSF
	M125SH	MNN125WS/MSH
	M125SHTB	MNN125WS/MSHTB
	M125SHDL	MNN125WS/MSHDL
<b>MSC100G</b>	M100SP	MSC100G/MSP
	M100SPTB	MSC100G/MSPTB
	M100SPDL	MSC100G/MSPDL
	M100SF	MSC100G/MSF
	M100SH	MSC100G/MSH
	M100SHTB	MSC100G/MSHTB
	M100SHDL	MSC100G/MSHDL
<b>MSC125G</b>	M125SP	MSC125G/MSP
	M125SPTB	MSC125G/MSPTB
	M125SPDL	MSC125G/MSPDL
	M125SF	MSC125G/MSF
	M125SH	MSC125G/MSH
	M125SHTB	MSC125G/MSHTB
	M125SHDL	MSC125G/MSHDL

Wheel	Fork code	Castor code
<b>QUC75G</b>	M75SP	QUC75G/MSP
	M75SPTB	QUC75G/MSPTB
	M75SPDL	QUC75G/MSPDL
	M75SF	QUC75G/MSF
	M75SH	QUC75G/MSH
	M75SHTB	QUC75G/MSHTB
	M75SHDL	QUC75G/MSHDL
<b>QUC100G</b>	M100SP	QUC100G/MSP
	M100SPTB	QUC100G/MSPTB
	M100SPDL	QUC100G/MSPDL
	M100SF	QUC100G/MSF
	M100SH	QUC100G/MSH
	M100SHTB	QUC100G/MSHTB
	M100SHDL	QUC100G/MSHDL
<b>QUC125G</b>	M125SP	QUC125G/MSP
	M125SPTB	QUC125G/MSPTB
	M125SPDL	QUC125G/MSPDL
	M125SF	QUC125G/MSF
	M125SH	QUC125G/MSH
	M125SHTB	QUC125G/MSHTB
	M125SHDL	QUC125G/MSHDL

# O Stainless



## Features

- 100% corrosive-free stainless steel castors in plate or bolt hole configurations, with or without total brake or direction lock
- Blue high resilience (hi-res) rubber, grey rubber, polyurethane (PU) or white nylon wheels with stainless steel (SS) bearings and a 20 mm bore diameter, reduced to 12.7 mm with axle bush
- Fork and ball bearings type 304
- Axle, bolt and nut type 304
- Rivet and axle bush type 303
- TB spring type 301 full hard
- Option for regular nut and bolt or stainless steel Chicago screw
- Chicago screw axle type 304
- Made in Australia

See page 71 for more information about chemical resistance.

## Wheels



**HBS<sup>\*1</sup>**  
Blue hi-res rubber, SS roller bearing



**HSS<sup>\*1</sup>**  
Grey rubber, SS roller bearing, optional thread guard



**HUS<sup>\*</sup>**  
PU, SS roller bearing




**ONS...W<sup>\*</sup>**  
White nylon, SS roller bearing


Wheel	Max load (kg)	Diameter x tread (mm)	Hub x bore (mm)
HBS150	230	150 x 40	60 x 12.7
HBS200	250	200 x 50	60 x 12.7
HSS200	250	200 x 50	60 x 12.7
HUS100	300	100 x 40	60 x 12.7
HUS125	350	125 x 40	60 x 12.7
HUS150	450	150 x 40	60 x 12.7
HUS200	450	200 x 48	60 x 12.7
ONS100W	350	100 x 40	60 x 12.7
ONS125W	380	125 x 40	60 x 12.7
ONS150W	450	150 x 40	60 x 12.7
ONS200W	500	200 x 40	60 x 12.7

<sup>\*</sup> Wheels also available with plain bearings—HBA, HSA, HUA...S, ONA...WS.  
<sup>1</sup> HBS, HSS wheels are not compatible with total brake fork.

## Forks



**OSP**  
Plate with swivel



**OSPTB**  
Plate with swivel and total brake



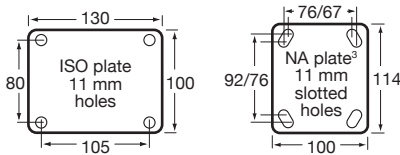
**OSPDL**  
Plate with swivel and direction lock



**HSF**  
Fixed plate

Forks	Wheel size (mm)	Mount height (mm)	Turning radius (mm)
OSP/HSF <sup>2</sup>	100	138	96
	125	162	109
	150	189	121
	200	239	152
OSPTB/OSPDL	100	138	140
	125	162	140
	150	189	140
	200	239	162

### Fork mounts



<sup>2</sup> HSF—fixed plate has no turning radius.  
<sup>3</sup> North American plate. Add **N** at the end of fork code to purchase (e.g. HBS150/OSPNTB).



## Order codes

Wheel	Fork code	Castor code
<b>HBS150</b> Diameter: <b>150 mm</b>	O150SP	HBS150/OSP
	H150SF	HBS150/HSF
	O150SPDL	HBS150/OSPDL
<b>HBS200</b> Diameter: <b>200 mm</b>	O200SP	HBS200/OSP
	H200SF	HBS200/HSF
	O200SPDL	HBS200/OSPDL
<b>HSS200<sup>2</sup></b> Diameter: <b>200 mm</b>	O200SP	HSS200/OSP
	H200SF	HSS200/HSF
	O200SPDL	HSS200/OSPDL
<b>HUS100</b> Diameter: <b>100 mm</b>	O100SP	HUS100/OSP
	H100SF	HUS100/HSF
	O100SPTB	HUS100/OSPTB
	O100SPDL	HUS100/OSPDL
<b>HUS125</b> Diameter: <b>125 mm</b>	O125SP	HUS125/OSP
	H125SF	HUS125/HSF
	O125SPTB	HUS125/OSPTB
	O125SPDL	HUS125/OSPDL
<b>HUS150</b> Diameter: <b>150 mm</b>	O150SP	HUS150/OSP
	H150SF	HUS150/HSF
	O150SPTB	HUS150/OSPTB
	O150SPDL	HUS150/OSPDL
<b>HUS200</b> Diameter: <b>200 mm</b>	O200SP	HUS200/OSP
	H200SF	HUS200/HSF
	O200SPTB	HUS200/OSPTB
	O200SPDL	HUS200/OSPDL

Wheel	Fork code	Castor code
<b>ONS100W</b> Diameter: <b>100 mm</b>	O100SP	ONS100W/OSP
	H100SF	ONS100W/HSF
	O100SPTB	ONS100W/OSPTB
	O100SPDL	ONS100W/OSPDL
<b>ONS125W</b> Diameter: <b>125 mm</b>	O125SP	ONS125W/OSP
	H125SF	ONS125W/HSF
	O125SPTB	ONS125W/OSPTB
	O125SPDL	ONS125W/OSPDL
<b>ONS150W</b> Diameter: <b>150 mm</b>	O150SP	ONS150W/OSP
	H150SF	ONS150W/HSF
	O150SPTB	ONS150W/OSPTB
	O150SPDL	ONS150W/OSPDL
<b>ONS200W</b> Diameter: <b>200 mm</b>	O200SP	ONS200W/OSP
	H200SF	ONS200W/HSF
	O200SPTB	ONS200W/OSPTB
	O200SPDL	ONS200W/OSPDL

# High & low temperature castors



## Features

- Available with high temperature resistant phenolic, or cast iron wheels, and freeze resistant glass filled nylon
- Swivel, fixed plate or bolt hole zinc plated Core Coat™ forks
- Specialised castor and fork grease depending on application
- Made in Australia

Detailed information about high and low temperature castors, including typical applications are available on page 72.

## M Series wheels



**MHH**  
Glass reinforced nylon, lighter hub, plain bearing



**MKT**  
High temperature phenolic, plain bearing



**DCI**  
Cast iron, plain bearing

Wheel	Max load at temperature	Diameter x tread (mm)	Hub x bore (mm)
MHH75	70 kg at 150°C	75 x 32	41 x 12
MHH100	80 kg at 150°C 70 kg at 180°C 60 kg at 210°C 50 kg at 230°C*	100 x 32	41 x 12
MKT100	125 kg at 100°C 100 kg at 250°C 40 kg at 300°C	100 x 35	41 x 12
DCI75	100 kg at 400°C	75 x 28	41 x 12

## M Series forks



**Plate with swivel<sup>1</sup>**  
High temp—MZPHT  
Low temp—MZPLT



**Fixed plate<sup>2</sup>**  
High temp—MZFHT  
Low temp—MZF



**Bolt hole swivel**  
High temp—MZHHT  
Low temp—MZHLT

Fork	Wheel size (mm)	Mount height (mm)	Turning radius (mm)
MZPHT/MZPLT	75	106	71
MZFHT/MZF <sup>3</sup>	100	135	91
MZHHT/MZHLT			

\* MHH wheel should be exposed to this temperature for short periods only.  
<sup>1</sup> Also available with North American plate with swivel—MZPNHT, MZPNLT.  
<sup>2</sup> Also available with North American fixed plate—MZFNHT, MZFN.  
<sup>3</sup> Fixed plate has no turning radius

## J Series wheels



**JHH**  
Glass reinforced nylon, heavy hub, plain bearing



**JCI**  
Cast iron, plain bearing

Wheel	Max load at temperature	Diameter x tread (mm)	Hub x bore (mm)
JHH100	100 kg at 150°C 90 kg at 180°C 80 kg at 210°C 60 kg at 230°C*	100 x 32	45 x 20
JCI100	230 kg at 400°C	100 x 38	45 x 20

## J Series forks



**Plate with swivel**  
High temp—JZPHT  
Low temp—JZPLT



**Fixed plate**  
High temp—JZFHT  
Low temp—JZF



**Bolt hole swivel**  
High temp—JZHHT  
Low temp—JZHLT

Fork	Wheel size (mm)	Mount height (mm)	Turning radius (mm)
JZPHT/JZPLT JMZFHT/JZF <sup>1</sup> JZHHT/JZHLT	100	129	90

\* JHH wheel should be exposed to this temperature for short periods only.  
<sup>1</sup> Fixed plate has no turning radius

## O Series wheels

**OHH**

Glass reinforced  
nylon, heavy hub,  
plain bearing

**WCI**

Cast iron, plain  
bearing

Wheel	Max load at temperature	Diameter x tread (mm)	Hub x bore (mm)
OHH150	<b>200 kg</b> at 210°C	<b>150</b> x 40	<b>60</b> x 20
WCI150	<b>250 kg</b> at 400°C	<b>150</b> x 50	<b>60</b> x 20

## O Series forks

**Plate with swivel\***

High temp—OZPHT  
Low temp—OZPLT

**Fixed plate<sup>1</sup>**

High temp—HZFHT  
Low temp—HZF

Fork	Wheel size (mm)	Mount height (mm)	Turning radius (mm)
OZPHT/OZPLT HZFHT/HZF <sup>2</sup>	150	189	121

\* Also available with North American plate with swivel—OZPNHT, OZPNLT.

<sup>1</sup> Also available with North American fixed plate—HZFNHT, HZFN.

<sup>2</sup> Fixed plate has no turning radius

## Order codes

M Series wheels	Fork code	Castor code
<b>DCI75</b> High temp	M75ZPHT	DCI75/MZPHT
	M75ZPNHT	DCI75/MZPNHT
	M75ZFHT	DCI75/MZFHT
	M75ZFNHT	DCI75/MZFNHT
	M75ZHHT	DCI75/MZHHT
<b>MHH75</b> High temp	M75ZPHT	MHH75/MZPHT
	M75ZPNHT	MHH75/MZPNHT
	M75ZFHT	MHH75/MZFHT
	M75ZFNHT	MHH75/MZFNHT
	M75ZHHT	MHH75/MZHHT
<b>MHH100</b> High temp	M100ZPHT	MHH100/MZPHT
	M100ZPNHT	MHH100/MZPNHT
	M100ZFHT	MHH100/MZFHT
	M100ZFNHT	MHH100/MZFNHT
	M100ZHHT	MHH100/MZHHT
<b>MHH100</b> Low temp	M100ZPLT	MHH100/MZPLT
	M100ZPNLT	MHH100/MZPNLT
	M100ZF	MHH100/MZF
	M100ZFN	MHH100/MZFN
	M100ZHLT	MHH100/MZHLT
<b>MKT100</b> High temp	M100ZPHT	MKT100/MZPHT
	M100ZPNHT	MKT100/MZPNHT
	M100ZFHT	MKT100/MZFHT
	M100ZFNHT	MKT100/MZFNHT
	M100ZHHT	MKT100/MZHHT

J Series wheels	Fork code	Castor code
<b>JCI100</b> High temp	J100ZPHT	JCI100/JZPHT
	J100ZFHT	JCI100/JZFHT
	J100ZHHT	JCI100/JZHHT
<b>JCI100</b> Low temp	J100ZPLT	JCI100/JZPLT
	J100ZF	JCI100/JZF
	J100ZHLT	JCI100/JZHLT

J Series wheels	Fork code	Castor code
<b>JHH100</b> High temp	J100ZPHT	JHH100/JZPHT
	J100ZFHT	JHH100/JZFHT
	J100ZHHT	JHH100/JZHHT
<b>JHH100</b> Low temp	J100ZPLT	JHH100/JZPLT
	J100ZF	JHH100/JZF
	J100ZHLT	JHH100/JZHLT

O Series wheels	Fork code	Castor code
<b>OHH150</b> High temp	O150ZPHT	OHH150/OZPHT
	O150ZPNHT	OHH150/OZPNHT
	H150ZFHT	OHH150/HZFHT
<b>OHH150</b> Low temp	H150ZFNHT	OHH150/HZFHNHT
	O150ZPLT	OHH150/OZPLT
	O150ZPNLT	OHH150/OZPNLT
<b>OHH150</b> Low temp	H150ZF	OHH150/HZF
	H150ZFN	OHH150/HZFN
	H150ZFNHT	OHH150/HZFHNHT
<b>WCI150</b> High temp	O150ZPHT	WCI150/OZPHT
	O150ZPNHT	WCI150/OZPNHT
	H150ZFHT	WCI150/HZFHT
<b>WCI150</b> Low temp	H150ZFNHT	WCI150/HZFHNHT
	O150ZPLT	WCI150/OZPLT
	O150ZPNLT	WCI150/OZPNLT
<b>WCI150</b> Low temp	H150ZF	WCI150/HZF
	H150ZFN	WCI150/HZFN



# Self-aligning castors

Available with a selection of wheels from the M, Big M and O Series, with stainless steel (SS) or zinc\* forks, self-aligning castors are available with swivel plate, total brake or direction lock (suitable if the carts will also be towed with a tug) configurations. For carts that require narrower castors, self-aligning castors can also be made in a special ultra-slim M Series with a 61.5 mm barrel width. Contact a sales representative for more details.

## Features






- Suitable for Automated Guided Vehicle (AGV) carts
- Stainless steel or zinc plated Core Coat™ forks
- Wide selection of wheels from M, Big M and O Series
- Available with or without total brake, and direction lock for towing flexibility
- Made in Australia






## Wheel compatibility

M Series <sup>1</sup>	Max load (kg)	O Series	Max load (kg)
<b>MJQ</b> 125G	85	<b>HBR</b> 150 <sup>3</sup>	230
<b>CBQ</b> 125G	100	<b>HBR</b> 200 <sup>3</sup>	250
<b>STQ</b> 125G	100	<b>HSR</b> 200 <sup>3</sup>	250
<b>MBQ</b> 125G	150	<b>HUR</b> 150 <sup>3</sup>	450
<b>MNN</b> 125	150	<b>HUR</b> 200	500
<b>MSQ</b> 125G	150	<b>OBQ</b> 125 <sup>4</sup>	350
<b>DNQ</b> 125G	200	<b>OBQ</b> 150 <sup>4</sup>	400
<b>QUQ</b> 125G	200	<b>OBQ</b> 200 <sup>4</sup>	400
Big M Series <sup>2</sup>		<b>ONR</b> 125	400
<b>QTQ</b> 150G	200	<b>ONR</b> 150	450
		<b>ONR</b> 200	500

## Forks

M/Big M Series		Wheel diameter	Height (mm)	Turning radius (mm)
	<b>MSPSA</b> (SS)	125	161	103
	<b>MZPSA</b> (Zinc) Plate with swivel	150	187	130
	<b>MSPTBSA</b> (SS with total brake)	125	161	128
	<b>MZPTBSA</b> (Zinc with total brake)	150	187	153
	<b>MSPDLSA</b> (SS with direction lock)			
	<b>MZPDLSA</b> (Zinc with direction lock)			
	<b>MSF</b> (SS)	125	161	-
	<b>MZF</b> (Zinc) Fixed plate	150	187	-
	<b>MZHSA</b> (Zinc) Plate with swivel	125	161	128
		150	187	153
	<b>MZHTBSA</b> (Zinc with total brake)	125	161	128
	<b>MZHDLSA</b> (Zinc with direction lock)	150	187	153

O Series <sup>5</sup>		Wheel diameter	Height (mm)	Turning radius (mm)
	<b>OSPSA</b> (SS)	125	162	109
	<b>OZPSA</b> (Zinc*) Plate with swivel	150	189	121
		200	239	152
	<b>OSPTBSA</b> (SS with total brake)	125	162	140
	<b>OZPTBSA</b> (Zinc with total brake*)	150	189	140
		200	239	162
	<b>OSPDLSA</b> (SS with direction lock)			
	<b>OZPDLSA</b> (Zinc with direction lock*)			
	<b>HSF</b> (SS)	125	162	-
	<b>HZF</b> (Zinc*) Fixed plate	150	189	-
		200	239	-

## Order codes

M Series wheels	Fork code	Castor code
<b>CBQ</b> 125G	M125SPSA <sup>7</sup>	CBQ125G/MSPSA <sup>7</sup>
	M125SPTBSA <sup>7</sup>	CBQ125G/MSPTBSA <sup>7</sup>
	M125SPDLSA <sup>7</sup>	CBQ125G/MSPDLSA <sup>7</sup>
	M125SF <sup>7</sup>	CBQ125G/MSF <sup>7</sup>
	M125ZHSA	CBQ125G/MZHSA
	M125ZHTBSA	CBQ125G/MZHTBSA
<b>DNQ</b> 125	M125ZHDLSA	CBQ125G/MZHDLSA
	M125SPSA <sup>7</sup>	DNQ125/MSPSA <sup>7</sup>
	M125SPTBSA <sup>7</sup>	DNQ125/MSPTBSA <sup>7</sup>
	M125SPDLSA <sup>7</sup>	DNQ125/MSPDLSA <sup>7</sup>
	M125SF <sup>7</sup>	DNQ125/MSF <sup>7</sup>
	M125ZHSA	DNQ125/MZHSA
	M125ZHTBSA	DNQ125/MZHTBSA
	M125ZHDLSA	DNQ125/MZHDLSA

M Series wheels	Fork code	Castor code
<b>MBQ125G</b>	M125SPSA <sup>7</sup>	MBQ125G/MSPSA <sup>7</sup>
	M125SPTBSA <sup>7</sup>	MBQ125G/MSPTBSA <sup>7</sup>
	M125SPDLSA <sup>7</sup>	MBQ125G/MSPDLSA <sup>7</sup>
	M125SF <sup>7</sup>	MBQ125G/MSF <sup>7</sup>
	M125ZHSA	MBQ125G/MZHSA
	M125ZHTBSA	MBQ125G/MZHTBSA
	M125ZHDLSA	MBQ125G/MZHDLSA
<b>MJQ125G</b>	M125SPSA <sup>7</sup>	MJQ125G/MSPSA <sup>7</sup>
	M125SPTBSA <sup>7</sup>	MJQ125G/MSPTBSA <sup>7</sup>
	M125SPDLSA <sup>7</sup>	MJQ125G/MSPDLSA <sup>7</sup>
	M125SF <sup>7</sup>	MJQ125G/MSF <sup>7</sup>
	M125ZHSA	MJQ125G/MZHSA
	M125ZHTBSA	MJQ125G/MZHTBSA
	M125ZHDLSA	MJQ125G/MZHDLSA
<b>MNN125</b>	M125SPSA <sup>7</sup>	MNN125/MSPSA <sup>7</sup>
	M125SPTBSA <sup>7</sup>	MNN125/MSPTBSA <sup>7</sup>
	M125SPDLSA <sup>7</sup>	MNN125/MSPDLSA <sup>7</sup>
	M125SF <sup>7</sup>	MNN125/MSF <sup>7</sup>
	M125ZHSA	MNN125G/MZHSA
	M125ZHTBSA	MNN125G/MZHTBSA
	M125ZHDLSA	MNN125G/MZHDLSA
<b>MSQ125G</b>	M125SPSA <sup>7</sup>	MSQ125G/MSPSA <sup>7</sup>
	M125SPTBSA <sup>7</sup>	MSQ125G/MSPTBSA <sup>7</sup>
	M125SPDLSA <sup>7</sup>	MSQ125G/MSPDLSA <sup>7</sup>
	M125SF <sup>7</sup>	MSQ125G/MSF <sup>7</sup>
	M125ZHSA	MSQ125G/MZHSA
	M125ZHTBSA	MSQ125G/MZHTBSA
	M125ZHDLSA	MSQ125G/MZHDLSA
<b>QUQ125G</b>	M125SPSA <sup>7</sup>	QUQ125G/MSPSA <sup>7</sup>
	M125SPTBSA <sup>7</sup>	QUQ125G/MSPTBSA <sup>7</sup>
	M125SPDLSA <sup>7</sup>	QUQ125G/MSPDLSA <sup>7</sup>
	M125SF <sup>7</sup>	QUQ125G/MSF <sup>7</sup>
	M125ZHSA	QUQ125G/MZHSA
	M125ZHTBSA	QUQ125G/MZHTBSA
	M125ZHDLSA	QUQ125G/MZHDLSA

M Series wheels	Fork code	Castor code
<b>STQ125G</b>	M125SPSA <sup>7</sup>	STQ125G/MSPSA <sup>7</sup>
	M125SPTBSA <sup>7</sup>	STQ125G/MSPTBSA <sup>7</sup>
	M125SPDLSA <sup>7</sup>	STQ125G/MSPDLSA <sup>7</sup>
	M125SF <sup>7</sup>	STQ125G/MSF <sup>7</sup>
	M125ZHSA	STQ125G/MZHSA
	M125ZHTBSA	STQ125G/MZHTBSA
	M125ZHDLSA	STQ125G/MZHDLSA
Big M Series wheel	Fork code	Castor code
<b>QTQ150G</b>	M150ZPSA	QTQ150G/MSPSA <sup>6</sup>
	M150ZPTBSA	QTQ150G/MSPTBSA <sup>6</sup>
	M150ZPDLSA	QTQ150G/MSPDLSA <sup>6</sup>
	M150ZF	QTQ150G/MSF <sup>6</sup>
	M150ZHSA	QTQ150G/MZHSA
	M150ZHTBSA	QTQ150G/MZHTBSA
	M150ZHDLSA	QTQ150G/MZHDLSA
O Series wheels	Fork code	Castor code
<b>HBR150</b>	O150SPSA <sup>8</sup>	HBR150/OSPSA <sup>8</sup>
	O150SPTBSA <sup>8</sup>	HBR150/OSPTBSA <sup>8</sup>
	O150SPDLSA <sup>8</sup>	HBR150/OSPDLSA <sup>8</sup>
	H150SF <sup>8</sup>	HBR150/HSF <sup>8</sup>
<b>HBR200</b>	O200SPSA <sup>8</sup>	HBR200/OSPSA <sup>8</sup>
	O200SPTBSA <sup>8</sup>	HBR200/OSPTBSA <sup>8</sup>
	O200SPDLSA <sup>8</sup>	HBR200/OSPDLSA <sup>8</sup>
	H200SF <sup>8</sup>	HBR200/HSF <sup>8</sup>
<b>HSR200</b>	O200SPSA <sup>8</sup>	HSR200/OSPSA <sup>8</sup>
	O200SPTBSA <sup>8</sup>	HSR200/OSPTBSA <sup>8</sup>
	O200SPDLSA <sup>8</sup>	HSR200/OSPDLSA <sup>8</sup>
	H200SF <sup>8</sup>	HSR200/HSF <sup>8</sup>
<b>HUR150</b>	O150SPSA <sup>8</sup>	HUR150/OSPSA <sup>8</sup>
	O150SPTBSA <sup>8</sup>	HUR150/OSPTBSA <sup>8</sup>
	O150SPDLSA <sup>8</sup>	HUR150/OSPDLSA <sup>8</sup>
	H150SF <sup>8</sup>	HUR150/HSF <sup>8</sup>

O Series wheels	Fork code	Castor code
<b>HUR200</b>	O200SPSA	HUR200/OSPSA <sup>8</sup>
	O200SPTBSA	HUR200/OSPTBSA <sup>8</sup>
	O200SPDLSA	HUR200/OSPDLSA <sup>8</sup>
	H200SF	HUR200/HSF <sup>8</sup>
<b>OBQ125<sup>4</sup></b>	O125SPSA	OBQ125/OSPSA <sup>8</sup>
	O125SPTBSA	OBQ125/OSPTBSA <sup>8</sup>
	O125SPDLSA	OBQ125/OSPDLSA <sup>8</sup>
	H125SF	OBQ125/HSF <sup>8</sup>
<b>OBQ150<sup>4</sup></b>	O150SPSA	OBQ150/OSPSA <sup>8</sup>
	O150SPTBSA	OBQ150/OSPTBSA <sup>8</sup>
	O150SPDLSA	OBQ150/OSPDLSA <sup>8</sup>
	H150SF	OBQ150/HSF <sup>8</sup>
<b>OBQ200<sup>4</sup></b>	O200SPSA	OBQ200/OSPSA <sup>8</sup>
	O200SPTBSA	OBQ200/OSPTBSA <sup>8</sup>
	O200SPDLSA	OBQ200/OSPDLSA <sup>8</sup>
	H200SF	OBQ200/HSF <sup>8</sup>
<b>ONR125</b>	O125SPSA	ONR125/OSPSA <sup>8</sup>
	O125SPTBSA	ONR125/OSPTBSA <sup>8</sup>
	O125SPDLSA	ONR125/OSPDLSA <sup>8</sup>
	H125SF	ONR125/HSF <sup>8</sup>
<b>ONR150</b>	O150SPSA	ONR150/OSPSA <sup>8</sup>
	O150SPTBSA	ONR150/OSPTBSA <sup>8</sup>
	O150SPDLSA	ONR150/OSPDLSA <sup>8</sup>
	H150SF	ONR150/HSF <sup>8</sup>
<b>ONR200</b>	O200SPSA	ONR200/OSPSA <sup>8</sup>
	O200SPTBSA	ONR200/OSPTBSA <sup>8</sup>
	O200SPDLSA	ONR200/OSPDLSA <sup>8</sup>
	H200SF	ONR200/HSF <sup>8</sup>

\* Minimum order quantity of 200 pieces for O Series zinc Core Coat™ castors

<sup>1</sup> See page 14 for more information on compatible 125 mm M Series wheels.

<sup>2</sup> See page 17 for more information on Big M Series wheels.

<sup>3</sup> For optional thread guards, add **G** at the end of wheel code.

<sup>4</sup> Also available with SS precision bearing—OBC125, OBC150, OBC200.

<sup>5</sup> See page 22 for more information on O Series wheels.

<sup>6</sup> See page 75 for M and Big M Series ISO and NA fork mount plate diagrams.

<sup>7</sup> Also available in SS—MSPSA, MSPTBSA, MSPDLSA, MSF.

<sup>8</sup> See page 75 for O Series ISO and NA fork mount plate diagrams.

Also available in zinc Core Coat™—OZPSA, HZF, OZPTBSA, OZPDLSA.

# Medical castors and wheels

## Trinity series castors

Designed for patient transport, Trinity three-in-one castors are renowned in the healthcare industry for their innovative three-in-one brake function, fixed brake pedal position and high dynamic load rating.

Built on this innovation, Trinity Electronic Braking Castors (EBC) feature automatic brakes, intuitive steering, and the control of brakes and steering from any castor foot pedal, handset or nurse panel.

## Traditional central locking castors

Castors and fittings for traditional hospital beds with mechanical central locking systems.

## Wheelchair castors

Moulded from high-impact nylon, spoked for less weight, fitted with sealed precision bearings and paired with lightweight foamed urethane tyres, our wheelchair castors are designed to be easy to use and maintenance free over its lifetime.

## Conductive wheels

Non-marking conductive wheels for M Series castors.





# Trinity series



## Features across the range

- Innovative patented design
- Suits a wide range of medical equipment and applications
- Advanced braking system
- Fixed position soft-touch actuation pedal
- Available in 100, 125 and 150 mm wheel diameters
- Made in Australia

## Innovative patented design

Trinity castors and Trinity EBC are designed in Australia and made under the following patents:

- USA patent 8205297 (12/663354)
- European patent 2164715
- Australian patent 2008258348
- International patent pending 20150266342

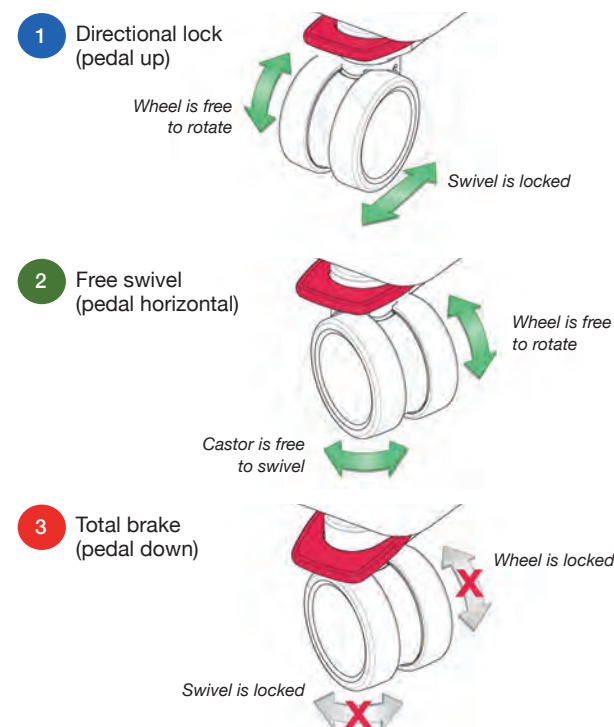
## Three-in-one castors

Designed for patient transport, Trinity castors are renowned in the healthcare industry for their innovative three-in-one brake function, fixed brake pedal position and high dynamic load rating.

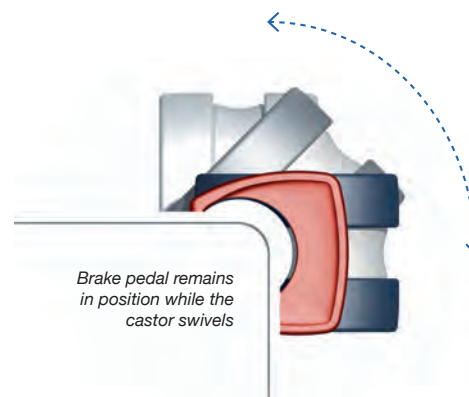
### Configuration

Trinity castors are available in three wheel sizes—100, 125 and 150 mm—and four brake configurations:

- Complete brake (CB)—includes all three brake positions
- Total brake (TB)—includes TB and swivel
- Swivel (SW)—free movement castor with no pedal
- Blank castor (BL)—used to achieve bilateral braking. If used at the rear of equipment and combined with CB castors at the front, one activation bar can control all castors to achieve total brake, direction lock or free swivel (down = TB, horizontal = swivel, up = swivel).



### Three-in-one brake pedal function



### Fixed brake pedal position

A fixed brake pedal means that you can use the castor no matter where it's facing as the pedal will always be accessible. No more fishing under equipment to try to find the pedal.

### Specifications

	Diameter (mm)	Max load (kg)	Height* (mm)	Turning radius (mm)
<b>Swivel</b>				
Swivel only	100	100	133	78
	125	125	161	104
	150	150	185	129
<b>In-line pedal</b>				
Pedal in-line with directional lock	100	100	133	78
	125	125	161	104
	150	150	185	129
<b>90 degree pedal</b>				
Pedal at 90 degree angle to directional lock	100	100	133	78
	125	125	161	104
	150	150	185	129

\* Mount heights shown are for castors only. Fittings are additional—5 mm for washer, 14 mm for plate.



# Electronic braking castors (EBC)

Built on the innovation of Trinity three-in-one castors, Trinity electronic braking castors (EBC) feature automatic brakes, intuitive steering, and the control of brakes and steering from any castor foot pedal, handset or nurse panel.

## Never forget the brakes again

Where medical castors are used for moving patients and specialised equipment frequently, forgetting to apply the brakes presents a higher risk of accidents, especially if the patient tries to alight, or when hospital equipment unexpectedly moves.

Trinity EBC helps prevent these kinds of accidents by automatically applying the brakes when it has been stationary for a programmed time (normally 60 seconds). When you want to unlock the brakes again, the control is always within easy reach—just flick up any of the four castor pedals, or press the button on the handset or nurse control panel.

## Steer like you flip your smart-phone

Just like your smart-phone decides whether to flip its display from portrait to landscape based on your pattern of movement, Trinity EBC analyses how you move the bed or equipment, and intelligently decides when and how to engage or disengage the directional lock.

## Control system

Trinity EBC is compatible with Dewert, TiMotion and Linak control systems. It is also fully customisable and can interface with customer-specific control systems. Pair an EBC set with the Fallshaw Control System to get the most out of Trinity EBC, or ask our engineers to help you retrofit EBC to you existing hospital bed system. Ask a Fallshaw representative for more information.

## No power, no problem

In the unlikely event of a power cut, the castors can still be manually steered and locked through the pedals, just like a normal Trinity castor. This allows you to still use the bed normally.

## Trinity EBC set

Trinity EBC can be ordered as a set. An EBC set consists of four castors—one motion sensing and conductive castor, and three standard castors.

## Specifications

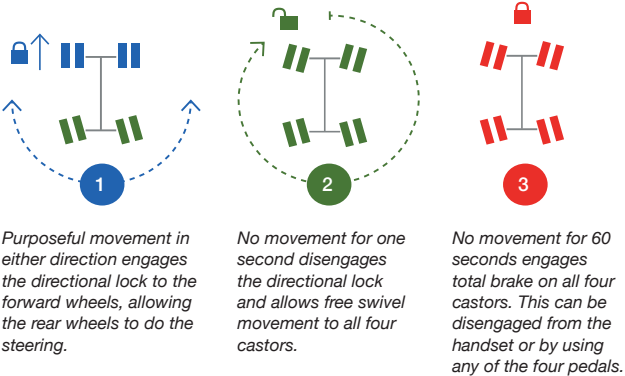
	100 mm wheel	125 mm wheel	150 mm wheel
Max load	100 kg	125 kg	150 kg
Mount height*	133 mm	161 mm	185 mm
Turning radius	78 mm	104 mm	129 mm
Standard fittings	• 32 mm pintle or 28 mm ISO pintle • Washer		
Standard features	• IPX5 water resistance rating • Cool grey or eggshell colourway		
Optional features	• Auto brake motion sensor • Intuitive steer motion sensor • Conductive (resistance < 10 <sup>5</sup> ohms)		

\* Add 5 mm for washer mount.

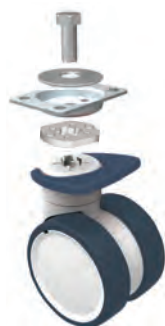


Trinity EBC can be used on a wide range of medical equipment, including hospital beds, mobile rehab robots and specialised surgical equipment.

## How automatic braking and intuitive steering works



## Trinity series fitting options



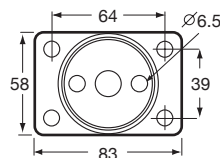
### PLATE MOUNT

#### SPFPLATEKIT

Includes:

- SPM14X40 (bolt)
- SPWSHFZDRILL (fitting washer)
- SPFPLATE (top plate)

Only compatible with 100 mm castors at full load rating.



### TUBE MOUNT

Add solid pintle adapter:

-AFR28Z(100) Fits 100 mm castors, 28 mm round stem<sup>2</sup>

-AFR28Z(125150) Fits 125 mm & 150 mm castors, 28 mm round stem<sup>2</sup>

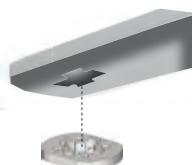
-AFR32Z(100) Fits 100 mm castors, 32 mm round stem<sup>3</sup>

-AFR32Z(125150) Fits 125 mm & 150 mm castors, 32 mm round stem<sup>3</sup>



### WASHER MOUNT

Customer supplied M14 bolt and washer to ensure engagement into the castor of 30–38 mm (100) or 40–50 mm (125 and 150).



Laser cut mount  
SPWSHFZLASER



Drill mount  
SPWSHFZDRILL

## Trinity three-in-one castor order codes

Castor series	Tyre material	Bearing	Size (mm)	Fork	Pedal	Colourway	Brake configuration	Fork design				
F	U Polyurethane	Q	100	F	0 In-line	C Cool grey	CB Complete brake	S Standard				
	A Conductive		125		9 90°	E Eggshell	TB Total brake	A Conductive				
			150				SW Swivel					
							BL Blank					
F	—	Q	—	F	—	—	—	—				

## Trinity EBC (single castor) order codes

Castor series	Tyre material*	Bearing	Size (mm)	Fork	Pedal	Colourway	Brake configuration	Fork design*	Steering type <sup>1</sup>	Cable compatibility	Motion-sensing <sup>1</sup>	Water resistance
F	U Polyurethane	Q	100	P	0 In-line	C Cool grey	CB Complete brake	S Standard	I Intuitive	L Linak	M Yes	5 IPX5
	A Conductive		125		9 90°	E Eggshell	TB Total brake	A Conductive	U User specified	D Dewert	N No	6 IPX6
			150				BL Blank			T TiMotion		
F	—	Q	—	P	—	—	—	—	—	—	—	—

**Please note:** The combination of TB (total brake) and I (intuitive steering) is unavailable in the Trinity EBC.

\* Tyre material and fork design—polyurethane tyre (U) can only be matched with standard fork (S). Conductive tyre (A) can only be matched with conductive fork.









<sup>1</sup> Steering type and motion sensing—intuitive steering (I) can only be matched with motion sensing (M: Yes).

<sup>2</sup> Cross drill hole: distance from end—19 mm, diameter—8 mm.

<sup>3</sup> Cross drill hole: distance from end—7 mm, diameter—6 mm.

Trinity EBC control system

Core components

	<b>EBCCONTROLU</b> (For user-specified handsets) <b>EBCCONTROLI</b> (For Intuitive handset or panel)
	<b>EBCCABLESET1.5</b> (Set of four 1.5 m cables)
	<b>EBCCABLEY</b>
	<b>EBCPOWERAU</b> (Australasian) <b>EBCPOWEREU</b> (European) <b>EBCPOWERUK</b> (UK) <b>EBCPOWERUS</b> (US)
User interface options (choose one only)	
	<b>EBCHANDSETU1</b> (User-specified, 1 button) <b>EBCHANDSETU5</b> (User-specified, 5 button) <b>EBCHANDSETI1</b> (Intuitive, 1 button) <b>EBCHANDSETI6</b> (Intuitive, 6 button)
	<b>EBCPANELI1</b> (Intuitive, 1 button)
	<b>EBCINTERFACE</b> (If using existing control panel)
Optional extras (choose only if your existing system requires a stand-alone battery)	
	<b>EBCBATTERY1</b> (1.2AH) <b>EBCBATTERY2</b> (2.0AH)

Trinity EBC set order codes

Castor Series	Size	Pedal configuration	Colourway	Brake configuration	Steering type	Cable compatibility	Water resistance
EBCSET	100 100 mm	0 In-line	C Cool grey	CB Complete brake	I Intuitive	L Linak	5 IPX5
	125 125 mm	9 90°	E Eggshell	TB Total brake	U User specified	D Dewert	6 IPX6
	150 150 mm					T TiMotion	
EBCSET	—	—	—	—	—	—	—

**Please note:** The combination of *TB* (total brake) and *I* (intuitive steering) is unavailable in the Trinity EBCSET.

*EBC Sets include one conductive and motion-sensing castor, and three standard castors.*

Trinity EBC colour coded feature identification

- Blue—Intuitive steering
- Black—Motion sensing
- White—IPX6 water resistance
- Yellow—Conductive



# Central locking castors

We have two options for central locking castors for hospital beds—the traditional mechanical system, and the innovative Trinity EBC.

## Traditional mechanical system

Made in Australia, these castors are operated via a foot pedal, which typically moves down for total brake, horizontal for swivel, and up for directional lock (steer). The foot pedal is connected via transmission levers and a hexagonal rod running through the bed undercarriage, which, in turn rotates cams inside the castors to control the brake state in all four castors centrally. Steering needs to be factory fitted to either steer from the head end or the foot end of the bed.

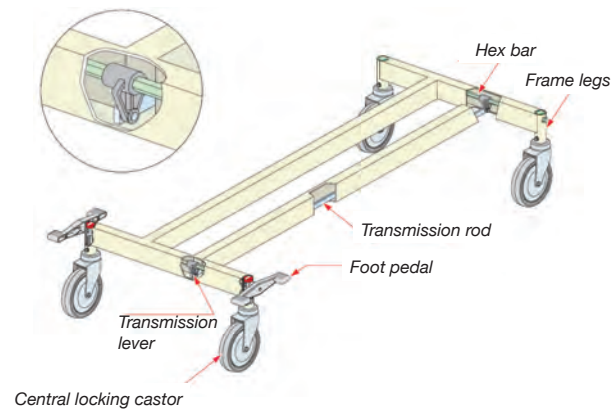
## Trinity EBC system (previous page)

Trinity EBC can be controlled with the push of a button via the handset, or by activating any of the four castors (which will then control their companion castors). Steering can flip from the head end of the bed to the foot end automatically.

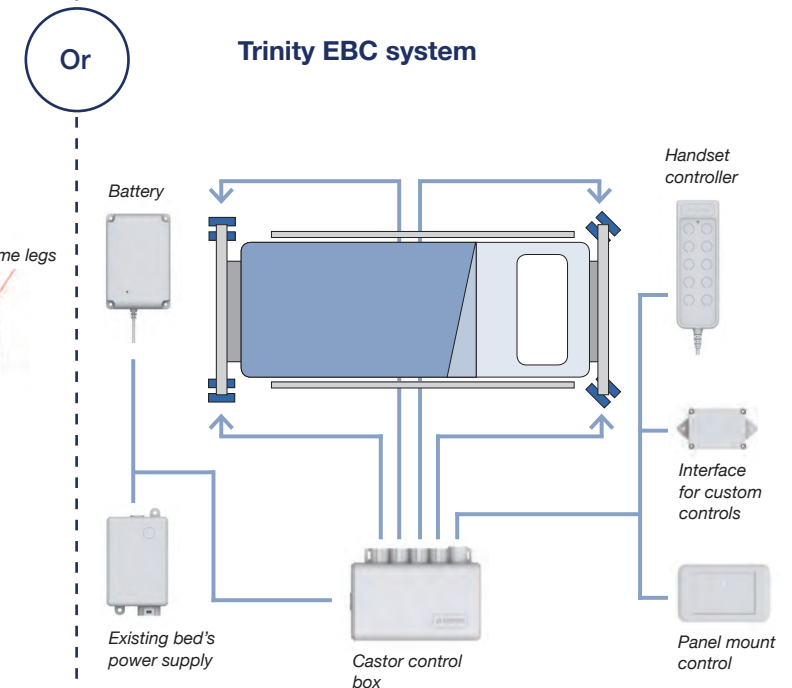
The EBC technology connects all four castors with electronic cables instead of a hexagonal rod and transmission levers. This provides great flexibility in bed design, where the undercarriage no longer needs to provide for the rigid hexagonal bars, and the cables can bend to any shape. Additionally, Trinity EBC can be retro-fitted to existing hospital beds.



Traditional mechanical system



Trinity EBC system



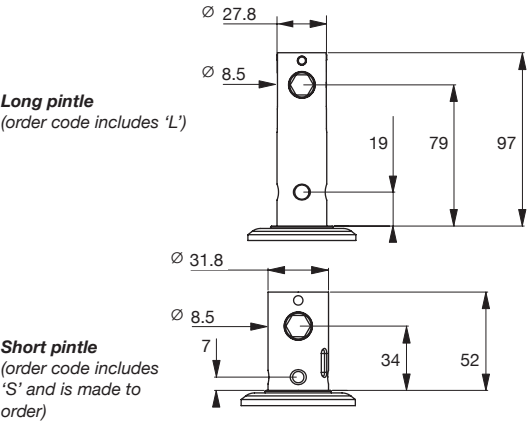


Traditional central locking castors



- CUQ (Twin wheel)**  
PU, precision bearing, thread guard
- MJQ**  
TPE, precision bearing, thread guard
- QTQ**  
Grey rubber, round profile, precision bearing, thread guard

Wheel	Max load (kg)	Diameter x tread (mm)
CUQ150GT	100	150 x 32
MJQ100G	100	100 x 32
MJQ125G	100	125 x 32
QTQ150G	100	150 x 32



Fork options

	Wheel Diameter	Height (mm)	Turning radius (mm)
<b>CNL/CZL</b> Long pintle with swivel	100	139	91
	125	165	103
	150	190	113
<b>CNLTB/CZLTB</b> Long pintle with total brake	100	139	91
	125	165	103
	150	190	113
<b>CNLDL/CZLDL</b> Long pintle with direction lock	100	139	91
	125	165	103
	150	190	113
<b>CNS/CZS</b> Short pintle with swivel	100	139	91
	125	165	103
	150	190	113
<b>CNSTB/CZSTB</b> Short pintle with total brake	100	139	91
	125	165	103
	150	190	113
<b>CNSDL/CZSDL</b> Short pintle with direction lock	100	139	91
	125	165	103
	150	190	113

Fitting options

- SPMCLNS28SPLIT**  
Square adaptor to suit 28 mm ID tube
- SPPEDCL(L)** — Left hand side control pedal  
**SPPEDCL(R)** — Right hand side control pedal
- SPMCLTL** — lever for long ISO pintle
- SPMCSTL** — lever to suit the short pintle

Order codes

Wheel code	Fork code	Castor code
<b>CUQ150GT</b> Diameter: 150 mm	C150NL	CUQ150GT/CNL
	C150NLTB	CUQ150GT/CNLTB
	C150NLDL	CUQ150GT/CNLDL
	C150NS	CUQ150GT/CNS
	C150NSTB	CUQ150GT/CNSTB
	C150NSDL	CUQ150GT/CNSDL
<b>MJQ100G</b> Diameter: 100 mm	C100ZL	MJQ100G/CZL
	C100ZLTB	MJQ100G/CZLTB
	C100ZLDL	MJQ100G/CZLDL
	C100ZS	MJQ100G/CZS
	C100ZSTB	MJQ100G/CZSTB
	C100ZSDL	MJQ100G/CZSDL
<b>MJQ125G</b> Diameter: 125 mm	C125ZL	MJQ125G/CZL
	C125ZLTB	MJQ125G/CZLTB
	C125ZLDL	MJQ125G/CZLDL
	C125ZS	MJQ125G/CZS
	C125ZSTB	MJQ125G/CZSTB
	C125ZSDL	MJQ125G/CZSDL
<b>QTQ150G</b> Diameter: 150 mm	C150ZL	QTQ150G/CZL
	C150ZLTB	QTQ150G/CZLTB
	C150ZLDL	QTQ150G/CZLDL
	C150ZS	QTQ150G/CZS
	C150ZSTB	QTQ150G/CZSTB
	C150ZSDL	QTQ150G/CZSDL
Sets — 2 x Total Brake, 2 x Direction Lock, 2 x Transmission Levers		
<b>CUQ150GT</b>	Long pintle	CUQ150GTCLLSET
	Short pintle	CUQ150GTCLSSET
<b>MJQ100G</b>	Long pintle	MJQ100GCLLSET
	Short pintle	MJQ100GCLSSET
<b>MJQ125G</b>	Long pintle	MJQ125GCLLSET
	Short pintle	MJQ125GCLSSET
<b>QTQ150G</b>	Long pintle	QTQ150GCLLSET
	Short pintle	QTQ150GCLSSET

# Wheelchair castors




## Features

- High impact nylon moulded centre with foamed urethane tyre and precision bearing
- Spoked design for lighter castor weight, only 1.07 kg for 175 mm castor and 1.27 kg for the 200 mm castor
- Maintenance free sealed precision head race bearing
- Made in Australia

## Specifications

	Diameter x tread (mm)	Hub width (mm)	Weight (kg)	Max load (kg)	Height (mm)	Turning radius (mm)	Castor code
<b>CFQ</b>	<b>175 x 45</b>	<b>50 x 8</b>	1.07	45	225	130	CFQ175/CPH
Foamed urethane wheel, precision bearing, no thread guard	<b>200 x 45</b>	<b>50 x 8</b>	1.27	45	237	144	CFQ200/CPH

## Solid pintle mount

	Stem OD	Tube size (OD x Wall)	Cross drill hole (distance from end x diameter)	Order code
	19 mm round	22 x 1.2 mm	19 x 8 mm	-AR19Z
	22 mm round	25 x 1.6 mm	19 x 8 mm	-AR22Z
	-AR19 with adapter 22 mm square	25 x 1.6 mm SQ	19 x 8 mm	-AS22Z
	28 mm round	32 x 1.6 mm	19 x 8 mm	-AR28Z

# Conductive wheels



## Features

- Conductive non-marking wheels exceeds the conductivity level requirements of ANSI/ESD S20.20-1999
- Made in Australia

**Designed for use in Electrostatic Discharge (ESD) environments as part of an effective ESD Control Program, our conductive non-marking wheels can be assembled into our M series castors.**

With a conductivity of  $<10^6$ , our conductive wheels exceed the requirements of ANSI/ESD S20.20-1999 for mobile equipment in protected areas, which specify  $10^9$  as the maximum level of resistance.

## Installation of conductive wheels

Conductive wheels must be properly installed to ensure a conductive path from the trolley leg, through the stem, and the castor and the axle and the bearing, and through the centre and tyre. Solid metal pintles will provide such a conductive path. If plastic expanding stems are selected, they will need to be installed with a copper wire attached to the stem and wrapped between the adaptor and tube inner to ensure a conductive path.

	Diameter x tread (mm)	Hub x bore (mm)	Max load (kg)
<b>MAQ*</b>	<b>75 x 32</b>	<b>40 x 8</b>	85
Conductive TPE, precision bearing, thread guard	<b>100 x 32</b>	<b>40 x 8</b>	85
	<b>125 x 32</b>	<b>40 x 8</b>	85

\* See page 14 for M Series fork options. Also available with stainless steel bearing—MAC—for M Powder-coat (page 31) and M Stainless Steel (page 32) castors.

# Products designed by you. Castors made by us.



A leading healthcare equipment company wanted a castor to perfectly match the powder-coat colour of their patient lifters and the blue of their company logo. They also required an ultra-low castor for the front of the patient lifter. We matched the colours, and were able to team a wheel with a custom made low-height fork. In addition, we recommended the use of Chicago screw axles (so there are no ankle-biting sharp edges around patients' fragile skin).



A leading design and manufacturing company wanted a castor for a recliner chair that could be activated using purpose-built engagement into a customised pedal (utilising the fixed pedal technology of the Trinity Castor). We added engagement holes into the pedal they designed and moulded in their customised colours, materials and finishes, specified for chemical resistance.



A leading hospital bed manufacturer approached us to develop a castor using their corporate colours with a special pintle to suit their specific dimensions. We adapted our O Series castor and developed a special top cap buffer to prevent fluid ingress.





# Decorative castors

## The Arc range

Based on our popular K and M Series castors, The Arc range is designed with crisp, clean finishes and ideally suited to modern, contemporary furniture. The decorative finishes include powder-coating in Anodic natural matt, grey pedals and seals, and Chicago screw axles. The wheels come in four colourways—graphite, silver, white and clear, all with pearlescent pigment in the thread guards for that sophisticated high lustre look.

## The Zen range

The Zen range of castors are designed with earthy, warm tones to complement timber furniture.

Also based on our K Series and M Series castors, Zen castors are decoratively finished in a 'storm front' powder-coat—a warm, dark grey with a tiny hint of olive—complemented with charcoal pedals and seals, and Chicago screw axles. The thermoplastic elastomer (TPE) wheels come with thread guards in a titanium coloured pearlescent pigment, for that high lustre sophistication.

## The M Deluxe range

Boasting elegant sophistication, the M Deluxe castor will complement your high end furniture, display, or equipment. Based on the M Series castors, the M Deluxe is fitted with a 100 mm or 125 mm TPE wheel, precision bearings and thread guard. The chrome-plated forks are fitted with Chicago screw axles.

## Build your own

Design your own castor from our wide selection of colourways.



DECORATIVE CASTORS



Arc



Features

- Anodic Natural Matt powder-coated forks with grey pedals and seals
- Available in K Series transparent grey PVC, TPE, or M Series TPE wheels in graphite, silver and white colourways
- Chicago screw axles and pearlescent thread guards
- Suitable for modern contemporary furniture
- Other sizes available subject to minimum orders
- Made in Australia

Wheels



**K SERIES KVP75**  
Transparent grey PVC, plain bearing



**K SERIES KJQ75G**  
TPE, precision bearing, thread guard



**M SERIES MJQ100G**  
TPE, precision bearing, thread guard

K Series forks



**KPP**  
Plate with swivel



**KPPTB**  
Plate with swivel and total brake



**KPH**  
Bolt hole swivel



**KPHTB**  
Bolt hole swivel and total brake

M Series forks



**MPP**  
Plate with swivel



**MPPTB**  
Plate with swivel and total brake



**MPH**  
Bolt hole swivel



**MPHTB**  
Bolt hole swivel and total brake

Colourways



**GH**  
Graphite



**SL**  
Silver



**WT**  
White



**GY**  
Clear grey (KVP75 only)

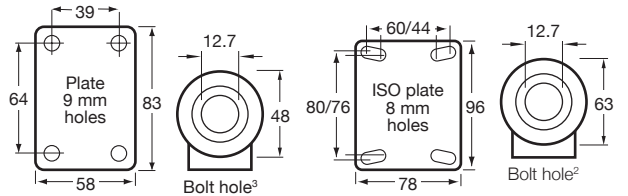
Specifications

Wheel	Max load (kg)	Diameter x tread (mm)	Hub x bore (mm)
KVP75	45	75 x 23	30 x 8
KJQ75G	50	75 x 23	30 x 8
MJQ100G	85	100 x 32	40 x 8

Forks	Wheel size (mm)	Mount height (mm)	Turning radius (mm)
KPP/KPH	75	104	69
KPPTB/KPHTB	75	104	89
MPP/MPH	100	135	91
MPPTB/MPHTB	100	135	128

K Series fork mount

M Series fork mount



Order codes

Wheel code	Fork code	Castor code	Colourway
<b>KJQ75G</b>	K75PPARC	KJQ75G/KPP	+ ____
	K75PPTBARC	KJQ75G/KPPTB	+ ____
	K75PHARC	KJQ75G/KPH	+ ____
	K75PHTBARC	KJQ75G/KPHTB	+ ____
<b>KVP75</b>	K75PPARC	KVP75/KPP	+ GY
	K75PPTBARC	KVP75/KPPTB	+ GY
	K75PHARC	KVP75/KPH	+ GY
	K75PHTBARC	KVP75/KPHTB	+ GY
<b>MJQ100G</b>	M100PPARC	MJQ100G/MPP	+ ____
	M100PPTBARC	MJQ100G/MPPTB	+ ____
	M100PHARC	MJQ100G/MPH	+ ____
	M100PHTBARC	MJQ100G/MPHTB	+ ____

Zen



## Wheels



**K SERIES KJQ75G**  
TPE, precision  
bearing, thread guard



**M SERIES MJQ100G**  
TPE, precision  
bearing, thread guard

## K Series forks



**KPP**  
Plate with  
swivel



**KPPTB**  
Plate with  
swivel and total  
brake



**KPH**  
Bolt hole swivel



**KPHTB**  
Bolt hole swivel  
and total brake

## M Series forks



**MPP**  
Plate with  
swivel



**MPPTB**  
Plate with  
swivel and total  
brake



**MPH**  
Bolt hole swivel



**MPHTB**  
Bolt hole swivel  
and total brake

## Features

- Storm front (warm, dark grey with a tiny hint of olive) powder-coated forks with charcoal pedals and seals
- Available in K Series or M Series TPE wheels with titanium thread guards and Chicago screw axles
- Suitable for complementing timber furniture
- Other sizes available subject to minimum orders
- Made in Australia

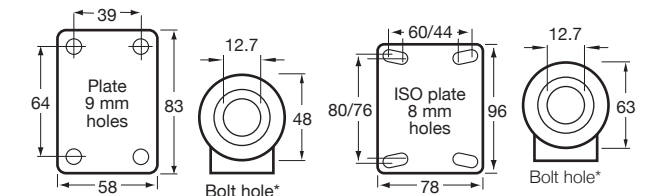
## Specifications

Wheel	Max load (kg)	Diameter x tread (mm)	Hub x bore (mm)
KJQ75G	50	75 x 23	30 x 8
MJQ100G	85	100 x 32	40 x 8

Forks	Wheel size (mm)	Mount height (mm)	Turning radius (mm)
KPP/KPH	75	104	69
KPPTB/KPHTB	75	104	89
MPP/MPH	100	135	91
MPPTB/MPHTB	100	135	128

### K Series fork mount

### M Series fork mount



## Order codes

Wheel code	Fork code	Castor code
<b>KJQ75G</b>	K75PPZEN	KJQ75G/KPPTM
	K75PPTBZEN	KJQ75G/KPPTBTM
	K75PHZEN	KJQ75G/KPHTM
	K75PHTBZEN	KJQ75G/KPHTBTM
<b>MJQ100G</b>	M100PPZEN	MJQ100G/MPPTM
	M100PPTBZEN	MJQ100G/MPPTBTM
	M100PHZEN	MJQ100G/MPHTM
	M100PHTBZEN	MJQ100G/MPHTBTM

\* Bushes available to reduce bolt hole to 8 and 10 mm.

DECORATIVE CASTORS



M Deluxe

Castor options



**MJQ WHEEL**  
TPE, precision bearing, thread guard



**MCP**  
Plate with swivel



**MCPTB**  
Plate with swivel and total brake



**MCF**  
Fixed plate, no swivel



**MCH**  
Bolt hole swivel



**MCHTB**  
Bolt hole swivel and total brake

Features

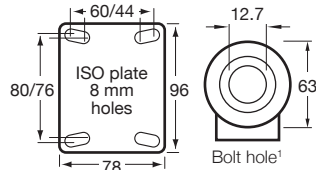
- Chrome plated forks with *Bluestone* pedals and seals
- M Series 100 mm or 125 mm TPE wheels with *Bluestone* thread guards and Chicago screw axles
- Complements high end furniture, displays or equipment
- Other sizes available subject to minimum orders
- Made in Australia

Specifications

Wheel	Max load (kg)	Diameter x tread (mm)	Hub x bore (mm)
MJQ100G	85	100 x 32	40 x 8
MJQ125G	85	125 x 32	40 x 8

Forks	Wheel size (mm)	Mount height (mm)	Turning radius (mm)
MCP/MCF*/MCH	100	135	91
MCPTB/MCHTB	100	135	128

M Series fork mount



Order codes

Wheel code	Fork code	Castor code
<b>MJQ100G</b>	M100CPBN	MJQ100G/MCPBN
	M100CPTBBN	MJQ100G/MCPTBBN
	M100CFBN	MJQ100G/MCFBN
	M100CHBN	MJQ100G/MCHBN
	M100CHTBBN	MJQ100G/MCHTBBN
<b>MJQ125G</b>	M125CPBN	MJQ125G/MCPBN
	M125CPTBBN	MJQ125G/MCPTBBN
	M125CFBN	MJQ125G/MCFBN
	M125CHBN	MJQ125G/MCHBN
	M125CHTBBN	MJQ125G/MCHTBBN

\* MCF—fixed plate has no turning radius.  
¹ Bushes available to reduce bolt hole to 8 and 10 mm.





# Build your own



## Your castor, your way.

Sometimes you just need castors that look different. Whether it's to match a piece of furniture you've designed, to complement your flooring, or just to give your proudly created masterpiece that upmarket touch, we can help you design and build the perfect castor for you.

Because we make our own castors, we can help product designers and manufacturers create their perfect castor with customised colours, wheel materials, fork finish.

We recently helped a leading furniture manufacturer with a total brake castor for their exclusive new lounge collection. With our team's help, we supplied the perfect castor, with colours and elements combined from the Arc, Zen and M Deluxe ranges.



## Castors that look the part

A leading manufacturer of high-end wooden furniture needed castors to complement their exclusive range. We supplied a castor that mixed and matched the bright chrome components from the M Deluxe range, the charcoal wheel from the Zen range, and colour-matched a custom colour for the thread guard and pedal.

If you are looking for a particular colourway to match your equipment or furniture, where volume permits, we have a large library of masterbatch colours to choose from. Alternatively we can match any colour from a swatch or a Pantone reference number, ensuring that you'll get the look you want.

## Popular colourways









# Wheels

## Soft wheels

- Grey rubber, blue rubber, black rubber and conductive

## Polyurethane wheels

## Hard wheels

- Nylon, pallet truck and PVC

## Pneumatics






- Puncture proof, steel centred and plastic centred wheels







WHEELS

Soft wheels


Grey rubber

	Diameter x tread (mm)
 <b>KSA</b>	<b>65 x 23</b>
Grey rubber, flat profile, plain bearing	<b>75 x 23</b>
	<b>100 x 23</b>
 <b>PSA/PSB</b>	<b>200 x 32</b>
Grey rubber, non-marking, white polypropylene (PP) offset wheel, plain bearing (PSA) or deep groove ball bearing (PSB). Developed for floor polishers and scrubbers. PSA also available to suit 5/8" bore (58)	
 <b>STQ</b>	<b>75 x 32</b>
Grey rubber, round profile, precision bearing, thread guard	<b>100 x 32</b>
	<b>125 x 32</b>
 <b>QTQ</b>	<b>150 x 34</b>
Grey rubber, round profile, precision bearing, thread guard	<b>175 x 34</b>
	<b>200 x 34</b>
 <b>HSR</b>	<b>200 x 50</b>
Grey rubber, roller bearing, thread guard available (HSR200G)	

Blue rubber

	Diameter x tread (mm)
 <b>CBQ</b>	<b>75 x 33</b>
Blue high-resilient elastomer, precision bearing, thread guard	<b>100 x 33</b>
	<b>125 x 33</b>
 <b>MBQ</b>	<b>100 x 32</b>
Blue high-resilient rubber, non-marking, long life, precision ball bearing, thread guard	<b>125 x 32</b>
 <b>JBR</b>	<b>100 x 32</b>
Blue high-resilient rubber, non-marking, long life, roller bearing	<b>125 x 32</b>
 <b>HBR</b>	<b>150 x 40</b>
Blue high-resilient rubber, non-marking, long life, roller bearing	<b>200 x 50</b>





Blue rubber

	Diameter x tread (mm)
 <b>OBQ</b>	<b>100 x 50</b>
Blue high-resilient rubber, non-marking, long life, precision ball bearing	<b>125 x 50</b>
	<b>150 x 50</b>
	<b>200 x 50</b>


Black rubber

	Diameter x tread (mm)
 <b>PRB*</b>	<b>125 x 36</b>
General purpose rubber utility wheel for lawn equipment and carts, deep groove ball bearing and offset centre	<b>150 x 36</b>
	<b>200 x 36</b>
 <b>PRP250</b>	<b>250 x 45</b>
General purpose rubber utility wheel, used on light lawn equipment and carts, plain bearing	
 <b>U200/60C</b>	<b>200 x 60</b>
Medium duty hand truck wheels, deep groove ball bearing, high-impact polypropylene centre, 20 mm bore (-POYB20) or 3/4" bore (-POYB34)	
 <b>R250/50C¹</b>	<b>250 x 50</b>
Puncture proof for wheelbarrows and utility equipment, precision ball bearing. Available in 20 mm bore (-PRYQ20), 3/4" bore (-PRYQ34) or (-PRYQ58)	
 <b>R300/50C¹</b>	<b>300 x 50</b>
Puncture proof for wheelbarrows and utility equipment, precision ball bearing. Available in 20 mm bore (-PRYQ20) or 3/4" bore (-PRYQ34)	
 <b>R400/70C¹</b>	<b>400 x 70</b>
Puncture proof for wheelbarrows and utility equipment, precision ball bearing. Available in 20 mm bore (-PRYQ20), 3/4" bore (-PRYQ34), or 1" bore (PRYQ25)	
 <b>R250/75C²</b>	<b>250 x 75</b>
Puncture proof for wheelbarrows and utility equipment, precision ball bearing. Available in 20 mm bore (-PRWQ20), 25 mm bore (-PRWQ25), 3/4" bore (-PRWQ34), or 5/8" bore (-PRWQ58)	

Black rubber

	Diameter x tread (mm)
 <b>HRR200²</b>	<b>200 x 50</b>
Black rubber wheel with roller bearing, for trolleys, carts and lawn mowers. Thread guard available (HRR200G)	
 <b>RB200L</b>	<b>200 x 45</b>
Solid black rubber wheel, with roller bearing, for wheelbarrows, utility equipment and waste bins	
 <b>R280/70R</b>	<b>280 x 70</b>
Puncture proof solid cushioned wheel, with deep groove ball bearings in sizes 1" (-SRBB10), 20 mm (-SRBB20), 3/4" (-SRBB34) or 5/8" (-SRBB58). With precision ball bearings in sizes 20 mm (-SRQ20), 3/4" (-SRQ34) or 5/8" (-SRQ58)	
 <b>R400X8-SQ10</b>	<b>400 x 95</b>
Heavy duty wheel, designed for towing, precision ball bearing. Max tow speed—15 km/h	

Conductive

	Diameter x tread (mm)
 <b>MAQ</b>	<b>75 x 32</b>
Conductive TPE, precision bearing, thread guard. Available with stainless steel bearing (MAC)	<b>100 x 32</b>
	<b>125 x 32</b>

Order codes

	Max load (kg)	Hub x bore (mm)
Grey rubber		
KSA65/KSA75/KSA100	50	<b>30 X 12</b>
PSA200	80	<b>38 x 12.7</b>
PSA200(58)	80	<b>38 x 16</b>
PSB200	80	<b>38 x 12.7</b>
STQ75G/STQ100G/STQ125G	100	<b>40 x 8</b>
QTQ150G/QTQ175G/QTQ200G	200	<b>40 x 8</b>
HSR200/HSR200G	250	<b>60 x 12.7</b>

\* Also available with plain bearing—PRA  
¹ 5/8" and 3/4" precision ball bearing or plain bush available.  
² 20 mm, 5/8", 3/4" deep groove ball bearing, or 5/8", 3/4" plain bush available.

Max load (kg) Hub x bore (mm)

## Blue rubber

CBQ75G	85	40 x 8
CBQ100G/CBQ125G	100	40 x 8
MBQ100G	140	40 x 8
MBQ125G	150	40 x 8
JBR100	150	45 x 10
JBR125	180	45 x 10
HBR150	230	60 x 12.7
HBR200	250	60 x 12.7
OBQ100	300	60 x 12.7
OBQ125	350	60 x 12.7
OBQ150/OBQ200	400	60 x 12.7










## Black rubber

PRB125	50	38 x 12.7
PRB150	75	38 x 12.7
PRB200	100	38 x 12.7
PRP250	100	45 x 16
U200/60C-POYB20	135	60 x 20
U200/60C-POYB34	135	60 x 19
R250/50C-PRYQ20	150	60 x 20
R300/50C-PRYQ20	150	60 x 20
R400/70C-PRYQ20	150	80 x 20
R250/75C-PRWQ20	180	75 x 20
HRR200/HRR200G	180	60 x 20
RB200L	200	53 x 25.4
R280/70R-SRBB10	200	60 x 25
R400X8-SQ10	600	80 x 25

## Conductive

MAQ75G/MAQ100G/ MAQ125G	85	40 x 8
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## Polyurethane

		Diameter x tread (mm)
	<b>KUQ*</b> PU, precision bearing, optional thread guard	75 x 23 100 x 23
	<b>QUQ¹</b> PU tyre on nylon, precision bearing, thread guard	75 x 32 100 x 32 125 x 32
	<b>JUR*</b> PU, roller bearing, optional thread guard	100 x 32 125 x 38
	<b>HUR</b> PU on nylon, roller bearing	100 x 40 125 x 40 150 x 40 200 x 48
	<b>HUS*</b> PU on nylon, stainless steel roller bearing, no thread guard	100 x 32 125 x 40 150 x 40 200 x 48
	<b>WUQ</b> PU, precision bearing, no thread guard	150 x 40 200 x 40
	<b>XUQ</b> PU on cast iron, precision bearing, no thread guard	102 x 50 127 x 50 152 x 50 203 x 50
	<b>VUQ</b> PU on cast iron, precision bearing, no thread guard	203 x 75 254 x 75
	<b>AUQ</b> PU on cast iron, precision bearing, no thread guard	200 x 102 250 x 102

\* Also available with plain bearing—KUA, JUA, HUA

¹ Also available with plain bearing (QUA) and stainless steel bearing (QUC).

² 5/8" and 3/4" precision ball bearing or plain bush available.

## Order codes


	Max load (kg)	Hub x bore (mm)
KUQ75/KUQ75G	100	30 x 8
KUQ100/KUQ100G	100	30 x 8
QUQ75G	200	40 x 8
QUQ100G	200	40 x 8
QUQ125G	200	40 x 8
JUR100/JUR100G	300	45 x 10
JUR125/JUR125G	300	45 x 10
HUR100	300	60 x 12.7
HUR125	350	60 x 12.7
HUR150	450	60 x 12.7
HUR200	500	60 x 12.7
HUS100	300	60 x 12.7
HUS125	350	60 x 12.7
HUS150	450	60 x 12.7
HUS200	500	60 x 12.7
WUQ150	600	60 x 12.7
WUQ200	600	60 x 12.7
XUQ100	600	62 x 12.7
XUQ125	800	62 x 12.7
XUQ150	1000	62 x 12.7
XUQ200	1000	62 x 12.7
VUQ200	2000	89 x 20
VUQ250	2000	89 x 20
AUQ200	3000	109 x 30
AUQ250	3500	109 x 30






WHEELS


Hard wheels

Nylon		Diameter x tread (mm)
	<b>LNN</b>	<b>50 x 20</b>
	Hard nylon, plain bearing, no thread guard	
	<b>KNN</b>	<b>65 x 23</b>
	Hard nylon, plain bearing, no thread guard	<b>75 x 23</b>
		<b>100 x 23</b>
	<b>DNQ</b>	<b>125 x 32</b>
	Hard nylon, precision bearing, no thread guard	
	<b>DNQ...W</b>	<b>125 x 32</b>
	White hard nylon, precision bearing, no thread guard	
	<b>MNN</b>	<b>75 x 32</b>
	Hard nylon, plain bearing, no thread guard	<b>100 x 32</b>
		<b>125 x 32</b>
	<b>MNN...W</b>	<b>75 x 32</b>
	White hard nylon, plain bearing, no thread guard	
	<b>JNN</b>	<b>100 x 35</b>
	Hard nylon, plain bearing, no thread guard	<b>125 x 35</b>
	<b>JNR</b>	<b>100 x 35</b>
	Hard nylon, roller bearing, optional thread guard	<b>125 x 35</b>
	<b>ONA</b>	<b>100 x 40</b>
	Hard nylon, plain bearing, no thread guard	<b>125 x 40</b>
		<b>150 x 40</b>
		<b>200 x 40</b>
	<b>ONR</b>	<b>100 x 40</b>
	Hard nylon, roller bearing, no thread guard	<b>125 x 40</b>
		<b>150 x 40</b>
		<b>200 x 40</b>

Nylon		Diameter x tread (mm)
	<b>WNQ</b>	<b>150 x 40</b>
	Hard nylon, precision bearing, no thread guard	<b>200 x 40</b>

Pallet truck wheels		Diameter x tread (mm)
	<b>PLN</b>	<b>200 x 48</b>
	Nylon, available in 20 mm (Q20), 25 mm (Q25) and 3/4" (Q34) precision bearings, or no bearing (NB)	
	<b>PLU</b>	<b>200 x 48</b>
	Polyurethane, available in 20 mm (Q20), 25 mm (Q25) and 3/4" (Q34) precision bearings, or no bearing (NB)	

Pallet truck rollers		Diameter x tread (mm)
	<b>PLN</b>	<b>82 x 83</b>
	Nylon, available in 20 mm (Q20), 25 mm (Q25) and 3/4" (Q34) precision bearings, or no bearing (NB)	<b>82 x 100</b>

PVC		Diameter x tread (mm)
	<b>AVP</b>	<b>150 x 46</b>
	TPE flat profile tyre, plain bearing. Suitable for lawn mowers, barbecues and equipment needing a flat profile wheel	<b>200 x 49</b>

Order codes

Nylon	Max load (kg)	Hub x bore (mm)
LNN50	30	<b>25 x 6</b>
KNN65	50	<b>30 x 8</b>
KNN75	65	<b>30 x 8</b>
KNN100	70	<b>30 x 8</b>
MNN75/MNN75W	150	<b>40 x 8</b>
MNN100/MNN100W	150	<b>40 x 8</b>
MNN125/MNN125W	150	<b>40 x 8</b>

Nylon	Max load (kg)	Hub x bore (mm)
DNQ125/DNQ125W	200	<b>40 x 8</b>
JNN100/JNN125	300	<b>45 x 10</b>
JNR100/JNR125	300	<b>45 x 10</b>
ONA100	350	<b>60 x 12.7</b>
ONA125	400	<b>60 x 12.7</b>
ONA150	450	<b>60 x 12.7</b>
ONA200	500	<b>60 x 12.7</b>
ONR100	350	<b>60 x 12.7</b>
ONR125	400	<b>60 x 12.7</b>
ONR150	450	<b>60 x 12.7</b>
ONR200	500	<b>60 x 12.7</b>
WNQ150/WNQ200	600	<b>60 x 12.7</b>

Pallet truck wheels		
PLN200X48Q20	700	<b>48 x 20</b>
PLN200X48Q25	700	<b>48 x 25</b>
PLN200X48Q34	700	<b>48 x 19</b>
PLN200X48NB	700	<b>48 x n/a</b>
PLU200X48Q20	700	<b>48 x 20</b>
PLU200X48Q25	700	<b>48 x 25</b>
PLU200X48Q34	700	<b>48 x 19</b>
PLU200X48NB	700	<b>48 x n/a</b>

Pallet truck rollers		
PLN82X83Q20	800	<b>83 x 20</b>
PLN82X83Q25	800	<b>83 x 25</b>
PLN82X83Q34	800	<b>83 x 34</b>
PLN82X83NB	800	<b>83 x n/a</b>
PLN82X100Q20	800	<b>100 x 20</b>
PLN82X100Q25	800	<b>100 x 25</b>
PLN82X100Q34	800	<b>100 x 19</b>
PLN82X100NB	800	<b>100 x n/a</b>

PVC		
AVP150/AVP200	30	<b>38 x 12.7</b>

# Pneumatics



## Wheels

### Puncture-proof wheels

Our premium Australian made polyurethane foam-filled tyres provide the greatest performance and reliability. The foam filling provides a light-weight bouncy performance, similar to air-filling, but without the risk of flat tyres.

These wheels boast 4 ply long life tyres, fitted to two piece wobble-free steel centres that are manufactured from thick 1.8 mm steel, unlike cheaper imports with 2 ply tyres and rims made from thin 0.6 mm steel.

### Steel centred wheels

Designed for strength and performance, our wobble-free steel centred wheels boast 4 ply tyres, rims manufactured from 1.8 mm steel—with the 650 x 8 manufactured from 2 mm steel, and supplied with premium butyl rubber seamless (butt-joined) tubes.

### Plastic centred wheels

Our plastic centred wheels are designed with thicker UV protected polypropylene sections in a multi-web design, making them stronger than most imported steel centres.

Combined with our standard 4 ply tyres and premium butt-joined tubes, these wheels offer excellent performance in wet and corrosive environments.

### Maximum load capacities

Each wheel can carry the recommended load capacity at walking pace—8 km/h. If you are intending to tow your load, it is recommended that you do not use wheels with plastic centred rims, or exceed 15 km/h while carrying half the recommended load capacity.

### Maximum inflation

Do NOT inflate over recommended tyre inflation pressure (30 psi).

Do NOT allow tyre pressure to drop below 20 psi or wheel may deflate and become very difficult to re-inflate. If you allow the tyre to go flat and you are unable to re-inflate it then you may need to buy an inner tube to be retro fitted to the wheel (see page 66 for spare parts).

**Use of pneumatic wheels other than as recommended can be dangerous.**

### Tread options

	<b>RIB</b>	Straight lines, grey non-marking rubber. Common for wheelchairs and light duty trolleys that need a softer ride.
	<b>LUG/LGG</b>	General purpose, outside use. Strongly marked cross lines on a fairly flat tread surface. Good for running in a straight line. Use LGG code for grey non-marking rubber where available.
	<b>IND</b>	The normal industrial type tread, a round profile with an even pattern.
	<b>DMD</b>	Chunky Diamond or Star shaped pads on a flatter surface. Often used in rougher construction sites. Good for softer grass surfaces but may become clogged with mud.
	<b>STR</b>	
	<b>KNO</b>	This knobby pattern is often preferred for outdoor use, good for gravel or uneven terrain.
	<b>HWY</b>	Designed to have a higher load rating for industrial work sites.
	<b>GRA</b>	A wide tread, designed specifically with ride-on mowers and associated equipment in mind. Will traverse virtually any surface they come across.

\* See page 66 for spare parts.








# Puncture proof wheels

## Features

- Puncture proof 4 ply long life tyres
- Available in thick 1.8 mm thick steel rims
- Fitted with heavy duty deep groove shielded bearings (SB) or precision bearings (SQ)

## Order codes

Tread	Type	Diameter x tread (mm)	Hub x bore (mm)	Max load (kg) at 8 km/h	Max load (kg) at 15 km/h	Order code	Rim and bearing code	
 RIB (non-marking)	200 x 50	200 x 50	60 x 12.7	50	Not suitable	P200X50RIB	-SQ05	1/2"
 LUG	250 x 4	220 x 54	60 x 20	75	40	P250X4LUG	-SB20	20 mm
			60 x 19				-SB34	3/4"
			60 x 16				-SB58	5/8"
			60 x 15				-SQ15	15 mm
 IND	250 x 6	275 x 65	60 x 25.4	90	50	P250X6IND	-SB10	1"
			60 x 20				-SB20	20 mm
			60 x 19				-SB34	3/4"
			60 x 16				-SB58	5/8"
 STR	350 x 4	265 x 70	60 x 20	100	70	P350X4STR	-SB20	20 mm
			60 x 19				-SB34	3/4"
			60 x 16				-SB58	5/8"
			60 x 15				-SQ15	15 mm
 KNO	400 x 8	400 x 100	80 x 25.4	120	90	P400X8KNO	-SB10	1"
			84 x 20				-SB20	20 mm
			84 x 19				-SB34	3/4"
			84 x 16				-SB58	5/8"





## Steel centred wheels

### Features

- Strong 1.8 mm steel rims (2 mm rims for 650 x 8)
- 4 ply long life tyres (6 ply for HWY tread)
- Fitted with heavy duty deep groove shielded bearings (SB)
- Made in Australia

### Order codes

Tread	Type	Diameter x tread (mm)	Hub x bore (mm)	Max load (kg) at 8 km/h	Max load (kg) at 15 km/h	Order code	Rim and bearing code	
 LUG	250 x 4	220 x 54	60 x 20	120	100	250X4LUG*	-SB20	20 mm
			60 x 19				-SB34	3/4"
			60 x 16				-SB58	5/8"
 DMD	300 x 4	250 x 70	60 x 20	140	110	300X4DMD*	-SB20	20 mm
			60 x 19				-SB34	3/4"
			60 x 16				-SB58	5/8"
 STR	350 x 4	265 x 70	60 x 20	180	160	350X4STR*	-SB20	20 mm
			60 x 19				-SB34	3/4"
			60 x 16				-SB58	5/8"
 IND	250 x 6	275 x 65	60 x 25.4	140	110	250X6IND <sup>1</sup>	-SB10	1"
			60 x 20				-SB20	20 mm
			60 x 19				-SB34	3/4"
			60 x 16				-SB58	5/8"
 KNO	350 x 6	320 x 80	60 x 25.4	200	180	350X6KNO <sup>1</sup>	-SB10	1"
			60 x 20				-SB20	20 mm
			60 x 19				-SB34	3/4"
			60 x 16				-SB58	5/8"
 HWY	400 x 8	400 x 100	84 x 25.4	360	340	400X8HWY <sup>1</sup>	-SB10	1"
			84 x 20				-SB20	20 mm
			84 x 19				-SB34	3/4"
			84 x 16				-SB58	5/8"
 KNO	400 x 8	400 x 100	84 x 25.4	220	200	400X8KNO <sup>1</sup>	-SB10	1"
			84 x 20				-SB20	20 mm
			84 x 19				-SB34	3/4"
			84 x 16				-SB58	5/8"
 GRA	500 x 6	330 x 125	84 x 25.4	220	200	500X6GRA <sup>1</sup>	-SB10	1"
			84 x 20				-SB20	20 mm
			84 x 19				-SB34	3/4"
			84 x 16				-SB58	5/8"
 GRA	650 x 8	420 x 165	150 x 25.4	230	200	650X8GRA <sup>1</sup>	-SB10	1"
			150 x 20				-SB20	20 mm
			150 x 19				-SB34	3/4"
			150 x 16				-SB58	5/8"

\* Also available with 15 mm precision bearings. Add -SQ15 to the end of code. <sup>1</sup> Also available with precision bearings: 20 mm (-SQ20), 25 mm (-SQ25), 3/4" (-SQ34), 5/8" (-SQ58) and 1" (-SQ10).











Plastic centred wheels

Features

- UV protected and corrosion resistant polypropylene rims
- Available with heavy duty deep groove shielded bearings (PWB), or plain bearings (PWA). RIB tread available with roller bearings (PR) or precision bearings (PQ)
- Made in Australia

Order codes

Tread	Style	Diameter x tread (mm)	Hub x bore (mm)	Max load (kg) at 8 km/h	Max load (kg) at 15 km/h	Order code	Rim and bearing code	
 RIB (non-marking)	200 x 50	200 x 50	60 x 20	75	Not suitable	200X50RIB	-PR20	20 mm
			60 x 12				-PQ12	12 mm
 LUG	250 x 4	220 x 54	60 x 20	100	Not suitable	250X4LUG*	-PWB20	20 mm
			60 x 19				-PWB34	3/4"
			60 x 16				-PWB58	5/8"
 LGG (non-marking)	250 x 4	220 x 54	60 x 20	100	Not suitable	250X4LGG*	-PWB20	20 mm
			60 x 19				-PWB34	3/4"
			60 x 16				-PWB58	5/8"
 IND	250 x 6	275 x 60	60 x 20	110	Not suitable	250X6IND*	-PWB20	20 mm
			60 x 19				-PWB34	3/4"
			60 x 16				-PWB58	5/8"
 DMD	300 x 4	250 x 70	60 x 20	120	Not suitable	300X4DMD*	-PWB20	20 mm
			60 x 19				-PWB34	3/4"
			60 x 16				-PWB58	5/8"
 STR	350 x 4	265 x 70	60 x 20	140	Not suitable	350X4STR*	-PWB20	20 mm
			60 x 19				-PWB34	3/4"
			60 x 16				-PWB58	5/8"
 KNO	350 x 6	320 x 80	60 x 20	140	Not suitable	350X6KNO*	-PWB20	20 mm
			60 x 19				-PWB34	3/4"
			60 x 16				-PWB58	5/8"
 KNO	400 x 8	400 x 100	105 x 25.4	200	Not suitable	400X8KNO <sup>1</sup>	-PWB10	1"
			105 x 20				-PWB20	20 mm
			105 x 19				-PWB34	3/4"
			105 x 16				-PWB58	5/8"

\* Also available with 1" plain bearings, indicated with an A, e.g.. 250X4LUG-PWA20.

<sup>1</sup> Also available with plain bearing.



# Fittings and spares

## Fittings

- For 10 mm and 12 mm bolt hole castors

## Spares

- For pneumatic and general wheels


## General spares






# Fittings

## For 10 mm and 12 mm bolt hole castors



### Pintle bolts with M10 threaded tube ends

	Thread x Length	Order code
	M10 x 30 mm	SPM10X30ZP
	M10 x 40 mm	SPM10X40ZP
	M10 x 50 mm	SPM10X50ZP
	3/8" x 19 mm	SP3/8X19ZP
	3/8" x 30 mm	SP3/8X30ZP
	3/8" x 40 mm	SP3/8X40ZP
	3/8" x 50 mm	SP3/8X50ZP


### 3/8" fittings

	Description	Order code
	Drill a 12.7 mm hole through the base and fit this down from the top, and screw the castor up into it through a washer.	38WTEE
	The base must be 3 mm thick, or washers of at least 25.4 mm OD used on both side to spread the load.	38WNUT
	Fits horizontal 1" x 1.6 square tube. Holds a 3/8" Whit nut in position 32 mm along a horizontal tube.	ENDPLUG25

### Grip-neck pintles (Fits L, K & M Series)

	Description	Order code
	For L series, M10 grip neck pintles are supplied loose to be retro-fitted. Size: 8 mm OD x 39 mm	SP-GN
	For K & M series, M12 grip neck pintles are supplied loose to be retro-fitted. Size: 8 mm OD x 39 mm	SP-GNKM
	For K & M series, grip neck pintles are supplied loose to be retro-fitted to Rubbermaid carts. Size: 11 mm OD x 36.5 mm	SP-GNKMRM
	Adapter to suit Rubbermaid pintle SP-GNKMRM. Size: 15 mm OD x 42 mm	SP-ADAPGNKMRM



### Grip-neck pintle adapters

	Shape	Material	Adapter size (mm)	Tube size ID	OD	Wall	Order code
	Round	Nylon	11	10.9	12.7	0.9	S11
	Round	Nylon	14	13.6	16.0	1.2	S14
	Round	Nylon	17	16.6	19.0	1.2	S17
	Round	Nylon	17	16.6	19.0 SQ	1.2	S17SQ
	Round	Nylon	19	19.0	22.2	1.6	S19
	Round	Nylon	23	23.0	25.4	1.2	S23
	Round	Nylon	23	23.0	25.4 SQ	1.6	S23SQ



## For 12 mm bolt hole castors

### Pintle bolts


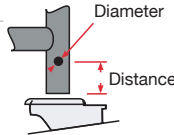

	Thread x length	Order code
	M12 x 81—standard	-E
	M12 x 65—stainless steel	-ESS
	M12 x 35	-E12x35
	M12 x 40	-E12x40
	M12 x 45	-E12x45
	M12 x 50	-E12x50
	M12 x 55	-E12x55
	M12 x 65	-E12x65
	1/2" UNF x 1 1/8"	-E1/2x30
	1/2" UNF x 1 9/16"	-E1/2x40
	1/2" UNF x 2"	-E1/2x50
	M16 x 40 (Adapts J, K and M series castors from 12 mm to 16 mm)	-PTLM16x40(12) <i>Order code includes pintle and nut</i>

### Expanding adapters (suits tubing <28 mm)


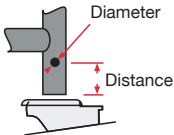
Shape	Material	Size (mm)	Tube size ID range	Mild steel	Stainless steel
Round	Nylon	19	18.5–21.0	-ER19	-ER19SS
Round	Nylon	22	21.5–24.0	-ER22	-ER22SS
Round	Rubber	22	21.5–24.0	-ER22R	-ER22RSS
Round	Nylon	28	25.0–28.0	-ER28	-ER28SS
Square	Nylon	19	18.5–21.0	-ES19	-ES19SS
Square	Nylon	22	21.5–24.0	-ES22	-ES22SS
Square	Rubber	22	21.5–24.0	-ES22R	-ES22RSS
Square	Nylon	28	25.0–28.0	-ES28	-ES28SS




### Solid nylon pintles

Description	Stem OD	Tube size (OD x wall)	Cross drill hole (distance from end x diameter)	Order code
 <b>NDL AND GENERAL CASTORS</b> Includes 2 x inset nuts, 2 x washers, 2 x coach bolts, 1 x M12 x 60 bolt, 1 x M12 Nyloc nut	22 mm round	25 x 1.6 mm	 Diameter Distance	19 x 6 mm -AR22N
	28 mm round	32 x 1.6 mm		19 x 8 mm -AR28N
	22 mm round	25 x 1.6 mm	 Diameter Distance	19 x 6 mm -AFR22N
	28 mm round	32 x 1.6 mm		19 x 8 mm -AFR28N
<b>TRINITY</b> Excludes nut				

### Solid steel pintles

	Stem OD	Tube size (OD x wall)	Cross drill hole (distance from end x diameter)	Order code
	19 mm round	22 x 1.2 mm	 Diameter Distance	19 x 8 mm -AR19Z
	22 mm round	25 x 1.6 mm		19 x 8 mm -AR22Z
	-AR19 with adapter 22 mm square	25 x 1.6 mm SQ		19 x 8 mm -AS22Z
	28 mm round	32 x 1.6 mm		19 x 8 mm -AR28Z

### Reducing bushes

Description	Order code
 Convert 12 mm bolt hole to 10 mm	SPRB1/2-10
Convert 12 mm bolt hole to 8 mm	SPRB1/2-8

### Square threaded tube ends (suits tubing >28 mm)

Order code (includes M12 x 75 mm set screw, zinc plated)	Order code (includes M12 x 75 mm set screw, stainless steel)	Order code (spare part excluding set screw)	Suits tube size (mm)
-TTESQ25Z	-TTESQ25S	SP-TTESQ25	25 x 25 square (1.6–2.5 wall)
-TTESQ32Z	-TTESQ32S	SP-TTESQ32	32 x 32 square (1.6–2.5 wall)
-TTESQ38Z	-TTESQ38S	SP-TTESQ38	38 x 38 square (1.6–2.5 wall)
-TTESQ50Z	-TTESQ50S	SP-TTESQ50	50 x 50 square (1.6–2.5 wall)



Order codes for set screws: SPM12X75SETZ (zinc plated), SPM12X75SETS (stainless steel)

# Spares

## For pneumatics and general wheels

### Tubes—butyl rubber seamless



Description	Order code
Tube pneumatic 200 x 50	SPTUBE200X50
Tube pneumatic 250 x 4	SPTUBE250X4
Tube pneumatic 300 x 4 or 350 x 4	SPTUBE300/350X4
Tube pneumatic 250 x 6	SPTUBE250X6
Tube pneumatic 350 x 6	SPTUBE350X6
Tube pneumatic 500 x 6	SPTUBE500X6
Tube pneumatic 400 x 8	SPTUBE400X8
Tube pneumatic 650 x 8	SPTUBE650X8

### Plastic rims



Description	Order code
Plastic rim—200 x 50 suits 200 x 50 with roller bearing	SPRIM200X50PRNB
Plastic rim—200 x 50 suits 200 x 50 with precision bearing	SPRIM200X50PQNB
Plastic rim—4 x 175 suits 250/300/350 x 4, no bearing	SPRIM4X175PW(NB)
Plastic rim—6 x 200 suits 250/350 x 6, no bearing	SPRIM6X200PW(NB)
Plastic rim—8 x 250 suits 400 x 8, no bearing	SPRIM8X250PW(NB)

### Bearings



Description	Order code
B—Deep groove ball bearing 12.7 mm ID	SPBRGC05
B—Deep groove ball bearing 25.4 mm ID	SPBRGC10
B—Deep groove ball bearing 20 mm ID	SPBRGC20
B—Deep groove ball bearing 19 mm ID	SPBRGC34
B—Deep groove ball bearing 15.9 mm ID	SPBRGC58
Q—Precision ball bearing #608 15.9 mm ID	SPBRGQ6004X58
Q—Precision ball bearing #6205 2RS suits CFQ Wheelchair, 8 mm ID	SPBRGQ6082RS
Q—Precision ball bearing 12 mm bore (suitable for pneumatics)	SPBRGQ6205X01
Q—Precision ball bearing #6004 20 mm	SPBRGQ6004X20
Q—Precision ball bearing #6004 19 mm ID	SPBRGQ6004X34
Q—Precision ball bearing #6005 25 mm ID	SPBRGQ6005X25
Q—Precision ball bearing with seals #6202 2RS, 15 mm ID	SPBRGQ6202X15
Q—Precision ball bearing #6204 2RS, 20 mm ID	SPBRGQ6204X20
Q—Precision ball bearing 25.4 mm ID for 400 x 8 pneumatic	SPBRGQPNEU01

### Housing and reducing bushes



Description	Order code
Housing (nylon) for a #6004 Q ball bearing	SPHOUSING6004
Housing (nylon) flanged to suit a #6004 Q ball bearing	SPHOUSING6004FLG
Housing (nylon) flanged to suit a #6204 Q ball bearing	SPHOUSING6204
Reducing bush flanged (grey nylon) 25.4 to 20 mm ID, 20 mm L—Grey	SPBSH10-20
Reducing bush flanged (black nylon) 25.4 to 19 mm ID Flange, 20 mm L	SPBSH10-34
Reducing bush flanged (black nylon) 25.4 to 15.9 mm ID Flange, 20 mm L	SPBSH10-58
Reducing bush flanged (nylon) to suit a 15.9 mm deep groove ball bearing (SPBRGC58), 15.9 to 12.7 mm	SPRB58-1/2

### Tyres



Description	Order code
Pneumatic 200 x 50 RIB tread	SPTYRE200X50RIB
Pneumatic 250 x 4 LUG tread	SPTYRE250X4LUG
Pneumatic 250 x 4 LGG tread	SPTYRE250X4LGG
Pneumatic 250 x 6 IND tread	SPTYRE250X6IND
Pneumatic 300 x 4 DMD tread	SPTYRE300X4DMD
Pneumatic 350 x 4 STR tread	SPTYRE350X4STR
Pneumatic 350 x 4 ZGG tread	SPTYRE350X4ZGG
Pneumatic 350 x 6 KNO tread	SPTYRE350X6KNO
Pneumatic 400 x 8 KNO tread	SPTYRE400X8KNO
Pneumatic 400 x 8 HWY tread	SPTYRE400X8HWY
Pneumatic 500 x 6 GRA tread	SPTYRE500X6GRA
Pneumatic 650 x 8 GRA tread	SPTYRE650X8GRA



# General spares

## Axles, nuts and bolts



Description	Order code
Axle to suit VHD X Series (bolt & nut)	SPAXLEX
Axle to suit VHD V Series (bolt & nut)	SPAXLEV
Axle to suit CFQ Wheelchair castors zinc plated bolt & nut	SPAXLECFQ
Axle to suit M Series, stainless steel (bolt & nut)	SPAXLEMSSBOLT
Axle to suit H Series (bolt & nut)	SPAXLEH
Axle to suit Y Pneumatics (bolt & nut)	SPAXLEHPNEU
Axle to suit H Series, stainless steel (bolt & nut)	SPAXLEHSS
Axle to suit J Series (bolt & nut)	SPAXLEJ
Axle to suit K Series (bolt & nut)	SPAXLEK
Axle to suit M Series (bolt & nut)	SPAXLEM
Axle to suit M Series, mild steel (Chicago screw)	SPAXLEMCHICAGO
Axle to suit M Stainless Steel (Chicago screw)	SPAXLEMSSCHICAGO
Axle to suit O Series forks (bolt & nut)	SPAXLEO
M8X12 Cup head bolt	SPBOLTM8CUPHEAD
M8X1.25 Pitch conelock nut	SPNUTM8CONE

## Spacers



Description	Order code
H Series spacer 61 mm L x 20 mm OD x 12.7 mm ID	SPSPACERH
H Series spacer 61 mm L x 20 mm OD x 16 mm D	SPSPACERH(16)
H Series spacer 61 mm L x 19 mm OD x 12.7 mm ID	SPSPACERH(19)
H & O Series spacer—stainless steel 61 mm L x 20 mm OD x 12.7 mm ID	SPSPACEROSS
H & O Series spacer—top hat (set of 2) 61 mm x 20 mm OD x 12.7 mm ID	SPSPACEROTOPHAT
Special J Series spacer 46 mm L x 20 mm OD x 12.7 mm ID	SPSPACERJ(05)R
J Series spacer to suit plain bearings 46 mm L x 12.7 mm OD x 10 mm ID	SPSPACERJA
J Series spacer to suit roller bearing 46 mm L x 20 mm OD x 10 mm ID	SPSPACERJR
J Series spacer—stainless steel 46 mm L x 12.7 mm OD x 10 mm ID	SPSPACERJSS
K Series spacer 31 mm L x 12 mm OD x 8 mm ID	SPSPACERK
M Series spacer 41 mm L x 12 mm OD x 8 mm ID	SPSPACERM
M Series spacer—stainless steel 41 mm L x 12 mm OD x 8 mm ID	SPSPACERMSS

## Bearings and bushes



Description	Order code
R—Roller bearing for H Series, 20 mm ID, stainless steel	SPBRGH20SS
B—Deep groove 12.7 mm for PRB (also suits GPBO)	SPBRGPRB05
Q—Precision bearing for M Series 608	SPBRGMQ608ZZ
Q—Precision bearing for M Series 608, stainless steel	SPBRGMQ608ZZSS
Q—Precision bearing for K series 608, twin seal	SPBRGKQ608NG
R—Roller bearing for J series, 20 mm ID	SPBRGJC20
R—Roller bearing for H Series, 20 mm ID	SPBRGR20
R—Roller bearing for J Series, 20 mm ID, stainless steel	SPBRGR20JSS
Sleeve for H Series roller bearing	SPBRGR20SLEEVE
R—Roller bearing, 19 mm bore for H, R and N Series	SPBRGR34



Thread guards (set of 2)

Description	Order code
Thread guard set—KSP75	SPTGDKSP75Z
Thread guard set—KJA75	TGDKJ75GRY
Thread guard set—KUQ100	SPTGDKUQ100SET
Thread guard set—MSQ	SPTGDMSQSET
Thread guard set—MNN75	SPTGDMNN75SET
Thread guard set—MNN100	SPTGDMNN100SET
Thread guard set—JUR100	SPTGDJUR100
Thread guard set—JUR125	SPTGDJU125SET
Thread guard set—JBA100/125	SPTGDB100
Thread guard set—HB & HS 200	SPTGDHB200SET
Thread guard set—HU 200	SPTGDHU200SET
Thread guard set—PR Wheels	SPTGDGHUBCAP



Plates

Description	Order code
H & O ISO top plate raw	SPPLATEHISORAW
H & O NA top plate raw	SPPLATEHNARAW
Flat spacer plate 96 mm x 78 mm	SPPLATEMISO
Flat spacer plate 96 mm x 78 mm—stainless steel	SPPLATEMISOSS

Buffers—D section (hollow)

Description	Order code
Normally placed around the edges of the trolley (between corner buffers) to prevent damage to door jambs. These are fitted by pushing a (off-cut) metal strip along the centre of the section and screwing through into the side of the trolley. The head of the screw will pop through the outer rubber leaving a small hole. If the strip is to be fitted on a rounded corner, this should be of at least 50 mm radius to prevent buckling of the strip.	<b>D25SPOOL</b> Length per spool: 80 m
	<b>D25BAG</b> Length per bag: 8 m



Buffers—corner

Description	Order code
Corner buffers can be fitted to new or existing trolleys with square corners, reducing damage to walls and door jambs. They are fitted by four pan head self tappers (not supplied), which are recessed down inside each arm of the buffer (No. 10 x 1" or similar). Being made from TPE they are very resistant to abrasion and chemicals. The end profile is matched to the 'D' section rubber strip.	<b>CB8025</b>



Buffers—leg

Description	Order code
<b>ROUND TPE</b> These are used to prevent damage to corridor walls. The buffers are placed onto tubular legs just before the castors. When a trolley approaches a wall the buffers make contact first and freely revolves on the tubing, thus rolling the trolley along the wall so it causes no damage.  In the case of 25.4 mm square tubing the urethane buffers are supplied with a 32 mm hole, together with a 'dress-cap' with a 25.4 mm square inner and a 32 mm round outer.	<b>BJ100X25</b> Suit 25.4 mm round tubing OD  <b>BJ100X32</b> Suit 32 mm round tubing OD  <b>BJ100X25SQ</b> Suit 25.4 mm square tubing OD  <b>BJ125X25</b> Suit 25.4 mm round tubing OD  <b>BJ125X32</b> Suit 32 mm round tubing OD  <b>BJ125X25SQ</b> Suit 25.4 mm square tubing OD  <b>BJDC25</b> Black dress cap to suit 25.4 mm square tubing OD





# Information and guides

- Maintenance and fitting
- About high and low temperature castors
- Conditions of use for castors
- Castor code structure
- Fork mount dimensions



# Maintenance and fitting

**Under average conditions of intermittent use, Fallshaw castors will run for 5 years without maintenance. If the castors are in constant use, this reduces to 1 year.**

## Correct fitting

Castors will not swivel properly unless they are mounted vertically. Otherwise they will track to one side.

Heavy trolleys need plate mountings, but the base of the trolley must be strong enough to withstand the load. Never mount a plate castor by three bolts only. Never skimp on the mounting base.

You can get up to 8 mm of adjustment with washers, or an off cut of tube tightly jammed between leg and castor—but do not let it float. Tighten tubular fittings firmly, but do not over-tighten.

You should retighten castors after 3 months of use, and annually after that. We recommend '3 finger' tightness—the amount of torque you can get onto a standard spanner using your 3 middle fingers.

## Tube fittings

Medium duty castors are often mounted into tubular legs. But again, it is important that these legs stay vertical.

We recommend that the leg never extend more than 125 mm below the nearest support, and (apart from the lightest uses), the tube should be 1.4 mm thick or more. Thinner gauges often split. If you wish to use lighted gauge in the rest of the trolley, insert a sleeve for at least 150 mm where the castor is mounted.

Never put a round expanding fitting into a square tube as when the trolley hits a bump, the tube is likely to elongate, and the castor may fall out. We do have square fittings, and ask that you use them. If for some reason you need to put round into square, then weld an insert sleeve of round tube (remember—our smallest fitting needs 3/4" ID). When using Directional Lock (DL) type castors it is best to use the solid swivel stem and weld or bolt it in—screwed types can become misaligned. To achieve the best performance from the larger 175 mm and 200 mm castors use solid stems.

When fitting expanding stem castors, make sure that the fitting is fully inserted into the tube, with the tube firmly down onto the castor head rivet, before tightening it up (you may have to remove some of the burr on the inside of the tube before you try

to push the fitting in). After making sure the weld on the inside of the tube is not excessive, align it with one of the slots down the outside of the adaptor fitting. Put the fitting into the tube all the way, then put some sideways pressure on to it to help the fittings grip, then tighten the stem bolt firmly. Do *not* over-tighten, or you will make it hard to remove later. It is advisable that any tube fitting on expanding stem castors be checked after the first 3 months, and then yearly to make sure the tube fitting is fully and firmly into the tube and the tightening nut is firmly but not over tightened.

## Greasing

Grease in both the swivel head race and the wheel serve three purposes:

- Prevents rusting of the balls and raceways
- Prevents galling
- Reduces noise

It does not need a lot of grease to do this. Too much is unsightly and only attracts dust. A liberal smear is all that is needed. If you only have a few castors to grease, use your finger to apply the grease, then wipe off the excess with a rag or use a needle tip grease gun.

If you have many of them we suggest the following:

- Turn the trolley upside down and remove the wheels.
- Re-grease the head, either through the grease nipple if fitted, or by a needle tip fitting on a grease gun. You will need to lift the seal on the heavier range of castors with a sharp pointed screwdriver. Two full squirts are usually adequate, but make sure enough grease gets through to the centre so it can descend to the bottom race.
- Check the wear of the axle bushing. Reuse if not heavily worn, otherwise replace. Smear about a teaspoon of grease along the inside of the wheel bearing with your finger, taking care to force the grease up into the rollers and reassemble.
- Be careful of the lip seal on the wheel as you reinsert the axle bushing into the roller bearing wheels. Make sure the axle bushing is clean as you reinsert it.
- Reassemble the wheel into the castor. Replace washer where fitted. A drop of *Locktite High Assembly Strength* solution on the axle thread is a good precaution.
- Use a No.2 bearing grease (not sodium based).



## Wheel bearings

Any slackness present in plain bearings or roller bearings can often be improved by replacing the axle bushing. If necessary, the plain or roller bearings can be replaced as well. Often simply re-greasing B type bearings is enough, though they can also be replaced if necessary. Sealed precision Q type bearings seldom wear sufficiently enough to need attention.

# About chemical resistance

The castors and wheels we make have worked well for many years in many uses and places around the world. However, sometimes you may want to apply them in places more corrosive than the usual residential, commercial or industrial environment. In the table (right), we lay out what can be expected from our castors when exposed to some of the more severe chemicals used.

For castors that are resistant to corrosion or extreme temperatures, see our range of corrosion resistant castors from page 31–35, and our high and low temperature castors from page 36.

If you are planning to use our castors in severe conditions, our team will be happy to help you choose the right castor for the job.

## Chemical resistance rating

	Polyurethane	Nylon	Thermoplastic elastomer	Rubber	Polypropylene	Cast iron	Stainless steel
Sulphuric acid 10%	Good	Good	Good	Poor	Good	Poor	Fair
Hydrochloric acid 10%	Fair	Poor	Fair	Poor	Fair	Poor	Poor
Nitric acid 10%	Poor	Poor	Fair	Poor	Good	Poor	Good
Methyl alcohol	Fair	Good	Good	Fair	Good	Good	Good
Sodium hydroxide 20%	Fair–Poor	Good	Good	Fair	Good	Good	Good
Gasoline 100%	Good	Good	Fair	Poor	Fair	Good	Good
Ethylene glycol	Good	Good	Fair	Poor	Fair	Good	Good
Brake fluid	Fair–Poor	Good	Good	Poor	Good	Good	Good
Salt, including marine environments	Good	Good	Good	Good	Good	Good	Poor
Carbon tetrachloride	Fair	Poor	Good	Poor	Fair	Fair	Good–Fair
Fresh water immersion	Good	Poor	Good	Good	Good	Good	Good
Dry heat 10%	Good	Good	Good	Good	Good	Good	Good
Outdoor weathering	Good	Good	Good	Good	Good	Good	Good



# About high and low temperature castors

## High temperature use

As temperatures increase, wheels become weaker, which lowers their load capacity and shortens their lifespan. It is important that you specify the temperature and type of application before ordering a castor, to ensure that the appropriate wheel type is selected. We make three different wheel types designed specifically for use in high temperature environments. These specialised wheels use standard lithium complex grease (STABUTHERM® GH 461) which has excellent water resistance (24 hrs at 90°C), bearing retention and long life.

## Low temperature use

Below 5°C you must specify temperature of use at the time of ordering. The standard grease we use in our castors is a lithium complex grease. This has excellent water resistance, bearing retention and long life. However below 5°C it begins to stiffen quickly, and will soon freeze the bearings so that neither the castor swivels nor the wheel bearings revolve. If specified at the time of ordering, we use a special aeronautical grease which is a synthetic oil with a microgel thickener. This is compounded for use down to -30°C, and will need to be refreshed every 6–12 months, but will continue to work effectively in chilling rooms, freezing stores and outdoor winter use in northern countries where ordinary greases would be useless.

As the temperature becomes lower, the softer rubber and polyurethane treads on our wheels become less elastic. For example, the polyurethane used on the 'H' series slowly stiffens from +20°C down to -20°C, but then rapidly stiffens until at -50°C, when it becomes brittle.

As temperature goes below 5°C, nylon can become brittle (particularly if it is kept for long periods in the very dry air in freezing rooms). At such times we recommend glass filled nylon reinforced wheels, which can be used down to -30°C.



Castors for applications such as baking trolleys and freezer carts need to be specified to ensure that they perform optimally in these extreme conditions.



## Wheel types

### Glass filled nylon

The best choice for hospitality based applications such as 'food baking' ovens, glass filled nylon can withstand sustained high temperatures and is gentle and quiet on most floor surfaces. Fibreglass reinforced nylon wheels are the preferred wheel for extended periods of up to 210°C (assuming most of their life is spent outside the oven), and for short periods up to 230°C.

### Phenolic

Phenolic is more brittle than glass filled nylon and it has a shorter life cycle but can go up to very high temperatures. Phenolic is a good choice for light duty industrial applications with very high temperatures such as ovens used for curing paint. The load capacity decreases from 125 kg at 100°C to 40 kg at 300°C therefore it is very important to ensure that the load capacity of the trolley fits within the appropriate temperature and load capacity. Phenolic wheels (with special inorganic fillers and PTFE bushes) are preferred for extended periods up to 280°C assuming most of their life is spent outside the oven and for short periods up to 300°C. These have a thick cross section, but are more brittle than either nylon or ordinary grades of phenolic. **Please note that phenolic wheels are not suitable for medium duty applications or applications where wheels are subjected to impact such as when a trolley is rolled down steps.**

### Cast iron

The best choice for Industrial based applications such as 'paint curing' ovens and also for use in sustained high temperature environments, cast iron wheels can withstand extreme high temperatures as well as higher load capacities than all other wheel types. Cast iron wheels do not have bearings. They have a plain bore fitted with an axle spacer that is lubricated with high temperature grease. This grease can be used up to 230°C for long periods. For temperatures that exceed 230°C a more exotic grease is required. For sustained high temperature use, we offer a range of cast iron wheeled castors used with high temperature grease. Please note that cast iron is heavy, noisy and may damage concrete floors and other floor surfaces.

See page 36 for our range of high and low temperature castors.



# Conditions of use for castors

Although manufactured in Australia, Fallshaw Wheels & Castors have adopted the general safety standards and conditions of use defined in the *European Union General Product Safety Directive (GPSD) 2001/95/EG (harmonized with the German Law of Liability for Products Prod-HaftG)* as this directive has more extensive product requirements additional to the general requirements of the *Australian Competition and Consumer Act 2010*. Please be advised that our manufacturer's warranty is subject to observing the following information. Deviation from this information will release Fallshaw Wheels & Castors from the manufacturer's liability.

## 1.0 Product information and determined use

Wheels and castors are defined as constructional parts that are generally interchangeable.

They are fitted to apparatus, furniture, transport systems or similar products to make them mobile.

This product information refers to castors and wheels, particularly to swivel castors (not steer castors) which are used on non-powered equipment at a speed not exceeding walking pace and not being under continuous motion.

Castors and wheels according to this product information, can be divided into the following categories of application:

- Domestic use—such as seating and furniture
- General services—such as shopping trolleys and office equipment
- Health care Services—such as hospital beds and patient trolleys
- Industrial purposes—such as transport equipment with medium and heavy duty load bearing capacities.

Our products will give a long and trouble-free life if the following criteria are adhered to:

1. Correct and secure fitting at the designed position.
2. The fitting must have adequate strength and material for a secure fitting.
3. The function of the castor must not be changed nor affected by the fitting.

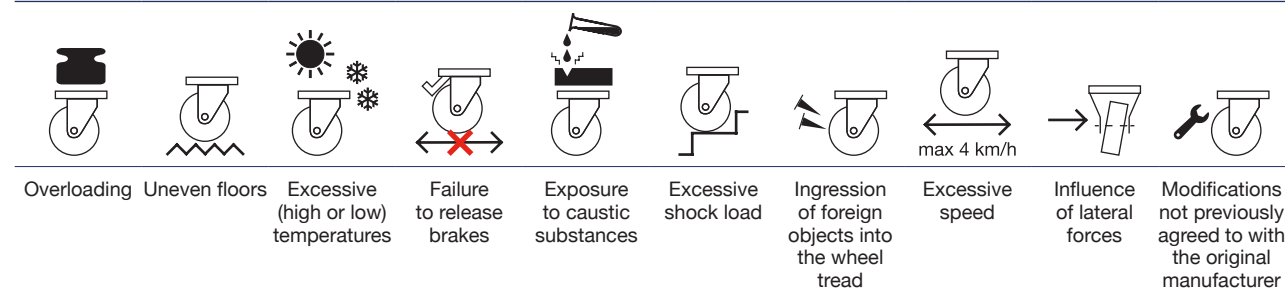
4. The swivel action axis must be vertical at all times.
5. Fixed castors must have their wheel axles perpendicular to the direction of travel.
6. If only swivel castors are used, they must be common to each other. If fixed castors are used in conjunction with swivel castors then all castors must be compatible and recommended by the manufacturer.

If castors are used in corrosive environments such as outdoors, coastal areas, corrosive and/or aggressive areas (like chicken farms), and where castors have cleaning regimes requiring water resistance of greater than IPX4, and where castors are exposed to caustic substances, special products have to be specified. See the chemical resistance chart on page 71 for a clear indication of suitability.

For use in temperatures below 5°C and above 30°C, the performance of the castor can be impaired, particularly the normal load capacity as published can be affected when used in temperatures below/above those stated herein. Special products can be specified (see pages 36 and 72).

## 2.0 Misuse

The word 'misuse' is defined as:



## 3.0 Product capability

Should the user not find a product clearly described in the manufacturer's catalogue, leaflets or descriptive literature, then any new castor designed for the particular application has to be fully agreed with the manufacturer. Any new designs effected will be subject to the relevant Standards (ISO, IEC etc).

## 4.0 Maintenance and cleaning

Regular maintenance of castors is required in order to maintain the warranty (as defined in the Maintenance and Fitting section of this catalogue).

Should any cleaning agents be used, then these same agents should not contain corrosive, nor grinding elements. Our products are rated to IPX4 unless otherwise stated on the product page, therefore cleaning with high pressure water (especially if the water is mixed with caustic chemicals and forced into the castor thereby displacing grease or forcing water past seals) will void the warranty. Cleaning should be conducted by following the correct dilution ratio for the cleaning detergent and wiping with a damp cloth.

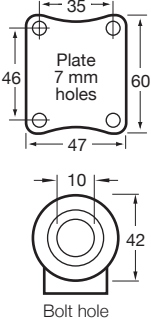
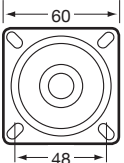
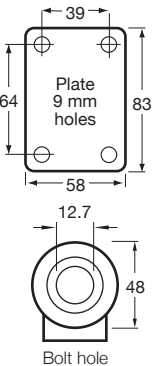
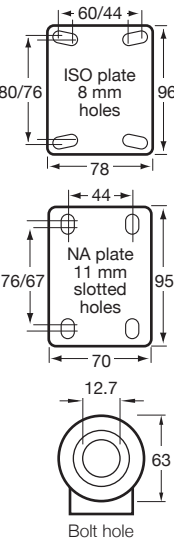
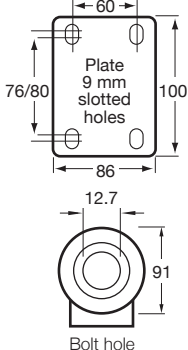
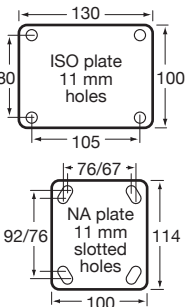
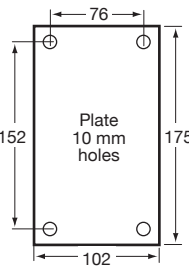
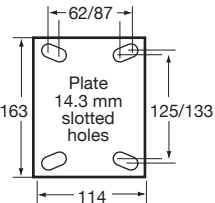
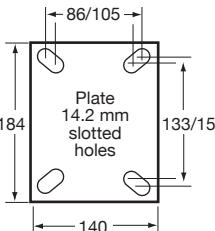
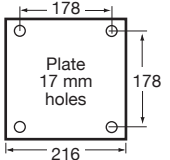
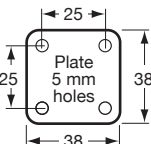
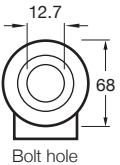
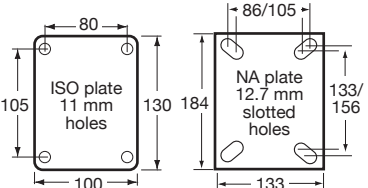
# Castor code structure

Wheel series	Tyre material	Bearing	Size (mm)	Extras	Fork series	Fork finish	Mount option	Brake option	Colourway
L	R Black rubber	B Deep groove ball bearing	40	G Thread guard	L	T Painted	P ISO plate mount	TB Total brake, locks swivel and wheel rotation	Arc range
N	S Grey rubber, (flat profile)	Q Precision ball bearing	50	W White nylon	N	P Powder-coated	PN North American plate mount		GH Graphite
TW	T Grey rubber, (round profile)	R Roller bearing	57	S Stainless steel	TW	Z Zinc plated	F Fixed plate	DL Direction lock, locks swivel	SL Silver
B	J Thermoplastic elastomer (TPE)	S Roller bearing (stainless steel)	65	T Twin	K	Core Coat ™ (with lacquer)	FN North American fixed plate	BR Wheel brake only	WT White
K	A Conductive TPE	A Plain bore	70		M	B Basic zinc (no lacquer)	H Swivel bolt hole		GY Grey
M	B Blue high resilience rubber	H High temp plain bore	75		D	S Stainless steel	L Long pintle	TS Thumb screw (hand operated wheel brake)	Zen range
Q	U Polyurethane	I Cast iron plain bore	100		J	C Chrome	S Short pintle		TM Titanium
J	V PVC	N Nylon plain bore	125		Y	B Nylon	38 3/8" pintle	CB Complete brake, includes DL and TB	M Deluxe range
Y	N Nylon	T PTFE (teflon) plain bore	150		O	K Nickel	E 12 mm pintle	SA Self-aligning AGV kit	BN Bluestone
O	H High temperature nylon	K High temp phenolic plain bore	175		H		GN Grip neck pintle	TBSA Self-aligning AGV kit on TB fork	K & M Series
H	W Very high temp phenolic	C Precision bearing (stainless steel)	200		X		J Friction stem	DLSA Self-aligning AGV kit on DL fork	R Red
X	P Polypropylene		230		V				G Grey
V	K High temp phenolic		250		A				B Black
A	F Foamed micro-cellular		280		W				
W	X High impact polymer		300						
			400						
			450						
EXAMPLE:									
J	B	R	125	G /	J	Z	P	TB	—

Castor = wheel / fork

EXAMPLE: JBR125G/JZPTB

# Fork mount dimensions

30–40 kg	40–60 kg	50–100 kg	100–200 kg	200–350 kg	350–600 kg	400 kg	750–3000 kg
<b>L Series</b> 	<b>N Series</b> 	<b>K Series</b> 	<b>M Series</b> 	<b>J Series</b> 	<b>O and H Series</b> 	<b>W Series</b> 	<b>X Series</b>  <b>V Series</b>  <b>A Series</b> 
<b>Twin Series</b> 			<b>Big M Series</b> 				
		<b>Y Series</b> 					





**TugEVO**  
ELECTRODRIVE.COM.AU

COOLER BAG  
PROMOTION  
6 Pk x 2

PRODUCE OF AUSTRALIA  
PRODUCED BY ORLANDO WINE  
BOWLAND FLAT  
SOUTH AUSTRALIA, 5112

WOR7913

# Electrodrive

## Powered mobility equipment

Designing and manufacturing powered materials handling equipment since 1987, our range of pedestrian operated powered tugs and movers have been proven to be the safest way to work with heavy trolleys, carts and equipment within and around your facility. We all know that pushing or pulling a heavy load increases the risk of back and shoulder injuries. Using a tug or mover reduces the risk by doing all the heavy work for you. And unlike driving a forklift, the risk of collision with other people or objects is eliminated because the operator has a clear view of what's ahead.

Unlike the competition, our range of tugs and movers are ergonomically designed, allowing your body to move forward with the load in a natural walking position. With intelligently designed tiller handles and controller grips on our tugs and movers, paired with powerful motors that can tow up to 20 tonnes, you're always in control, and you can use them all day long without risk of strain on your back or shoulders.

So whether you're working with planes, trains, automobiles or hospital beds, we will have a powered solution for you.



# Choosing the right tug or mover

## 1 Determine the weight and incline of the load being moved

The nominal towing capacity of our tugs relates to the weight that can be pulled on a flat surface (with a friction coefficient of 0.5 such as dry concrete or bitumen).

The practical rule of thumb to determine which tug is right for your application is to get the pull force (in kilograms) required to start your load moving (on the worst case surface of your application) and divide it by 0.04. This will give you the pulling power required.

$$\frac{\text{Pull force (kg)}}{0.04} = \text{Pulling power (kg)}$$

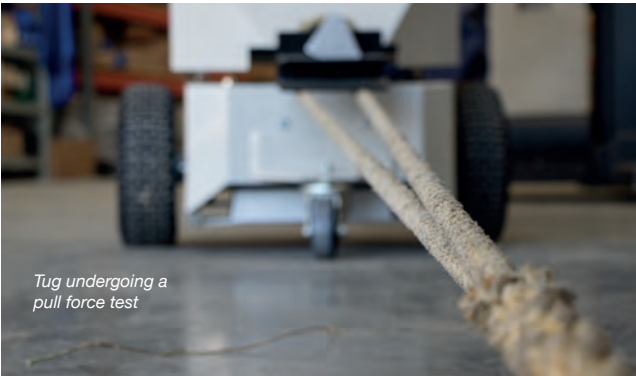
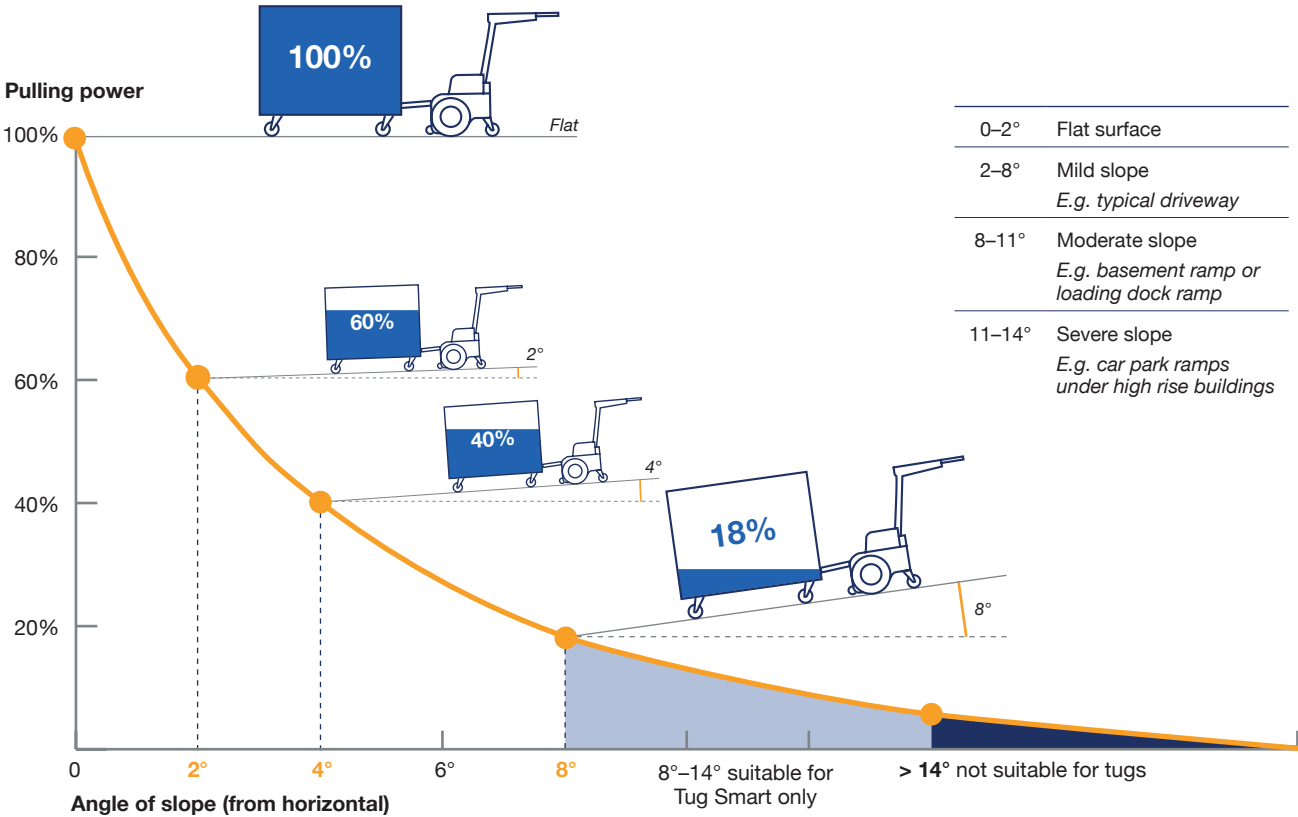
So, for example, if it takes 30 kg of pull force to get your trolley moving on your intended surface, divide this by 0.04 to identify the pulling power required of 750 kg, meaning that you will need a tug that can pull more than the Tug Compact (500 kg), and would need the power of a Tug Evo 1T, which will exceed your pull force comfortably.

Another way of thinking about this is that for every 1T of load to be pulled, the force to pull it will increase by 40 kg.

Measuring the pull force required to start the load moving can be done with a weight scale—of the type used to weigh produce at the green grocers, or the more modern digital luggage scales such as those shown in the photos above.

It is important to measure the pull force required on the worst case of your application. Perhaps a linen cart will need to follow a route that includes the flat internal hospital passageways on carpet, as well as an outside bitumen area with a 6 degree slope. Make sure you measure the worst case scenario—in this example, the outside inclined area when wet (to simulate the added slipperiness that occurs when raining).

A final ‘top tip’: measuring the incline can be done with a smart phone app. Go to your app store and search for “measure incline” or “measure slope” or “spirit level” and you’ll have many options to choose from for both Apple and Android smart phones.







## 2 Determine whether it will be used in confined spaces

Suitable for confined spaces

	Tug Compact	Very small footprint and turning circle
	Tug Incliner 1T	Excellent for ramps such as steep basement driveways
	Tug Evo 1T and 2T	Ideal for moving heavy weights from 1–3.5 tonnes
	Tug Classic	
	Tug Smart	Perfect for up to 6 tonnes
	Gzunda bed movers	Perfect for navigating hospital corridors
	Transpak Powered Trolley	Great for moving multiple small objects

Suitable for open spaces

	Tug Smart	Perfect for moving very heavy loads over 4 tonnes, and up to 20 tonnes
	Tug Tough 10T and 20T	

## 3 Determine if the load will have existing hitch points

Tug hitches to suit the most popular trolleys



Hitches that adapt to different trolley designs



Hitches for bed movers



## 4 Determine the load's wheel configuration

### Castor configuration will affect towing

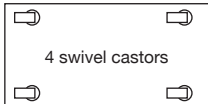
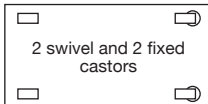
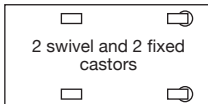
Four swivel castors will not trail properly behind the towing unit—they will cut corners rather than follow the unit. They will also tend to whip—over correct any sideways displacement and sway from side-to-side as they travel.

These problems become more acute if more trolleys are linked in a train. We offer fixed wheel skate hitch (pictured) accessories to correct this problem for situations where it's not feasible to replace two of the four swivel castors on an existing trolley fleet.



If two fixed castors are used at the rear of the trolley it eliminates the whip, and improves trailing and towing.

An ideal configuration is to mount 2 swivel castors 1/6 of the length of the trolley from the front of the trolley and two fixed castors 1/3 of the length of the trolley from the rear. This gives little whip, and good trailing. Note though, that such trolleys should not have a heavy load concentrated at the rear end or they will tip backwards.

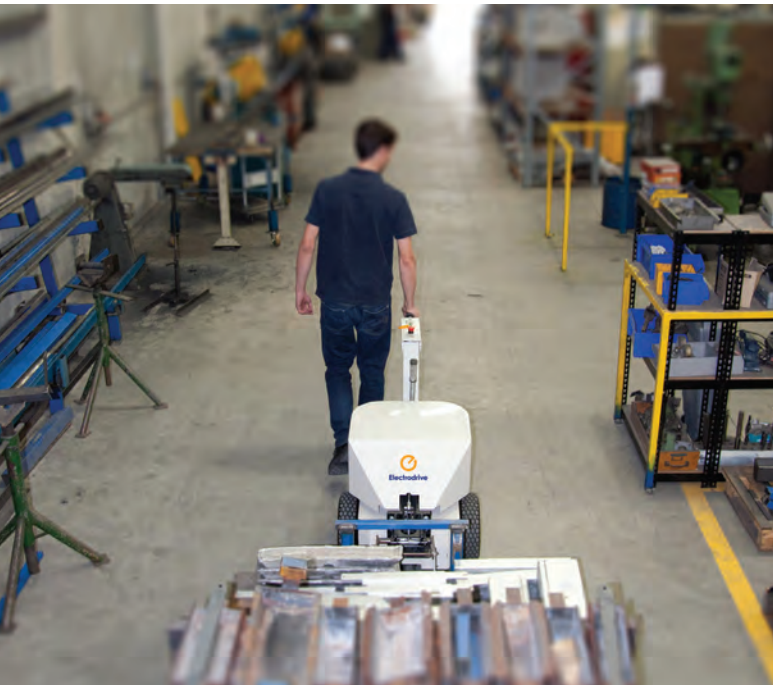
DIRECTION OF TRAVEL →	Trailing	Whip	Stability
	Poor	Bad	Very good
	Good	Least	Very good
	Good	Little	Good

→ 1/3 ←      → 1/6 ←

# Tugs

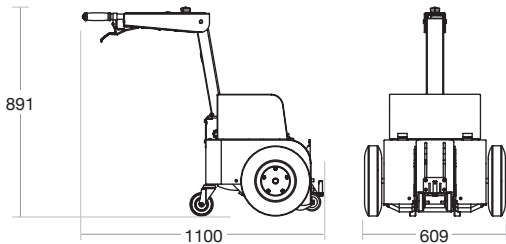
## Features across the range

- Powerful battery operated motor
- Tiller control handle for 'front of load' operation
- Three speed control with forward and reverse
- Emergency stop and back-off safety buttons
- Customisable with a wide variety of hitches available
- Smart battery charger (supplied standard with AU/NZ plugs — add 'EU', 'US' or 'UK' to the end of tug order codes for European, US or United Kingdom plugs)
- Low maintenance
- Made in Australia



## Compact

- Tow up to 500 kg on flat ground
- Compact and easy to manoeuvre in tight corridors
- Non marking tyres
- Supplied with pin hitch
- Suitable for medical and commercial towing



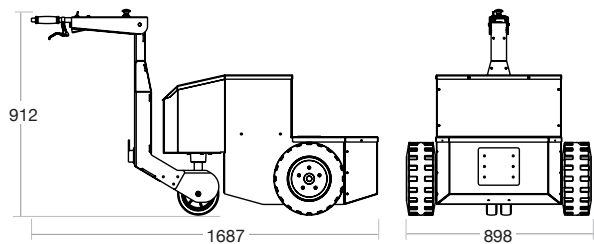
Order Code

Tug Compact 500 kg (no hitch)	TUGCOM500NH
Pin hitch (standard)	EDHT1316



## Incliner 1T

- Designed to tow on slopes/ramps
- Towing capacity of up to 1 tonne on 10° slope
- Towing capacity of up to 500 kg on 14° slope
- Folding tiller handle
- Suitable for towing bins



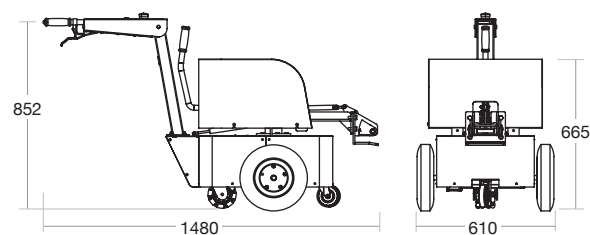
Order Code

Tug Incliner 1 Tonne (including pin hitch)	TUGINCLINER1T
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## Evo 1T/2T

- Available in 1 and 2 tonne models for towing on flat ground
- Supplied with auto-latching hitch
- Suitable for retail and light industrial towing



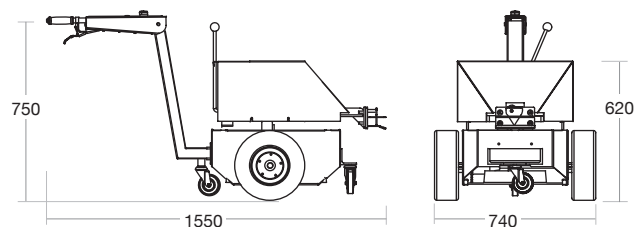
Order Code

Tug Evo 1 Tonne (no hitch)	TUGEVO1TNH
Tug Evo 2 Tonne (no hitch)	TUGEVO2TNH
Auto-latching hitch (standard)	EDHT1810-024



## Classic

- Tow up to 3.5 tonnes on flat ground
- Supplied with lock-tow hitch
- Suitable for large retail and heavy industrial towing



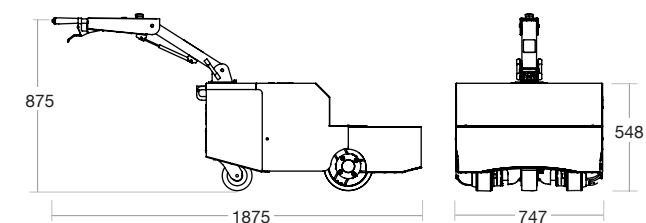
Order Code

Tug Classic 3.5 Tonne (including lock-tow hitch)	TUGCLASSIC3.5T
--	----------------



## Smart 4T/5T/6T Heavy duty

- Tow up to 6 tonnes on flat ground
- Power steering on folding tiller handle
- Capable of towing on slopes—1 tonne on 8° incline, or 500 kg on 14° incline towing capacity



Order Code

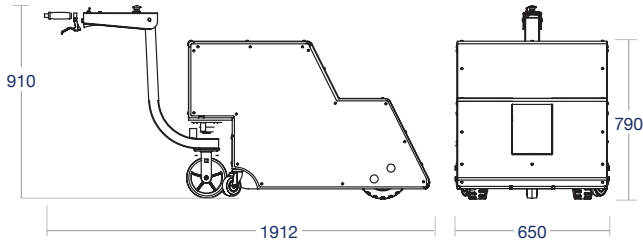
Tug Smart 4 Tonne (no hitch)	TUGSMART4TNH
Tug Smart 5 Tonne (no hitch)	TUGSMART5TNH
Tug Smart 6 Tonne (no hitch)	TUGSMART6TNH
Hitch Smart tow ball	EDHTTOWSMART01
Hitch Smart auto latch	EDHTALSMART01
Hitch Smart pin	EDHTPINSMART01





**Tough 10T** Heavy duty

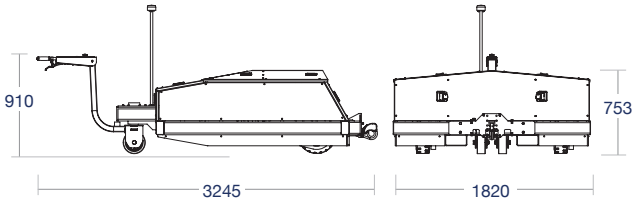
- Tow up to 10 tonnes on flat ground
- Heavy duty construction, perfect for pulling very heavy equipment, vehicles and aircraft
- Wide variety of hitches available



Order Code	
Tug Tough 10 Tonne (no hitch)	TUGTOUGH10TNH
Pin hitch	EDHT10TPIN
Hook hitch	EDHT10THOOK
Beeping reversing light	EDEL1080F
Amber strobe light	EDEL1000F

**Tough 20T** Heavy duty

- Tow up to 20 tonnes on flat ground
- Heavy duty construction, perfect for pulling very heavy equipment, vehicles and aircraft
- Wide variety of hitches available
- Smart battery charger (supplied standard with AU/NZ plugs — add 'EU', 'US' or 'UK' to the end of tug order codes for European, US or United Kingdom plugs)



Order Code	
Tug Tough 20 Tonne (no hitch)	TUGTOUGH20TNH
Hook hitch	EDHT20THOOK
Beeping reversing light	EDEL1080F
Amber strobe light	EDEL1000F

# Powered fifth wheel

The Powered Fifth Wheel is a retrofittable solution for converting your manually pushed trolleys or hospital beds into powered ones.

Controlled with an ergonomically designed control grip for a natural walking posture, the Powered Fifth Wheel works with your trolley or bed's other four wheels to help you move heavy loads safely and efficiently.

## Features across the range

- Tow up to 400 kg on flat ground.
- Three-speed control with forward and reverse
- Emergency stop and back-off safety buttons
- Customisable with a wide variety of hitches available
- Smart battery charger
- Made in Australia



*Traction and load rating of the fifth wheel is to suit a maximum load of 400 kg on flat ground. Towing capability will reduce substantially as the angle of the slope increases. If less downwards force is required to suit lighter trolleys (less than 60 kg) we can customize the unit.*

*Sold with Australian (AU) charging plug and charger. Also sold with plugs to suit USA (US), Europe (EU) and the United Kingdom (UK). Change last two digits of product code accordingly.*

*Both models require a minimum of 150 mm ground clearance. Fitting to the bed or trolley is quoted separately. We have a wide range of brackets and fittings.*

*Water resistance IP rating of IP55.*



## P5W Retractable Two-hand control

Tow up to 400 kg on flat ground with the Retractable Powered Fifth Wheel.

Retrofittable kit includes:

- ‘Gzunda’ style two-hand control unit
- Retractable fifth wheel in carriage
- Batteries: 2 x 33Ah gel
- Charger
- 1 year warranty

Order Code

### Retrofittable kit

Retractable powered fifth wheel with ‘Gzunda’ style two-hand control	GZP5W400HBAU
--	--------------

### Items available separately

Control unit	EDGZP5WCONTROL
Retractable fifth wheel in carriage	EDGZP5WWHEEL
Batteries: 2 x 33Ah gel batteries	EDBAT12V33AHGEL
Slide out battery carriage	EDP5WBATCARRIAGE
Charger: 7Ah, AU plug	EDCHARGER7AhAU <sup>1</sup>

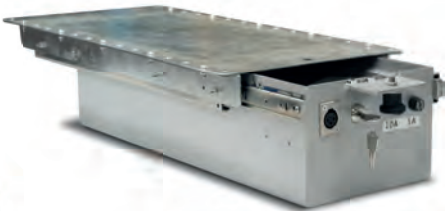
<sup>1</sup> International chargers are also available. Replace “AU” at the end of the order code with “US”, “EU” or “UK”. For example EDCHARGER7AhUS.



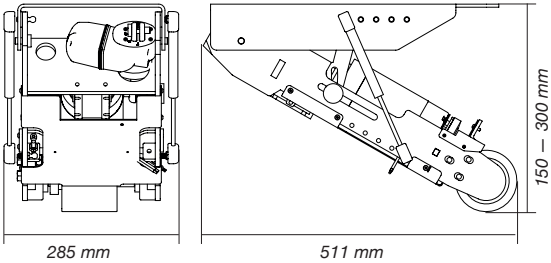
Control unit



Retractable fifth wheel



Slide out battery carriage



A hospital bed fitted with the retractable fifth wheel and control unit



## Powered fifth wheel



### P5W Non-retractable Simple control

Tow up to 400 kg on flat ground.

Retrofit kit includes:

- Simple control unit (mounted vertically or horizontally—adaptable to suit 20-52 mm tube)
- Non-retractable fifth wheel in carriage
- Batteries: 2 x 33Ah gel, assembled within slide-out carriage
- Charger
- 1 year warranty

Order Code

#### Retrofit kit

Non-retractable Powered Fifth Wheel with simple control:

• Vertically mounted	P5W400VBAU
• Horizontally mounted	P5W400HBAU

#### Items available separately

Control unit (vertical)	EDP5WCONTROLV
Control unit (horizontal)	EDP5WCONTROLH
Non-retractable fifth wheel in carriage	EDP5WWHEEL
Slide out battery carriage	EDP5WBATCARRIAGE
Batteries: 2 x 33Ah gel batteries	EDBAT12V33AHGEL
Charger: 7Ah, AU plug	EDCHARGER7AhAU <sup>1</sup>

<sup>1</sup> International chargers are also available. Replace "AU" at the end of the order code with "US", "EU" or "UK". For example EDCHARGER7AhUS.



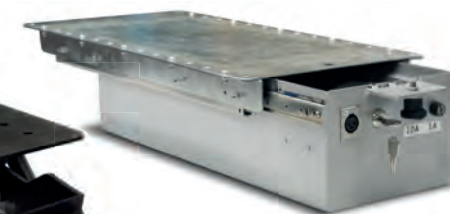
Control unit (vertical)



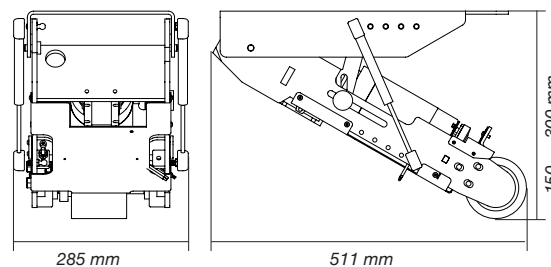
Control unit (horizontal)



Non-retractable fifth wheel



Slide out battery carriage



A trolley fitted with the non-retractable fifth wheel, battery carriage and horizontal control unit

# Bed movers

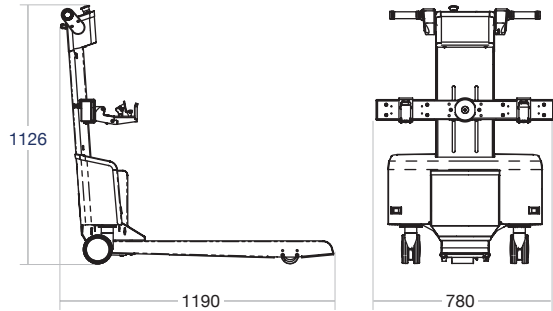
## Features across the range

- Powerful battery operated motors move up to 600 kg
- Highly manoeuvrable in tight spaces
- Three speed operation with forward, reverse and emergency stop
- Intuitive controls with twist grip throttle and horn
- Customisable with a wide variety of hitches available
- Smart battery charger (supplied standard with AU/NZ plugs — add 'EU', 'US' or 'UK' to the end of Gzunda order codes for European, US or United Kingdom plugs)
- Made in Australia



## Gzunda GZ10SL

- Move up to 500 kg
- Middle tyne\* for easy manoeuvrability in tight spaces
- Three speed operation with forward, reverse and emergency stop
- Variety of hitches available (See page 88 for hitch options)



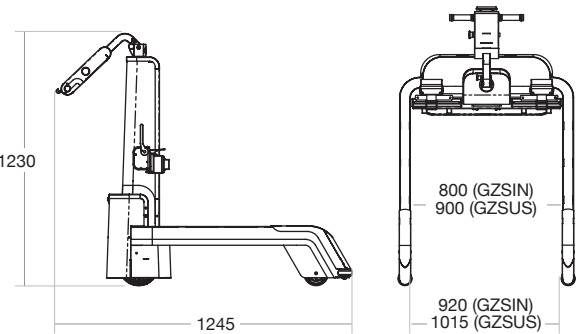
Order Code

Gzunda GZ10SL 500 kg (no hitch)	GZ10SL(NH) <sup>1</sup>
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<sup>1</sup> Requires 100mm of clearance under the bed (can be modified to 90mm if required)

## Gzunda GZS

- Move up to 600 kg
- Split tyne design with no under-bed clearance required
- Three speed operation with forward, reverse and emergency stop
- Variety of hitches available (See page 88 for hitch options)



Order Code

Gzunda GZS 600 kg split tyne (International) (no hitch)	GZSIN(NH)
Gzunda GZS 600 kg split tyne (US) (no hitch)	GZSUS(NH)

# Linen movers

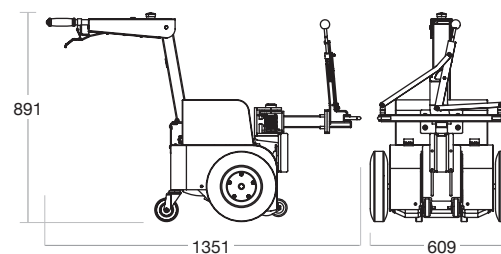
## Features across the range

- Designed for towing linen trolleys up to 500 kg
- Powerful battery operated motor
- Tiller control handle for 'front of load' operation
- Three speed control with forward and reverse
- Emergency stop and back-off safety buttons
- Smart battery charger (supplied standard with AU/NZ plugs — add 'EU', 'US' or 'UK' to the end of tug order codes for European, US or United Kingdom plugs)
- Low maintenance
- Made in Australia



## Tug Compact Linen Mover

- Tow up to 500 kg
- Compact and easy to manoeuvre in tight corridors
- Supplied with clamp hitch
- Ideal for towing linen trolleys fitted with two swivel and two fixed castors



Order Code

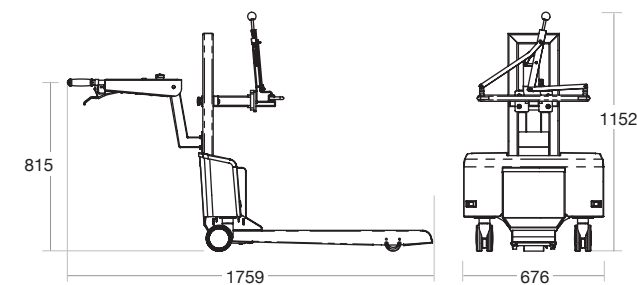
Tug Compact linen mover 500 kg  
(with clamping hitch)

TUGLINENMOVER



## Gzunda Linen Mover

- Tow up to 500 kg
- Compact and easy to manoeuvre in tight corridors
- Middle tyne design—ideal for towing linen trolleys fitted with four swivel castors
- Supplied with clamp hitch. (See page 88 for hitch options)



Order Code

Gzunda Linen Mover 500 kg  
(with clamping hitch)

GZLINENMOVER





Hitches to suit Gzunda bed movers (GZ10SL and GZS) and Gzunda linen mover		Order Code
	Flex hitch kit with hitch bar (780 mm length)	EDHTFLEX001
	Gripper hitch kit with hitch bar (780 mm length) Suits 20-40mm bed frame	EDHTGRIPPER001
	Ratchet hitch kit with hitch bar (780 mm length)	EDHTRATCH001
	Clamping hitch kit (520-720 mm length)	EDHT1118
	Groove hitch kit with hitch bar	EDHTGROOVE001
Retrofittable hitch kits to suit the common hitch bars above (to enable multiple hitch styles on your bed mover or linen mover):		
	Flex hitch unit kit	EDHTFLEX001-001
	Gripper hitch unit kit	EDHTGRIPP001-001
	Ratchet hitch unit kit	EDHTRATCH001-001
	Groove hitch unit kit	EDHTGROOV001-001

<sup>1</sup> NH: Bed movers are sold without a hitch. Hitches are sold separately to suit the range of bed models in your fleet. For the latest information on bed compatibility, speak with one of our sales representatives.

# Meal delivery

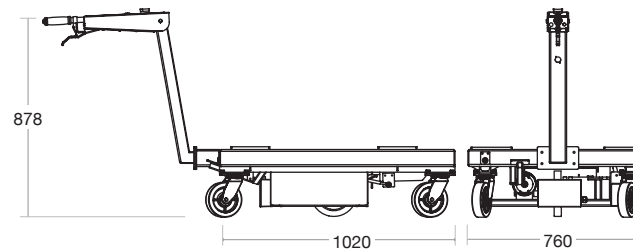
## Features across the range

- Designed for carrying or towing meal delivery systems up to 500 kg
- Powerful battery operated motor
- Tiller control handle for 'front of load' operation
- Three speed control with forward and reverse
- Emergency stop and back-off safety buttons
- Smart battery charger (supplied standard with AU/NZ plugs — add 'EU', 'US' or 'UK' to the end of tug order codes for European, US or United Kingdom plugs)
- Low maintenance
- Made in Australia



## Transpak powered trolley

- Carries up to 500 kg
- Suitable for carrying meal delivery systems including those from Burlodge, Socamel and Versigen
- Frame size can be built to suit your requirements



Order Code

Transpak powered trolley 500 kg

TRANSPAK500



## Tug Compact

- Tow up to 500 kg
- Customised hitch to suit all pod and mobile meal delivery systems\*
- Compact and easy to manoeuvre in tight corridors

Order Code

Tug Compact 500 kg (no hitch)

TUGCOM500NH

\* Clamping hitch shown is for illustration purposes only.  
See range of hitches on page 88.



# Electrodrive—your move-safe solution in healthcare

**Whether you're moving beds, linen, food or waste, Electrodrive can help your staff to stay safe, and demonstrate compliance with the Australian Government's *Hazardous Manual Tasks, Work Health and Safety Code of Practice*.**

## We are the experts in mindful moving

We work with healthcare facilities to improve safety outcomes in their push-pull processes and patient safety.

We are a single-source solution provider in mobile applications with intelligently simple, smart product design.

We have solutions to prevent push-pull injuries effecting the shoulder, back, neck, arm, forearm/wrist, knee, and hand and fingers.

## The cost of doing nothing is huge

The Healthcare & Social Assistance industry suffers more than 17,000 musculoskeletal injuries a year, according to Safe Work Australia (Australian Workers' Compensation Statistics, 2012–13). The median cost of a push-pull injury is \$9,700 with 6 weeks lost. With an annual incidence rate of 12.5 per 1000 employees suffering serious injuries related to injury & musculoskeletal disorders, the cost to a Healthcare facility can be enormous. And of course the personal cost to an injured worker can be devastating.

## Known injury risk factors

High forces when manoeuvring wheeled equipment increase the risk of musculoskeletal disorders. Table 1 on the next page offers the best state of knowledge on pushing and pulling, which is based on the work of Snook and Ciriello\*. Snook investigated a large number of tasks in which workers had been injured in order to establish the relationship between perceived risk and actual injury occurrence.

Snook's maximum acceptable forces are set out in Table 1, which describes how frequently a worker can push wheeled equipment based on the distance travelled and weight pushed. So, for example, a heavy trolley with 11 kg of sustained push effort can be pushed short distances (7.6 m) every 1 minute, but if you have moderate distances to travel (30.5 m) it is only safe to do this once every 8 hours, and very long distances (61 m+) are not acceptable.

These benchmarks for safe push-pull forces have been adopted as benchmarks within Australia's regulatory environment. But many Australian work places ask staff to push hospital beds or catering and linen trolleys with push effort well above 11 kg for distances and frequencies well above these published government guidelines.





Hospital bed undergoing  
a pull force test

**Table:** Acceptable frequencies for sustained straight line pushing of wheeled equipment over various distances, handle height 890 mm (Snook and Ciriello 1991)

Distance	2.1 m	7.6 m	15.2 m	30.5 m	45.7 m	61 m
Sustained force	Frequency—75% of female workforce may push wheeled equipment over stated distance once every:					
6 kg or less	6 sec	15 sec	25 sec	1 min	1 min	2 min
7 kg	6 sec	15 sec	25 sec	1 min	1 min	30 min
8 kg	6 sec	15 sec	35 sec	1 min	2 min	8 hr
9 kg	12 sec	15 sec	1 min	2 min	30 min	8 hr
10 kg	12 sec	22 sec	2 min	30 min	8 hr	Not acceptable
11 kg	12 sec	1 min	5 min	8 hr	8 hr	Not acceptable
12 kg	1 min	5 min	8 hr	8 hr	8 hr	Not acceptable

\* Source: A guide to designing workplaces for safer handling of people for health, aged care, rehabilitation and disability facilities—3rd edition, September 2007—Public Sector and Community Services.

### Reducing push-pull injuries is easy...

...if you work with the experts to redesign your work processes.

The *Hazardous Manual Tasks, Work Health & Safety Code of Practice*, and the related state government industry guideline publications can be so broad that they tell you what the problem is, but offer only vague solutions.

For example, WorkSafe Victoria in their publication *Injury Hotspots Health & Aged Care Services* directs “when pushing and pulling trolleys and wheelchairs, provide equipment that is fit for the purpose and maintained in accordance with manufacturer’s specifications”.

We can help you go from knowing what the problem is, to actually doing something to fix it. We offer actionable solutions with industry best-practice equipment.

### The bottom line

Published government guidelines, developed from evidence-based analysis of injuries in the healthcare sector due to pushing and pulling mobile equipment, mandate that pushing a bed, linen cart or meal delivery system is a two-person job unless a motorised solution is utilised.

Complying with the *Hazardous Manual Tasks, Work Health and Safety Code of Practice* makes good business sense as well as being the right thing to do.





LIFTMASTER

YES  
NO  
NO

13

UNIVERSAL  
BIN LIFTER  
UBL250HY1800

14-7-15

ALLSHAW  
14-7-15



# Liftmaster

## Waste handling solutions

There will always be waste, and while we're getting better at separating our general waste, recycling and green waste into different types of bins, a growing population simply means more waste, which leads to more bins. More bins mean an increase in manual waste handling processes, like emptying them into industrial bins or skips.

While some workplaces previously allowed manual lifting of wheelie bins into skips, the rising costs of workplace injuries has led at least one state government department to direct that:

*'Wheelie bins are not to be manually lifted into industrial bins... If wheelie bins are to be emptied into an industrial bin then an appropriate lifting device is to be provided.'*

If your workplace still has a manual waste handling problem, it's time to find a solution from Liftmaster's range of Australian made full swing or lift-and-tilt bin lifters, which allow a single operator to lift and empty wheelie bins safely, whilst eliminating the risk of back and side strains caused by lifting heavy bins above shoulder height.



# How to choose the right bin lifter

## 1 Determine the size and weight of your full wheelie bin and how often you'll be tipping

Our range of Australian made bin lifters have models that can lift 80, 120, 140 and 240 litre wheelie bins weighing anywhere from 30–250 kg safely, with assisted lift units that you can safely use up to twice a day, all the way to powered hydraulic units that can lift and tip all day long.

## 2 Determine how many times a day you'll be tipping

Assisted-lift bin lifters can safely lift their specified weights, but still require manual effort when tipping. So we recommend only using them between 2 and 10 times a day, per person, depending on the model you choose. If you need to tip more frequently, our powered bin lifters can lift heavier weights more often without the risk of muscle strains.

## 3 Determine the height of the dumper bin you'll be tipping into

The Niftylift full swing bin lifter and the Ecolift lift-and-tilt bin lifter is suitable for 1500 mm high skip bins. The rest of the range can be configured for use with either 1500 or 1800 mm high skip bins.

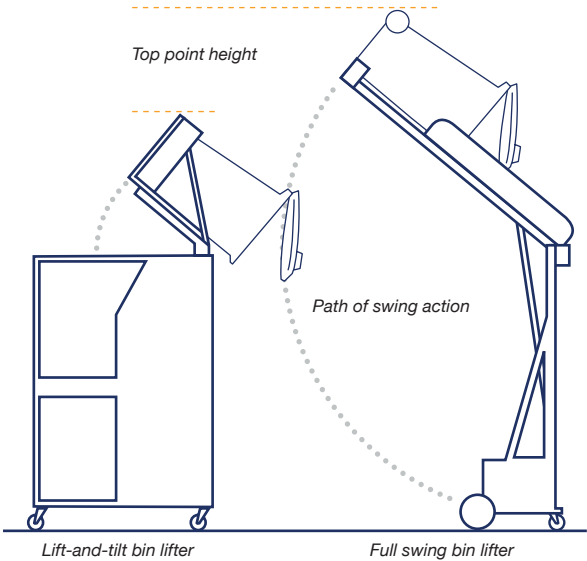
## 4 Determine the work area and space requirements of the bin lifter

Because of the path of the swing action, full swing bin lifters are only recommended for use in a controlled environment where pedestrian access is restricted. For areas such as schools, retail centres, or anywhere where pedestrian access cannot be restricted, we recommend using a lift-and-tilt model, which encloses the lifting motion within the bin lifter's footprint.

Full swing bin lifters also need more height clearance than lift-and-tilt models so they may not be suitable for low ceiling areas like basements or underground car-parks (see table below).

For industrial work areas that deal with flammable materials, we recommend using the spark-free full swing Rugged—Manual bin lifter.

Bin lifter	Order code	Top point height (mm)
Full swing		
Niftylift	NIFTYLIFT30	2850
Rugged—Manual	BLHP1500/BLHP1500LL	3278
	BLHP1800	3752
Rugged—Powered	BLEH1500/BLEH1500LL	3278
	BLEH1800	3752
Rugged (All terrain)	BLHPAT1500/BLEHAT1500	3370
Lift-and-tilt		
Ecolift	ECOLIFT50	2800
Simplicity Plus	SIMPLUS150HY1500/	2900
	SIMPLUS150HY1800	
Universal	UBL250HYD1500/	2900
	UBL250HYD1800	



# Full swing bin lifters



## Niftylift

- Lifts up to 30 kg safely
- Suits 1500 mm skip bins
- Compatible with 120 and 240 litre wheelie bins
- Manual assisted lift operation with slow release gas struts
- Recommended for up to 2 lifts per day, per person
- Fits through internal doorways
- Made in Australia

Order Code

Niftylift bin lifter for 1500 mm skip bins

NIFTYLIFT30



## Rugged—Manual

- Lifts up to 100 kg safely
- Models to suit 1500 mm or 1800 mm skip bins
- Compatible with 80, 120, 140 and 240 litre wheelie bins
- Spark free hydraulic hand pump operation
- Recommended for up to 10 lifts per day, per person
- Fits through internal doorways
- All-terrain model available for 1500 mm skip bins
- Made in Australia

Order Code

Rugged—Manual bin lifter for 1500 mm skip bins

BLHP1500

Lid lifter compatible, for 1500 mm skip bins

BLHP1500LL

All terrain model for 1500 mm skip bins

BLHPAT1500

Rugged—Manual bin lifter for 1800 mm skip bins

BLHP1800



## Rugged—Powered

- Lifts up to 150 kg safely, up to 50 times per day
- Models to suit 1500 mm or 1800 mm skip bins
- Compatible with 80, 120, 140 and 240 litre wheelie bins
- Battery operated push button hydraulic system
- Fits through internal doorways
- All-terrain model available for 1500 mm skip bins
- Made in Australia

Order Code

Rugged—Powered bin lifter for 1500 mm skips

BLEH1500

Lid lifter compatible, for 1500 mm skip bins

BLEH1500LL

All terrain model for 1500 mm skip bins

BLEHAT1500

Rugged—Powered bin lifter for 1800 mm skips

BLEH1800

# Lift-and-tilt bin lifters



## Ecolift

- Lifts up to 50 kg safely
- Suits 1500 mm skip bins
- Compatible with 80, 120, 140 and 240 litre wheelie bins
- Crank handle winding operation for controlled lifting
- Recommended for up to 6 lifts per day, per person
- Safety cage panels eliminate hand crush points for operators and bystanders
- Made in Australia

Ecolift bin lifter for 1500 mm skip bins

ECOLIFT50



## Simplicity Plus

- Lifts up to 150 kg safely
- Configured to suit 1500 or 1800 mm skip bins
- Compatible with 80, 120, 140 and 240 litre wheelie bins
- Battery operated push button hydraulic system
- Will lift up to 100 times per day on one charge
- Safety cage eliminates hand and foot crush points for operators and bystanders
- Made in Australia

Simplicity Plus for 1500 mm skip bins

SIMPLUS150HY1500

Simplicity Plus for 1800 mm skip bins

SIMPLUS150HY1800



## Universal

- Lifts up to 250 kg safely
- Configured to suit 1500 or 1800 mm skip bins
- Compatible with 80, 120, 140 and 240 litre wheelie bins
- Battery operated push button hydraulic system
- Will lift over 100 times per day on one charge
- Safety cage and door eliminates all hand and foot crush points for operators and bystanders
- Made in Australia

Universal bin lifter for 1500 mm skip bins

UBL250HYD1500

Universal bin lifter for 1800 mm skip bins

UBL250HYD1800



# Bin movers



## Powered Bin Trolley by Electrodrive

- Move up to three 240 litre wheelie bins, weighing up to 400 kg over a flat surface
- Powered drive wheel can carry loads over ramps up to 5°
- Smart design with easy turning action
- Tiller control keeps you in front of load
- Made in Australia

Order Code	
Powered Bin Trolley	POWBINTROLLEY



Trailer with optional tow ball coupling shown.

## Modular Bin Trailer

- Available in three and six bin models
- Load capacity of up to 240 kg per bin bay
- Compatible with 80, 120, 140, 240 and 360 litre wheelie bins
- Gas strut actuated bin ramp
- Fits within one standard car parking space
- Comes with a pin-hitch coupling as standard
- Also available with tow ball or bar hitch couplings
- Made in Australia

Order Code	
Three bay trailer for 80–360 L wheelie bins	MODULAR3
Six bay trailer for 80–360 L wheelie bins	MODULAR6





# Castors & Industrial

## Materials handling equipment

Castors & Industrial have been at the forefront of castors and materials handling equipment distribution in Queensland since 1997.

In 2015, Castors & Industrial joined the Fallshaw Group, with team members bringing more than 40 years of combined experience and product knowledge, along with their extensive catalogue of materials handling equipment.

Specialising in custom conveyor systems, scissor lifts, access equipment and trolleys, as well as the entire Fallshaw Group catalogue at their disposal, the team at Castors & Industrial will ensure you have the right equipment for the job at hand.



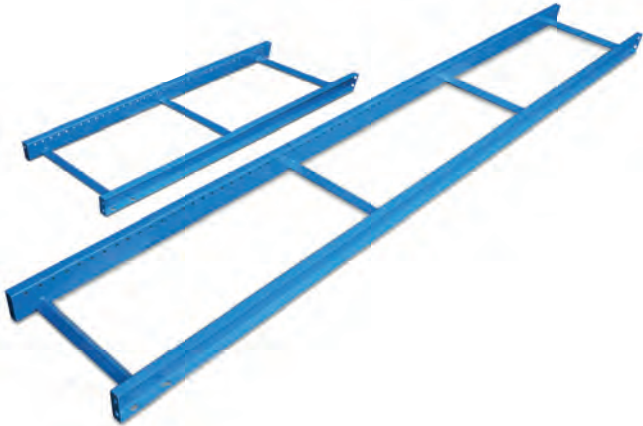
# Gravity conveyors

A gravity conveyor is ideally suited for handling operations which cannot justify the expense of powered equipment. They provide efficient handling at negligible costs. Gravity conveyors are also very easy to set up, dismantle or relocate.

Medium heavy duty gravity conveyor frames, legs and rollers are available in a variety of sizes and configurations.

We can also design, manufacture and supply a vast array of custom manufactured conveyors including powered belt conveyors, skate wheel conveyors and sanitary food conveyor systems.

Our experienced team will be able to analyse and ascertain the best solution to your materials handling issues.



## Frames

- Constructed from 90 mm x 30 mm x 2.5 mm mild steel channel
- Fully welded construction with butting end plates and laser-cut holes
- Set at 79 mm pitch, painted in blaze blue
- Made in Australia

	Order Code
1500 mm long x 304 mm wide (over frame)	ACF15X304
1500 mm long x 458 mm wide (over frame)	ACF15X458
1500 mm long x 607 mm wide (over frame)	ACF15X607
3000 mm long x 304 mm wide (over frame)	ACF3X304
3000 mm long x 458 mm wide (over frame)	ACF3X458
3000 mm long x 607 mm wide (over frame)	ACF3X607

## Support legs

- Gravity conveyor support leg
- Rectangular hollow steel construction, painted in blaze blue
- When fitted with a conveyor frame, the minimum height to top of roller is 600 mm, maximum height to top of roller is 900mm
- Made in Australia

	Order Code
For 304 mm wide (over frame) gravity conveyor	24-40RHS304
For 458 mm wide (over frame) gravity conveyor	24-40RHS458
For 607 mm wide (over frame) gravity conveyor	24-40RHS607



## Rollers

- Available in polypropylene (PP), black steel or galvanised steel 50 mm diameter rollers
- Made in Australia

For 304 mm wide gravity conveyor frame	Order Code
4 mm thick PP gravity conveyor roller	304POLY
1.6 mm thick black steel tube conveyor roller	304MHD
1.6 mm thick galvanised steel tube conveyor roller	304MHDGAL
2 mm thick black steel tube conveyor roller	304HD

For 458 mm wide gravity conveyor frame	Order Code
4 mm thick PP conveyor roller	458POLY
1.6 mm thick black steel tube conveyor roller	458MHD
1.6 mm thick galvanised steel tube conveyor roller	458MHDGAL
2 mm wall black steel tube conveyor roller	458HD

For 607 mm wide gravity conveyor frame	Order Code
4 mm wall PP conveyor roller	607POLY
1.6 mm wall black steel tube conveyor roller	607MHD
1.6 mm wall galvanised steel tube conveyor roller	607MHDGAL
2 mm wall black steel tube conveyor roller	607HD

## Custom rollers

- Manufactured to suit any length and style you require.
- Made in Australia

Shaft type	Diameter (mm)
Round shaft diameters	6, 8, 9.5, 12, 14, 15, 17, 20 & 25
Hexagonal shaft diameters	9.5, 11, 16 & 17.5

Roller type	Diameter (mm)
PVC tube	20, 25, 32, 48, 60
Polypropylene tube	50
Mild steel tube	19, 25, 32, 42, 50
Galvanised steel tube	19, 25, 32, 42, 50
Stainless steel tube	19, 25, 32, 51, 73
Aluminium tube	20, 25, 50, 60
Galvanized pipe	34, 42, 48, 60, 76, 89
Mild steel pipe	34, 42, 48, 60, 76, 89

# Lift tables

Our hydraulic lift tables are designed for safety and are offered with an extensive range of capacities, features and options to provide your factory or warehouse with safe and efficient lifting and work positioning. Smartlift controls are supplied as standard across the range, providing automatic down-indexing, electronic diagnostics and enhanced safety features.

## Features and options

- Smartlift controls
- Available with manual turntables to rotate the load
- Available with high cycle capacity
- Available with safety bars or skirts to protect operators
- Can be adapted for use as personnel lifts, fabrication bench, or assembly bench
- Can be customised with multiple hand or foot controls, automation, on-board power outlets, or interlocks with associated equipment
- Designed to exceed industry safety standards
- Made in Australia



Max load	Height range	Vertical travel	Platform size					Max platform size	Order code
			Standard	With safety bar only	With skirt only	With safety bar and skirt	Without safety bar or skirt		
1000 kg	175–1090 mm	915 mm	1300 x 1150 mm	1300 x 800 mm	1400 x 800 mm	1500 x 1000 mm	1220 x 610 mm	1800 x 1200 mm	LT1000
	200–1420 mm	1220 mm	1800 x 1150 mm	1800 x 800 mm	1900 x 800 mm	2000 x 1000 mm	1680 x 610 mm	2400 x 1200 mm	LT1000H
2000 kg	175–1090 mm	915 mm	1300 x 1150 mm	1300 x 800 mm	1400 x 800 mm	1500 x 1000 mm	1220 x 610 mm	1800 x 1200 mm	LT2000
	200–1420 mm	1220 mm	1800 x 1150 mm	1800 x 800 mm	1900 x 800 mm	2000 x 1000 mm	1680 x 610 mm	2400 x 1200 mm	LT2000H
3000 kg	200–1115 mm	915 mm	1300 x 1150 mm	1300 x 800 mm	1400 x 800 mm	1500 x 1000 mm	1220 x 610 mm	1800 x 1200 mm	LT3000
	200–1420 mm	1220 mm	1800 x 1150 mm	1800 x 800 mm	1900 x 800 mm	2000 x 1000 mm	1680 x 610 mm	2400 x 1200 mm	LT3000H

Please note that pricing on lift tables will vary with your particular requirements. Factors like the installation environment, power source, the number of cycles and motor starts per hour, up and down indexing, interfacing, and safety features need to be considered. Speak to one of our materials handling experts for more information.



# Turntables

**Palring and Paldisc turntables are designed to aid manual handling tasks and eliminate the need for stretching when loading or unloading products. Goods are simply placed on the turntable and then manually rotated to allow direct access.**

Inexpensive and durable, these turntables can be fitted on a stand or on a lift table, and are ideal for areas where more complex lifting equipment can't be used.



## Palring

- Tough, affordable and easy to use turntable, ideal for use alongside conveyor systems, feeding hoppers, extruders, process and production equipment.
- 2000 kg capacity
- Also available in stainless steel
- Made in Australia

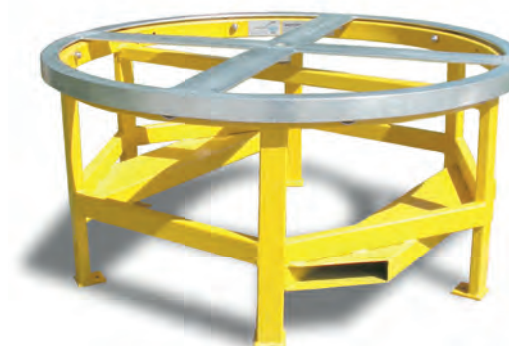
	Order code
1100 mm Palring with carry handles	PALRING1100
1100 mm Palring with bolt down lugs	PALRING1100L
1100 mm Palring with captive centre pivot and bolt down lugs	PALRING11C
900mm Palring, no handles or lugs	PALRING900
900mm Palring with bolt down lugs	PALRING9L
900 mm Palring with captive centre pivot and bolt down lugs	PALRING9C



## Paldisc

- Ultra-low height of 24 mm, ideal for use with hand pallet trucks
- 2000 kg capacity
- 1100 mm diameter
- Available with or without ramp
- Made in Australia

	Order code
Paldisc with ramp ideal for use with a pallet truck or jack (1240 mm total diameter)	PALDISCWR
Paldisc with square edge (no ramp)	PALDISCSQE
Tyne lug for forklift relocation (can be added to Paldisc as an optional extra)	TLUG



## Palring on stand

- 1100 mm diameter galvanised Palring on 300 mm or 500 mm stand with captive centre pivot
- Painted in safety yellow enamel finish
- Can be supplied with a Paldisc (custom manufactured option)
- Made in Australia

	Order code
Palring on 300 mm stand, self-locking rotation lock with easy release foot pedal	PALRING11S3
Palring on 500 mm stand, self-locking rotation lock with easy release foot pedal	PALRING11S5
Palring on 500 mm stand, no rotation lock, fork sockets	PR11-500FS
Palring on 500 mm stand, self-locking rotation lock with easy release foot pedal, fork sockets	PR11-500FF

# Spring loaded pallet positioners

Resembling a scissor lift table in appearance, pallet positioners have a top deck and a base connected by a pair of scissor legs, with levellers that automatically raise or lower the deck as the weight changes.

## Features across the range

- Robust construction with a 3 year warranty
- Supplied with springs specific to the size of the load
- Shock absorbers to prevent bounce
- Fork sockets



## Turntable

- Lifts up to 2000 kg
- Fully galvanised construction
- Smooth raising and lowering action
- Low-friction bearing supported turntable for near-side loading and unloading
- Optional levelling feet
- Also available in stainless steel

Order code	SLT
Platform diameter	1100 mm
Height range	230–700 mm
Load capacity	2000 kg



## Square top

- Lifts up to 2000 kg
- Fully galvanised construction
- Smooth raising and lowering action
- Low-friction bearing supported turntable for near-side loading and unloading
- Optional levelling feet
- Also available in stainless steel

Order code	SLST
Platform diameter	1040 x 1040 mm
Height range	230–700 mm
Load capacity	2000 kg

## Accessories

	Order code
Turntable rotation lock	P3TTLA
Mobile base frame	PMDB
Mobile dolly handle	PMDH
Set of 4 adjustable feet	PADJFT2(4)



# Battery powered scissor lifts

## Features across the range

- 12 volt rechargeable battery
- 100–500 kg load capacities
- Up to 150 lifts per charge



### SLB100

- Lifts up to 100 kg
- Made in Australia
- Double scissor lift

Platform size	895 x 480 mm
Height range	460–1440 mm
Elevation time	20 sec
Load capacity	100 kg



### SLB250

- Lifts up to 250 kg
- Made in Australia

Platform size	895 x 480 mm
Height range	365–855 mm
Elevation time	20 sec
Load capacity	250 kg



## ETFD35

- Lifts up to 350 kg
- Double scissor lift

Platform size	910 x 500 mm
Height range	370–1300 mm
Elevation time	40 sec
Load capacity	350 kg



## ETF50

- Lifts up to 500 kg

Platform size	1010 x 520 mm
Height range	440–1025 mm
Elevation time	25 sec
Load capacity	500 kg

# Mobile scissor lifts

## Features across the range

- Manual assisted lift
- 150–800 kg load capacity
- Powder-coated



### SLM150

- Lifts up to 150 kg
- Single scissor lift

Platform size	700 x 450 mm
Height range	220—750 mm
Load capacity	150 kg



### SLM200

- Lifts up to 200 kg
- Large base
- Solid rubber wheels

Platform size	1000 x 500 mm
Height range	340—1000 mm
Load capacity	200 kg





## SLM300

- Lifts up to 300 kg
- Single scissor lift

Platform size	855 x 500 mm
Height range	340—900 mm
Load capacity	300 kg



## SLM350

- Lifts up to 350 kg
- Double scissor lift

Platform size	940 x 500 mm
Height range	340—1300 mm
Load capacity	350 kg



## SLM500

- Lifts up to 500 kg
- Single scissor lift

Platform size	850 x 500 mm
Height range	285—880 mm
Load capacity	500 kg



**SLMV500**

- Suitable for veterinary applications
- Lifts up to 500 kg
- Single scissor lift

Platform size	1600 x 800 mm
Height range	340—900 mm
Load capacity	500 kg



**SLM800L**

- Lifts up to 800 kg
- Single scissor lift

Platform size	1000 x 510 mm
Height range	420—1000 mm
Load capacity	800 kg

# Pallet trucks

## Features across the range

- Entry and exit rollers for easier operation and to protect load roller and pallet
- Totally sealed hydraulic pump with a slow lowering hand control valve
- Full adjustable push rod under forks
- 3-position control handle
- Grease fittings at key point



## Standard pallet truck

- Lifts up to 2500 kg

Order code	PT450/PT520/PT685
Fork length	1150 mm
Fork height range	80–185 mm
Width over fork	450 mm (PT450) 520 mm (PT520) 685 mm (PT685)
Load capacity	2500 kg



## Pallet truck with scales

- Lifts up to 2000 kg, suitable for weighing goods for transport

Order code	PTS568/PTS703
Fork length	1150 mm
Fork height range	88–200 mm
Width over fork	568 mm (PTS568) 703 mm (PTS703)
Load capacity	2000 kg





### High lift pallet truck

- Lifts up to 1000 kg, suitable as a lift table or work bench

Order code	HLPT540/HLPT680
Fork length	1150 mm
Fork height range	85–800 mm
Width over fork	540 mm (HLPT540) 680 mm (HLPT680)
Load capacity	1000 kg

Please note: unit is not mobile when tynes are elevated.



### Pallet truck with handbrake

- Lifts up to 2000 kg

Order code	HBPT540/HBPT685
Fork length	1150 mm
Fork height range	85–200 mm
Width over fork	540 mm (HBPT540) 685 mm (HBPT685)
Load capacity	2000 kg



### Low profile pallet truck

- Lifts up to 2000 kg

Order code	LPT540/LPT685
Fork length	1150 mm
Fork height range	51–165 mm
Width over fork	540 mm (LPT540) 685 mm (LPT685)
Load capacity	2000 kg

## Pallet trucks



## Galvanized pallet truck

- Durable corrosion protection, lifts up to 2000 kg

Order code	GPT685
Fork length	1150 mm
Fork height range	75–190 mm
Width over fork	685 mm
Load capacity	2000 kg



## Stainless steel pallet truck

- Durable corrosion protection, lifts up to 2000 kg

Order code	SSPT685
Fork length	1150 mm
Fork height range	75–190 mm
Width over fork	685 mm
Load capacity	2000 kg

# Industrial trolleys

## Features across the range

- 300–520 kg load capacity
- Heavy duty construction
- Powder-coated finishes



### IT150

- Fold-down handle
- Low maintenance non-slip vinyl deck
- Rubber bumper
- Powder-coat finish
- Carries up to 150 kg

Platform size	740 x 480 mm
Handle height	1000 mm
Load capacity	150 kg



### IT300

- Heavy duty trolley with removable handles
- Low maintenance non-slip vinyl deck
- Rubber bumper
- Powder-coat finish
- Carries up to 300 kg

Platform size	1160 x 760 mm
Handle height	1000 mm
Load capacity	300 kg





## IT500

- Welded fixed handle
- Low maintenance non-slip vinyl deck
- Rubber bumper
- Powder-coat finish
- Carries up to 500 kg

Platform size	1170 x 765 mm
Handle height	865 mm
Load capacity	500 kg



## IT520

- Welded fixed handle
- Powder-coat finish
- Carries up to 520 kg
- Six castors

Platform size	1200 x 700 mm
Handle height	1020 mm
Load capacity	520 kg



## IT2T340

- Two tiered heavy duty trolley
- Grey powder-coat finish
- Non-slip industrial matting embedded into the top platform
- Fully welded

Platform size	900 x 600 mm
Handle height	930 mm
Load capacity	340 kg



**IT3T340**

- Three tiered heavy duty trolley
- Grey powder-coat finish
- Fully welded

Platform size	900 x 600 mm
Handle height	930 mm
Load capacity	340 kg



**ITC340**

- Heavy duty trolley with full mesh sides and fold down gate
- Grey powder-coat finish
- Fully welded

Platform size	900 x 600 mm
Handle height	930 mm
Load capacity	340 kg



**IT2TC340**

- Two tier heavy duty trolley with top basket
- Grey powder-coat finish
- Fully welded

Platform size	900 x 600 mm
Handle height	930 mm
Load capacity	340 kg

# Access equipment

## Products in this category

- Work platforms
- Safety steps
- Order pickers



## Fully welded platform

- Fully welded construction
- Designed for 2 people with safety harness anchor points
- Safety features include safety screen, skid resistant floor plates, self-closing door, toe boards and safety chains

Order code	WP
Load capacity	250 kg
Overall height	2200 mm
Platform size	1200 x 1200 mm



## Collapsible platform

- Flat packed platform
- Designed for 2 people (not suitable for use with safety harness)
- Safety features include safety screen, skid resistant floor plates, self-closing door, toe boards and safety chains

Order code	WPF
Load capacity	250 kg
Overall height	2200 mm
Platform size	1200 x 1200 mm





Safety step

- Mobile safety step with 150 kg load capacity
- Durable one piece plastic construction with anti-slip surface
- Spring loaded castors
- Australian made

Order code	SS
Load capacity	150 kg
Height	395 mm
Platform diameter	315 mm



Jumbo safety step

- Large diameter mobile safety step with 150 kg load capacity
- Durable one piece plastic construction with anti-slip surface
- Spring loaded castors
- Australian made

Order code	JSS
Load capacity	150 kg
Height	360 mm
Platform diameter	380 mm



Square safety step

- Large safety step with 150 kg load capacity
- Durable one piece plastic construction with anti-slip surface
- Strengthened under supports prevents bowing or sagging
- Australian made

Order code	SQSS
Load capacity	150 kg
Height	360 mm
Platform size	370 x 370 mm

## Access equipment



## Order pickers

- 150 kg load rating
- Light, strong, fully welded aluminium construction
- Fully retractable castors to ensure that the rubber feet engage the floor as soon as the unit is stepped onto to prevent unexpected shifting

Steps (including platform)	Platform height (mm)	Platform size (mm)	Overall height (mm)	Footprint (mm)	Order code
2	565	730 x 585	1466	1025 x 675	OP2S
3	840	730 x 585	1742	1167 x 715	OP3S
4	1115	730 x 585	2017	1305 x 758	OP4S
5	1390	730 x 585	2290	1460 x 800	OP5S
6	1665	730 x 585	2570	1595 x 844	OP6S

# Hand trucks

## Features across the range

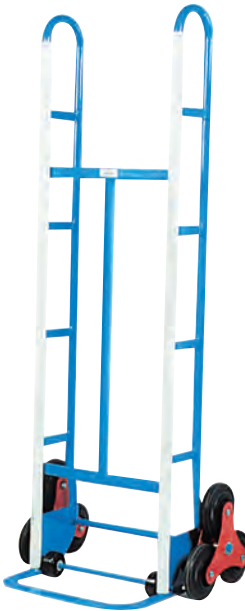
- Fully welded frames
- Heavy duty construction
- 12 month warranty



## Appliance hand truck

- Fully welded powder-coated frame
- Carries up to 220 kg
- Puncture-proof wheels

Order code	HTAP
Load capacity	220 kg
Overall height	1540 mm
Width	612 mm
Wheel diameter	250 mm
Toe plate size	455 x 185 mm



## Stair climber

- Stair climber wheels
- Carries up to 220 kg

Order code	HTAS
Load capacity	220 kg
Overall height/handle height	1540 mm
Wheel diameter	150 mm
Toe plate size	455 x 185 mm



## Box n' bag

- Multi grip loop handle with powder-coated structural steel
- Carries up to 300 kg
- Tubeless black pneumatic wheels on steel rim

Order code	HTBNB
Load capacity	300 kg
Overall height	1290 mm
Width	370 mm
Toe plate size	430 x 240 mm



## All rounder

- Ergonomic hand grips with powder-coated structural steel
- Carries up to 300 kg
- Tubeless black pneumatic wheels on steel rim

Order code	HTAR
Load capacity	300 kg
Overall height	1400 mm
Width	370 mm
Toe plate size	430 x 240 mm



## Super Mover

- Two hand grip levels with powder-coated structural steel
- Carries up to 300 kg
- Break axle load bearing for easy tilting of heavy loads

Order code	HTSP
Load capacity	300 kg
Overall height	1560 mm
Width	430 mm
Toe plate size	430 x 240 mm



# Adjustable feet

## Features across the range

- Available in mild and stainless steel
- Choice of ball joint, bolt-down ball joint, or fixed feet



## Ball joint feet

Pad diameter (mm)	Pad height (mm)	Thread diameter	Thread length (mm)	Base height (mm)	Max load (kg)	Mild steel code	Stainless steel code
40	20	M8	60	33	350	AF20/40/M8/60	-
	20	M10	60	33	500	AF20/40/M10/60	AF21/40/M10/60
60	20	M12	65	51	800	AF20/60/M12/65	AF21/60/M12/65
	25	M16	65	51	1000	AF20/60/M16/65	AF21/60/M16/65
	25	M16	150	51	1000	AF20/60/M16/150	-
	25	M16	165	51	1000	-	AF21/60/M16/165
	25	M20	100	51	1000	AF20/60/M20/100	AF21/60/M20/100
90	25	M12	65	51	1000	AF20/90/M12/65	AF21/90/M12/65
	25	M16	65	51	1000	AF20/90/M16/65	AF21/90/M16/65
	25	M16	150	51	1000	AF20/90/M16/150	-
	25	M16	165	51	1000	-	AF21/90/M16/165
	25	M20	100	51	1000	AF20/90/M20/100	AF21/90/M20/100

## Bolt down ball joint feet

Pad diameter (mm)	Pad height (mm)	Thread diameter	Thread length (mm)	Base height (mm)	Max load (kg)	Mild steel code	Stainless steel code
40	20	M8	60	33	350	AF30/40/M8/60	-
	20	M10	60	33	500	AF30/40/M10/60	AF31/40/M10/60
60	20	M12	65	51	800	AF30/60/M12/65	AF31/60/M12/65
	25	M16	65	51	1000	AF30/60/M16/65	AF31/60/M16/65
	25	M16	65	51	1000	AF30/60/M16/150	-
	25	M16	165	51	1000	-	AF31/60/M16/165
	25	M20	100	51	1000	A30/60/M20/100	AF31/60/M20/100
90	25	M12	65	51	1000	AF30/90/M12/65	AF31/90/M12/65
	25	M16	65	51	1000	AF30/90/M16/65	AF31/90/M16/65
	25	M16	150	51	1000	AF30/90/M16/150	-
	25	M16	165	51	1000	-	AF31/90/M16/165
	25	M20	100	51	1000	AF30/90/M20/100	AF31/90/M20/100

## Fixed feet

Pad diameter (mm)	Pad height (mm)	Thread diameter	Thread length (mm)	Max load (kg)	Mild steel code	Stainless steel code
40	20	M8	35	350	AF40/40/M8/35	AF41/40/M8/35
	20	M10	35	500	AF40/40/M10/35	AF41/40/M10/35
60	20	M12	60	800	AF40/60/M12/60	AF41/60/M12/60



Round knock in tube end

Square knock in tube end

### Round knock in tube ends

External tube size (mm)	Internal tube size (mm)	Thread diameter (mm)	Knock in length (mm)	Max load (kg)	Stainless steel code
25	22	M8	38	100	AF81/25/M8
25	22	M10	38	100	AF81/25/M10
25	22	M12	38	100	AF81/25/M12
32	28-29	M8	39	200	AF81/32/M8
32	28-29	M10	39	250	AF81/32/M10
32	28-29	M12	39	250	AF81/32/M12
32	28-29	M16	32	250	AF81/32/M16
38	35-36	M10	38	300	AF81/38/M10
38	35-36	M12	38	300	AF81/38/M12
38	35-36	M16	38	300	AF81/38/M16
51	47-48	M12	38	450	AF81/51/M12
40	36-37	M10	39	500	AF81/40/M10
40	36-37	M12	39	500	AF81/40/M12
40	36-37	M16	39	500	AF81/40/M16
51	47-48	M12	38	450	AF81/51/M12
51	47-48	M16	38	450	AF81/51/M16
62	60-61	M16	38	450	AF81/62/M16

### Square knock in tube ends

External tube size (mm)	Internal tube size (mm)	Thread diameter (mm)	Knock in length (mm)	Max load (kg)	Mild steel code	Stainless steel code
25	22-23	M10	39	250	AF10/25/M10	AF11/25/M10
25	22-23	M12	39	250	AF10/25/M12	AF11/25/M12
25	22-23	M16	39	250	AF10/25/M16	AF11/25/M16
30	26-27	M8	39	350	AF10/30/M8	AF11/30/M8
30	26-27	M10	39	350	AF10/30/M10	AF11/30/M10
30	26-27	M12	39	350	AF10/30/M12	AF11/30/M12
30	26-27	M16	39	350	AF10/30/M16	AF11/30/M16
32	28-29	M8	39	350	AF10/32/M8	AF11/32/M8
32	28-29	M10	39	350	AF10/32/M10	AF11/32/M10
32	28-29	M12	39	350	AF10/32/M12	AF11/32/M12
32	28-29	M16	39	350	AF10/32/M16	AF11/32/M16
35	31-32	M8	39	350	AF10/35/M8	AF11/35/M8
35	31-32	M10	39	400	AF10/35/M10	AF11/35/M10
35	31-32	M12	39	400	AF10/35/M12	AF11/35/M12
35	31-32	M16	39	400	AF10/35/M16	AF11/35/M16
38	35-36	M8	41	500	AF10/38/M8	AF11/38/M8
38	35-36	M10	41	500	AF10/38/M10	AF11/38/M10
38	35-36	M12	41	500	AF10/38/M12	AF11/38/M12
38	35-36	M16	41	500	AF10/38/M16	AF11/38/M16
40	36-37	M10	39	350	AF10/40/M10	AF11/40/M10
40	36-37	M12	39	350	AF10/40/M12	AF11/40/M12
40	36-37	M16	39	350	AF10/40/M16	AF11/40/M16
51	47-48	M10	39	750	AF10/51/M10	AF11/51/M10
51	47-48	M12	39	750	AF10/51/M12	AF11/51/M12
51	47-48	M16	39	750	AF10/51/M16	AF11/51/M16
51	47-48	M20	39	750	-	AF11/51/M20



  
Electrodrive



# Custom Engineered Solutions

## Purpose-built mobility solutions

Custom Engineered Solutions design and manufacture purpose-built solutions to help you move heavy goods and rolling equipment in and around your work site. Although the most common products we make are trolleys and hand trucks, our specialties lie in helping your business or organisation find a safer and more efficient way to tow, push, lift or tip.

With the full resources of the Fallshaw Group available to us, we assess your current work processes and find ways to improve the safety and efficiency of your staff. Where your needs aren't met with the available specified equipment, we customise one to fit your needs, or create one from scratch if required.





# Research & Development Team—custom solutions specialists

**Every industry and workplace is different. And while the Fallshaw Group has a wide variety of materials handling products already available to meet most of the requirements for every business, sometimes there is just something unique about yours that can't be quite addressed.**

This is where we come in.

With decades of engineering, electronics and tooling experience under our belts, we can respond and design a solution that is specific to your needs where one doesn't exist. In fact many of the products in this catalogue were designed by our team, utilising the manufacturing expertise in the Fallshaw Group to produce and deliver solutions and products to customers in Australia and around the world.

With expertise in towing and pushing methodologies, and emphasis on safety, we will produce a solution that will increase your productivity, while keeping your staff safe from injuries.

## Towing and pushing

While there is no doubt that an Electrodrive powered tug is the safest known way for one person to move thousands of kilograms of equipment at a time, you may have trolleys that cannot be hitched to a tug conventionally. We have helped businesses by creating special hitches to suit their trolleys, modify their trolleys to be able to be towed in a train, or create a whole new trolley to fit their work flow. We have even used the technology behind the powered tug to create a solution to turn a customer's trolleys into powered trolleys. Either way, we have the expertise and resources to make sure that manual pushing and pulling in your workplace is a thing of the past.

## Safety

Whether you're working near people or even with animals, a solution sometimes requires keeping others safe. While solutions could be found with simple modifications to existing equipment, we find that some need to be invented. We helped a business

add a braking system to their existing fleet of carts to avoid collisions and injury to others. We also helped one business find a safer way to move their animals from their pens to a weighing station, by creating a mobile solution that can be moved to the pens themselves.

## Case studies

The following pages showcase just some of the solutions we have helped businesses with in their materials handling work flows. While every problem was unique, our approach to the solution was the same: find a way to avoid push/pull injuries and collisions, while improving efficiency.

## Case study

# Towing a train of trolleys through a store

### Problem

A large department store wanted a solution for restocking shelves more efficiently. Their current process was time consuming as it involved a staff member taking a roll cage from the storeroom to a designated aisle in the store, opening and unpacking boxes of stock, filling the shelves, and then returning the roll cage full of empty boxes back to the storeroom. This process was repeated many times across many aisles until all the shelves were stocked.

Apart from being an eyesore, the roll cages also presented a potential injury risk to shoppers if restocking wasn't completed before the store opened. To avoid this situation, staff continually moved roll cages around the store as quickly as possible, increasing the risk of push/pull injuries to themselves.

Needing a more efficient and safer way to deliver stock to the aisles, management decided that they wanted trolleys that could be connected into a train. The train had to be able to easily negotiate the tight corners and passageways throughout store, as well as being easy to hitch and unhitch.

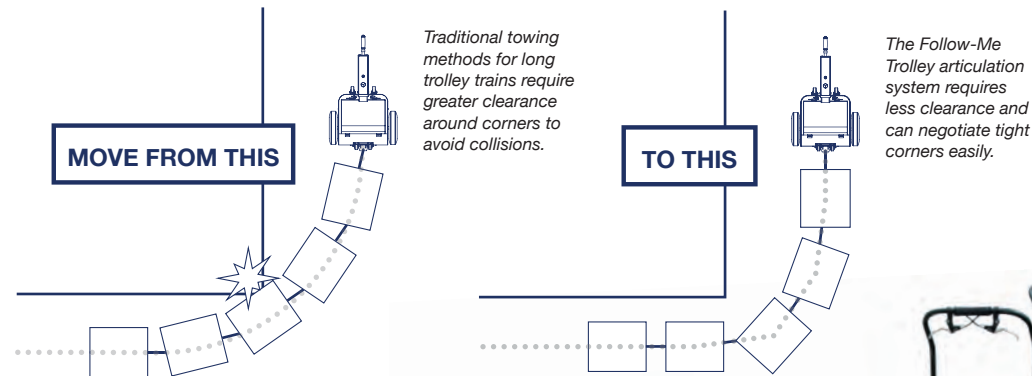
### Solution: The-Follow Me Trolley

To address their need, we developed the Follow-Me Trolley, a highly manoeuvrable flat bed trolley with an articulation system inspired by B-Double trailers and road trains.

Designed with a quick hitching mechanism, each trolley can be easily hitched into a train where it mimics the movement of the object directly in front, giving the whole train a very tight turn circle and allowing it to negotiate tight corners and S-bends.

Combined with an Electrodrive powered tug, up to ten fully loaded Follow-Me Trolleys could be towed safely by one person through the tight confines of the store and delivered at the end of a series of aisles where waiting staff can fill the shelves.

The Follow-Me Trolley can also be customised to suit any application. The articulation system can even be retrofitted to your existing fleet of trolleys.



### Follow-Me Trolley features

- High manoeuvrability of trolley trains through tight corners and S-bends
- Quick release levers for easy hitching and unhitching
- Stay in 'front of load', preventing push-pull injuries and the risk of collisions with pedestrians or objects
- Suitable for retail or industrial environments
- Articulation system can be retrofitted to your existing fleet of trolleys



Follow-Me Trolleys in a train easily negotiating an S-bend.



# Case study

## A tall order with a tight deadline

### Problem

A brand new hospital installed a state of the art automatic guided vehicle (AGV) system to transport linen carts back and forth from the wards to the loading dock, where waiting trucks would take the carts to a commercial laundry, and return with the freshly cleaned linen. However the brand new linen carts (which were customised to fit an AGV passing underneath) were too wide to fit three carts across the width of a truck. The hospital needed to find a way to reduce the widths of the carts before opening day, or face having to pay a third more for trucks and drivers, increasing the hospital's running costs upwards of six figures.

### Solution: Ultra slim self-aligning castor

With the hospital opening only eight weeks away, and the new linen carts and AGVs already paid for and delivered, the only components that could be modified were the linen cart castors.

Desperate, the hospital approached us with this tall order. It was a massive challenge but our design expertise and tooling capability allowed us to produce a thinner prototype in just one week. Working with *Fallshaw Wheels & Castors*, we delivered enough ultra slim self-aligning castors to fit the hospital's entire fleet of carts within seven weeks. At just 61.5 mm, it ensured that the hospital could comfortably fit three linen carts across a delivery truck's width, saving the hospital from an increase in running costs.



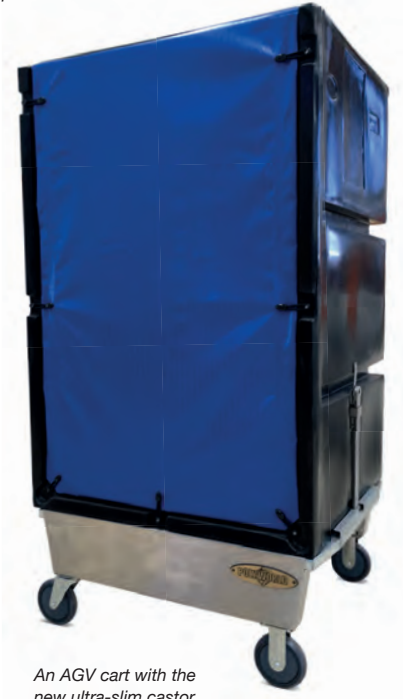
The Continuous Improvement and Tool Room team who produced the prototype within a week of the hospital's request.

### Ultra slim self-aligning castor features

- Only 61.5 mm wide
- Retrofittable to existing carts and trolleys



Left: the modified narrower castor top plate had to be 61.5 mm in width, compared to the original 70 mm version (right).



An AGV cart with the new ultra-slim castor fitted.

## Case study

# Moving airline meal carts safely

### Problem

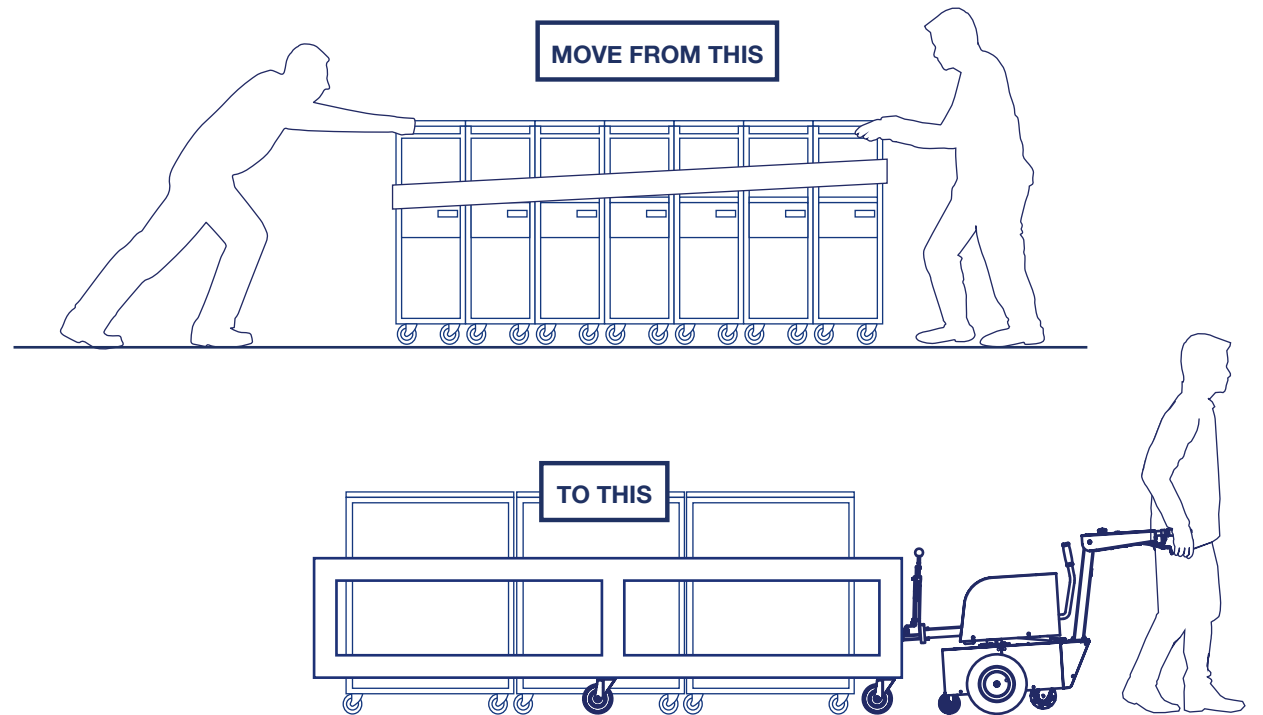
An airline catering department needed a better way to transport airline food carts from their kitchens to the aircraft. The current process was manually intensive, involving tying groups of seven carts together, which are then pushed by two people through their catering facilities and onto the tarmac. The carts are heavy, and moving them sideways placed a lot of stress on the staff's hamstrings, lower backs and shoulders.

### Solution: Meal delivery cart trailer

We designed a special trolley that can hold nine carts together for towing with an Electrodrive Tug Evo. This meant that not only could the airline staff move more with less people, but also ensure that the risks of injury from pushing and pulling, and collisions were eliminated.

### Features

- Stay in 'front of load', preventing push-pull injuries and the risk of collisions with pedestrians or objects
- More efficient process with one person able to move more carts per trip





# Case study

## Preventing cleaning carts from rolling onto railway tracks

### Problem

A cleaning company maintaining train stations needed a solution to stop their unattended cleaning carts from potentially rolling onto railway tracks and into the path of an oncoming train.

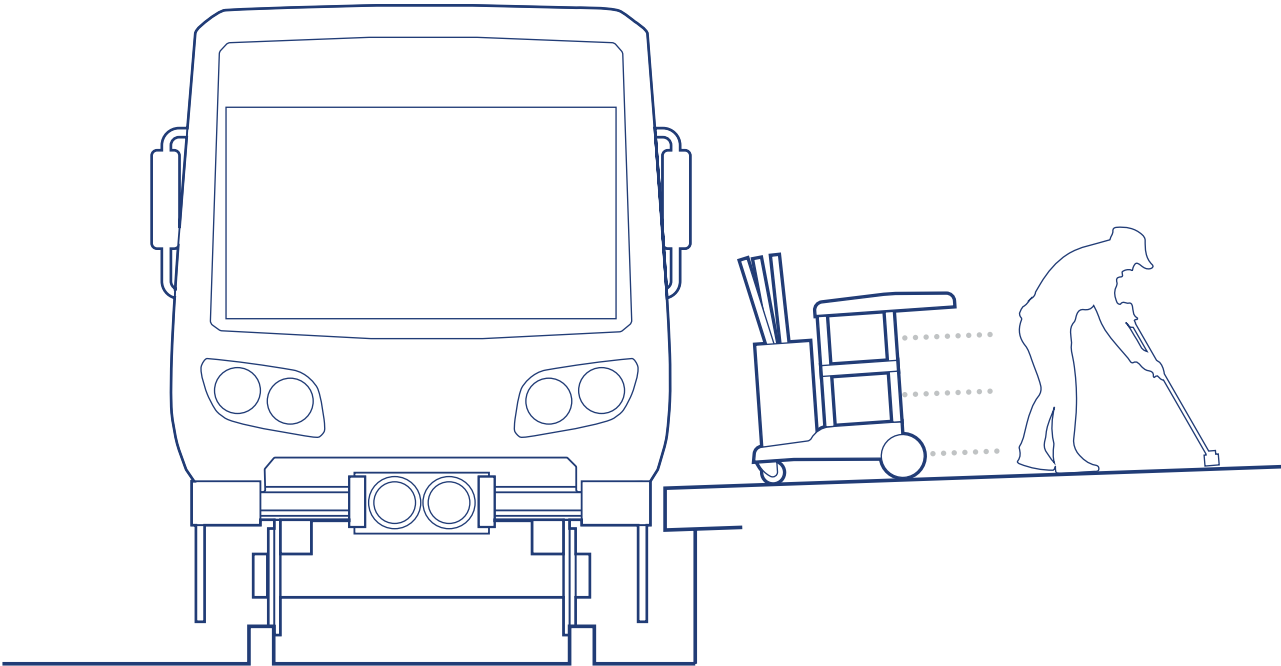
### Solution: Deadman brakes

The inspiration for the solution came from the same safety technology already found in the trains that travel through. We designed a deadman brake which could be retrofitted to their existing fleet of cleaning carts.

To operate the cart, a person would need to squeeze two levers underneath the handle bars to disengage the brake. When the cart was stationary and levers were released, the brake would activate, stopping the carts from rolling on their own. This eliminated the risk of accidents.

### Deadman brake system features

- Retrofittable to your existing carts and trolleys
- Customisable braking options to suit your trolley design and requirements



The deadman brake system on a cleaning cart. Squeezing the levers releases the brake and allows the cart to move.

## Case study

# Moving and lifting animals

### Problem

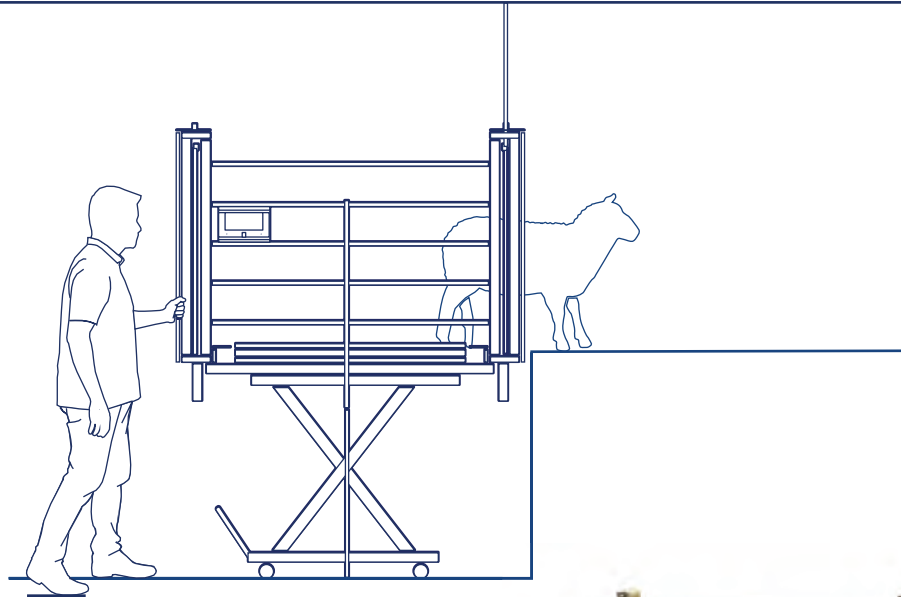
A veterinarian was looking for a safer way to move their pigs and sheep from their pens to a set of scales for weighing. The current process took five hours to complete and involved up to four people moving all of the animals in and out of pens and onto the weigh scales. The work was physically demanding, carried out in a hot and noisy environment with animals that can be stressed. This presented numerous injury risks to both the staff and animals as they negotiated between the pen and the scales.

### Solution: Mobile weigh station

Our team went out to assess the area and produced a mobile weigh station built using equipment and expertise from Castors & Industrial, Fallshaw and Electrodrive.

The mobile weigh station was designed with special safety rails and doors which allowed it to be taken directly to the pen where the animal can walk straight onto the scales, and then back to the pen again. The scales can also be elevated to suit the different platform heights around the area.

With the mobile weigh station, what once took four people, five hours to do, can now be accomplished with two people in just two hours.



### Mobile weigh station features

- Battery powered scissor lift
- Safety rails and doors
- Heavy duty castors with brakes



# Case study

## Motorising your trolleys

### Problem

A company providing waste and linen collection services needed a better way for their staff to move their tall heavy trolleys throughout a busy hotel, hundreds of times per day.

They needed a solution that was both powerful enough so staff did not suffer strains from pushing and pulling the trolleys around, and nimble enough so it could be moved through the tight corridors and lifts, especially around guests who were staying there.

Although the company wanted a way to motorise their existing fleet of trolleys, introducing a powered tug to tow their trolleys was not ideal because the tug and trolley weren't nimble enough to fit into the lifts.

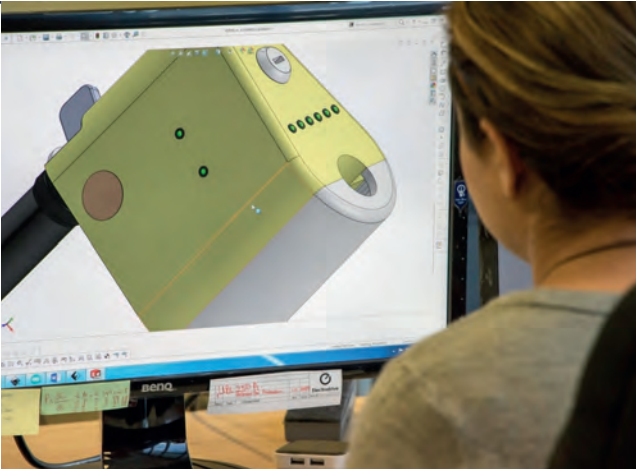
### Solution: Powered 5th Wheel (P5W)

To address their problem we developed the P5W, a powered drive wheel that can be easily retrofitted to their existing trolleys, converting them all to powered trolleys.

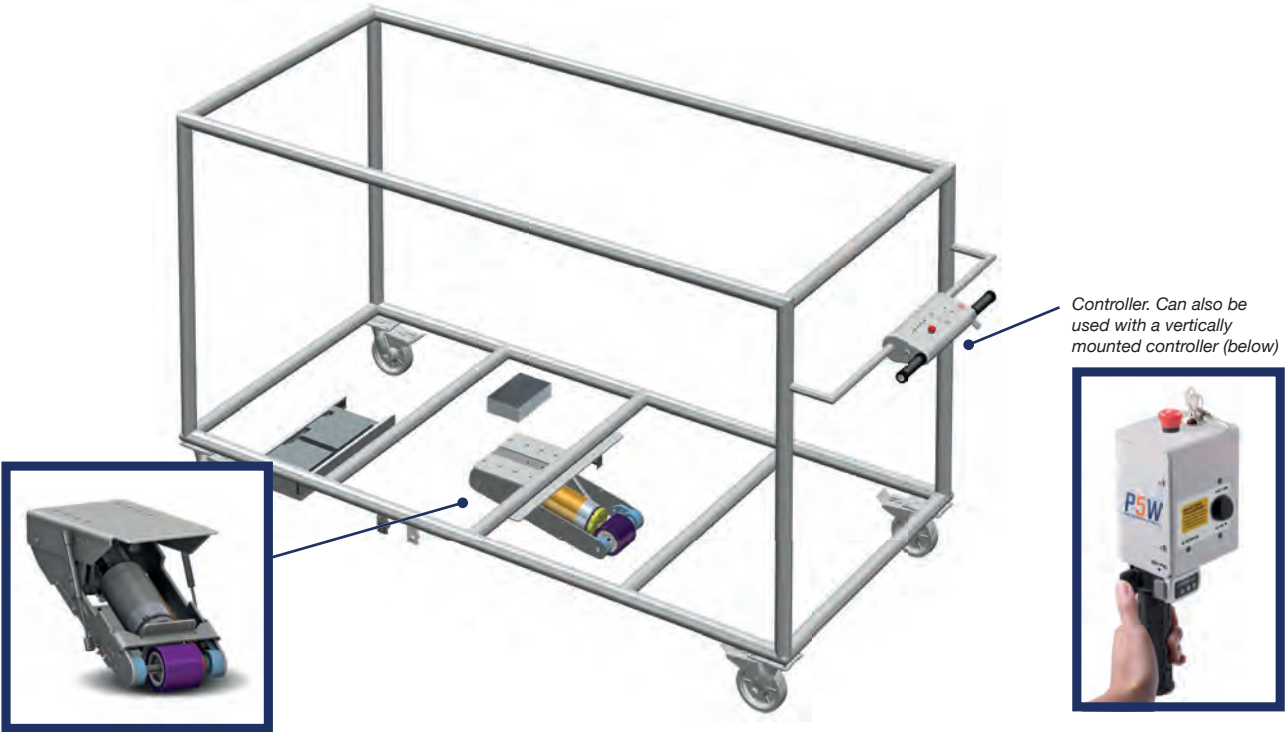
Controlled with an ergonomically designed grip for a natural walking posture, the P5W works with their trolley's other four wheels to help them move the heavy loads safely and efficiently, eliminating the risk of push-pull injuries.

### Features

- Powerful motorised wheel capable of moving up to 500 kg
- Ergonomic control grip with thumb controlled throttle and emergency stop
- Flexible configurations to fit trolleys with vertical or horizontal handlebars of varying widths and heights
- Smart charger for optimum operation and battery life



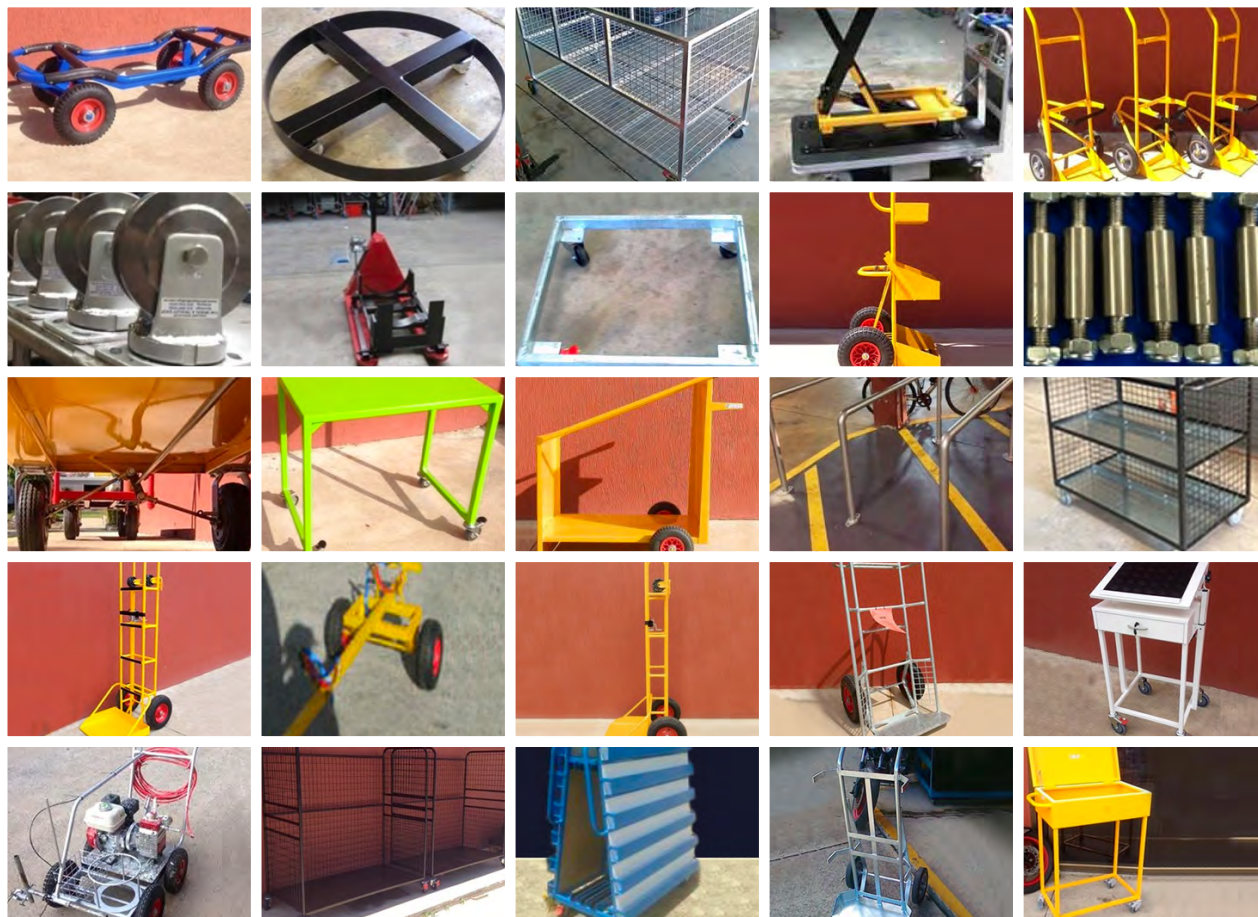
Engineers and electricians designing and prototyping the P5W.



P5W mounted under the trolley



# Customised trolleys and hand trucks



We also design and manufacture a comprehensive range of manual handling equipment to suit specific needs:

- Industrial hand trolleys and hand trucks
- Container loading and unloading ramps
- Plastic and steel drum handling equipment
- Forklift, tug and jib attachments
- Extra large dangerous goods cabinets
- Lifting equipment and forklift attachments
- Storage, racking and shelving equipment
- Aluminium access ladders and platforms
- Industrial hand trucks and trolleys
- Electric lifters and fork stackers
- Two and three level trolleys
- Janitor trolleys
- Sheet and panel trolleys
- Specific purpose trolleys
- Laundry and linen trolley
- Wire basket trolleys
- Piano and furniture dollies
- Load moving skates
- Platform trolleys
- Warehouse trolleys
- Stainless steel (anti-corrosion) trolley





# Serviced Equipment

## Repairs, maintenance and fitting

Serviced Equipment is a leading provider of preventative maintenance and breakdown repair services for a wide range of industries.

Our qualified staff can help you with:

- Preventative and breakdown maintenance of a wide range of electro-mechanical machines like Electrodrive powered movers and Liftmaster bin lifters
- Electrical testing and tagging
- Castor fitting and replacement

Our experienced technicians hold relevant industry qualifications and are certified to perform service work in the healthcare and industrial sectors.



# What we do

## Industrial and commercial service

We specialise in servicing materials handling equipment (otherwise known as plant items) across a wide range of industrial businesses. Our highly skilled and experienced technicians have the ability to inspect, diagnose and repair almost any fault with materials handling equipment that is typically used as part of a critical business process. This might involve reprogramming a controller on a Tug, installing a drive wheel to a trolley, upgrading or adding new features, replacing worn components, making modifications backed by our Engineering team, rewiring steering controllers, fabricating and customising brand new parts, replacing oil in hydraulic actuators and much more.

### Mobility equipment

- Tugs

### Back of house

- Bakery equipment
- Deli equipment
- Roll cages
- Stock trolleys
- Flat bed trolleys

### Waste handling equipment

- Product display
- Supermarket trolleys
- Bin lifters

## Healthcare service

Experience tells us that all healthcare facilities handle the maintenance and repair of equipment differently. Larger hospitals normally centralise their maintenance work through one department that may look after multiple assets for the whole facility. These departments normally outsource their maintenance work to specialist service companies such as ours, who supplement with routine service work and the supply of replacement parts over the long term. On the other hand, smaller healthcare clients, such as aged care homes and day surgeries, may only have a few assets to maintain. This is where reactive “call outs” are better suited and where fast response times and work efficiency are paramount. In both cases, our dedicated service manager will organise the job on your behalf, taking all the work out of solving the problem.

### Castors for beds and stretchers

- Clinical beds
- Nursing home beds
- Stretchers
- Gurneys
- Hospital beds

### Patient transport and handling equipment

- Mobile floor hoists
- Bed movers
- Wheelchairs
- Power chairs
- Wheelchair movers
- Mobility scooters
- Strollers

## Preventative maintenance

Preventative maintenance is a fundamental part of our service delivery. Preventative maintenance is directed towards two basic outcomes:

1. Ensure your mobile equipment is always performing at its peak
2. Reduce the total cost of ownership of your equipment

Our preventative maintenance scheduling allows us to be reactive to urgent call outs for breakdown repairs. This makes us lean and efficient and able to cope with jobs both large and small. From completely rebuilding, rewiring or recondition equipment to replacing the wheels and castors on your trolleys, our routine service work keeps equipment working at its peak and reduces downtime for staff who use it. This has a massive impact on productivity and in turn reduces downtime caused by traditional “break/fix” type servicing.

### Maintenance methodology

In addition to a number of standard preventative maintenance checks, adjustments and procedures which need to be performed on every visit, the following steps are applied by Serviced Equipment to define a process for targeting specific remedial call-out reduction.

- Produce an accurate and detailed database of remedial maintenance activities
- Apply regression analysis techniques to identify the distribution of maintenance issues and develop an optimum preventative maintenance strategy
- Prepare a detailed preventative maintenance schedule and checklist to implement this strategy
- Produce statistical data to facilitate analysis of the process
- Review Preventative Maintenance activities quarterly and adjust accordingly

This is the basis for a successful preventative maintenance implementation. Commercially, these activities ultimately must result in reduced overall maintenance costs and this will be the measuring stick for success.



# Preventative maintenance service plans

## BRONZE SERVICE

### Bronze service

All materials handling equipment sold in this catalogue come with our standard Bronze service package. The service intervals are specified by us and our Field Service Technician will provide the due dates for the next service using a sticker on the instrument panel.

- Six monthly call cycle
- Online booking service

This is a 'pay as you go' package and does not include the security of a fixed price service package. Upgrading your Bronze service will reduce service costs over the longer term and avoid downtime from a preventable breakdown.

## SILVER SERVICE

### Silver service

This is the minimum recommended level of service cover if you have one or more units in the field. It includes the Bronze level service plus:

- Two scheduled services
- Basic spare parts included—handgrips, levers, cables, springs

## GOLD SERVICE

### Gold service

This is the recommended level of service cover if you have one or more units in the field. It includes the Silver level service plus:

- Major spare parts included—gearbox, motor, chain (if applicable), switches, electronics, wheels, castors

## GOLD+ SERVICE

### Gold Plus service

This includes all the benefits of the Gold level service plus an extended warranty period of three years.

This level is highly recommended for organisations that have multiple units in the field or for those that have one or more units continually used over three to six month periods.

### Don't risk using someone else!

Serviced Equipment technicians are specially trained to diagnose and repair mobile materials handling equipment using original components without voiding your warranty.

We maintain a complete service history on your behalf. The service history will support the resale value of your asset. Our fixed price service packages are designed to give you the cover you need and give you peace of mind, not surprises.

# The Fallshaw Group

## **Mobility solutions to help you push, pull & lift with ease**

We are a single-source solution provider in mobility solutions. As experts in mindful moving, we help our customers improve safety, productivity and profit in any process that involves pushing, pulling or lifting.

- We work with healthcare, commercial and industrial original equipment manufacturers (OEM) to offer components or complementary products that either reduce the lowest total cost of ownership or provide enhanced product features that increase the saleability or value of their OEM equipment.
- We work with healthcare facilities to improve outcomes in their push-pull processes and patient safety.
- We work with industrial end users to improve their move-safe processes.











# How it all began



**The Fallshaw Group of companies have engineering roots and proud histories of making products to world standards.**

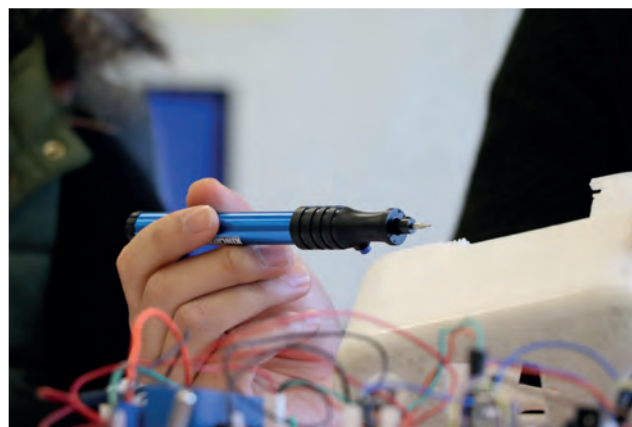
Starting as a wheelchair company in 1920, Percy Fallshaw manufactured wheels and invalid's chairs from a factory in Melbourne.

It was then managed for 45 years by Robert Fallshaw, under whose leadership the company started making castors, developing its manufacturing expertise and building an enviable sales network to make it one of the world's leading castor companies. In 1995, Robert expanded the Fallshaw product range by acquiring Liftmaster Materials Handling and its line of bin lifters.

After Robert's regretful passing in 2005, his daughter Jo took over as the Managing Director and owner, and continues the tradition of developing innovative products, and manufacturing well-designed, cost effective, quality castors, delivered in-full and on-time with great service and technical support.

In 2006, Fallshaw acquired Electrodrive (established in 1987)—with its own proud history in design and manufacture of powered materials handling products. As sales grew and the service division of Electrodrive expanded, we established a new company called Serviced Equipment, utilising the team's expertise in providing repairs, maintenance and fitting, not just for Electrodrive products but for a wider range of powered materials handling equipment as well.





The group's range expanded further when it was joined by Queensland based materials handling retailers and Fallshaw distributors, Castors and Industrial Products in 2015—bringing with them their expertise in conveying and lifting equipment, and The Wheel & Trolley Shop in 2016 (later renamed to Custom Engineered Solutions) a provider of purpose built mobility solutions.

Today the Fallshaw Group boasts an extensive range of powered and mobile materials handling solutions that are designed to increase productivity while keeping your workplace safe from all types of manual handling injuries. And while not all workplaces

and situations are the same, we will create a solution for your particular situation where one does not yet exist.

As experts in mindful moving, we can help our customers improve safety, productivity and profit in any process that involves pushing, pulling or lifting.

We strive for intelligently simple and smart product design, where our mobility products are deceptively simple and elegant, with an interface that is intuitive and easy to use.

Our products are not constrained by traditional approaches and we enjoy doing things differently. We think anew about material selection and manufacturing technology and we radically reinterpret mobility product design.

# Trading policies

## Customer satisfaction policy

We improve our services by listening to any customer complaints. Occasionally customers take the trouble to tell us if our service was less than perfect, but most dissatisfied customers simply cease to deal with us—to our loss. We treasure those who complain—it is only through the trouble they take that we can improve.

We undertake to respond to any complaints within two business days.

### We believe you will be happy, but if you are not...

Firstly try to sort it out with our distributor or branch. If you are still unhappy, feel free to contact our Managing Director—Jo Fallshaw directly on +61 3 9300 8542 or email her at [jo@fallshaw.com.au](mailto:jo@fallshaw.com.au). We are determined to maintain a high standard and continuously strive for perfect quality and service.

## Reduction of Hazardous Substances (RoHS) statement of compliance

This is a directive of the European Union (Directive 2002/95/EC) that restricts the use of hazardous materials in the manufacture of various types of electronic and electrical equipment. Hexavalent Chromium is one of these chemicals and has been traditionally used in the zinc plating industry. We hereby certify that our products (sold under the Fallshaw brands\*) comply with RoHS regulations and do not contain the following banned substances:

- Lead
- Polybrominated Biphenyls
- Pentabromodiphenyl ether (PentaBDE)
- Mercury
- Cadmium
- Polybrominated Diphenyl Ether
- Octabromodiphenyl ether (OctaBDE)
- Hexavalent Chromium.

*\* For special-ordered products or products sold under other brands, please inquire about RoHS compliance prior to ordering if this is important to you, and we will research the RoHS compliance or otherwise of the particular item concerned and provide a separate written statement.*



### CERTIFICATE OF REGISTRATION

ISO 9001  
CERTIFIED  
QUALITY  
MANAGEMENT

**FALLSHAW HOLDINGS PTY LTD**  
ABN: 74 005 237 525  
Locations as specified on Appendix 1

has been independently assessed and certified as having established, documented and implemented a Quality Management System complying with the requirements of

## ISO 9001:2015

### Quality Management Systems

The scope of certification covers the design, manufacture and distribution of Fallshaw Wheels and Castors and the design, manufacture, sales and service of materials handling equipment.



W.A. Cullinan  
Chairman – Approval Panel



S.A.J. Marlow  
Co-Signatory – Approval Panel

Certificate number:	315111-Q1	Initial certification:	11/12/2015
Current issue	17/05/2019	Certificate expiry:	31/05/2022



ECAAS Pty Ltd  
A.C.N 104 429 898  
[www.eccan.com](http://www.eccan.com)  
GPO Box 1818  
ADELAIDE, South Australia 5001



### CERTIFICATE OF REGISTRATION

ISO 9001  
CERTIFIED  
QUALITY  
MANAGEMENT

**ELECTRODRIVE PTY LTD**  
ABN: 68 005 805 232  
Locations as specified on Appendix 1

has been independently assessed and certified as having established, documented and implemented a Quality Management System complying with the requirements of

## ISO 9001:2015

### Quality Management Systems

The scope of certification covers the design, manufacture and distribution of Fallshaw Wheels and Castors and the design, manufacture, sales and service of materials handling equipment.



W.A. Cullinan  
Chairman – Approval Panel



S.A.J. Marlow  
Co-Signatory – Approval Panel

Certificate number:	315111-Q2	Initial certification:	11/12/2015
Current issue	17/05/2019	Certificate expiry:	31/05/2022



ECAAS Pty Ltd  
A.C.N 104 429 898  
[www.eccan.com](http://www.eccan.com)  
GPO Box 1818  
ADELAIDE, South Australia 5001



# Delivery policy

Fallshaw's factory and main stock holding is in Melbourne, Australia. We also carry small stock holdings in Brisbane. We have a national freight policy, whereby we subsidise freight prices from Melbourne to other Australian destinations so that there is no price disadvantage to receiving stock direct from Melbourne rather than from a local branch. This helps us to prevent double-handling and thereby reduce costs. This keeps our prices competitive for all our customers.

This Despatch Policy is the lead time to despatch an order that our sales people can commit to without making separate inquiries to the Production & Assembly Factory. We ensure we have sufficient stock and manufacturing capacity to reliably deliver against these lead times. We can often do better on request, but you'll need to check first. We can also provide customised replenishment and stocking solutions for our account customers, when particular high-volume products are required on an ongoing basis (so goods are packed and ready to be called up against a firm order).

If an order is placed *before* 10am (Melbourne time), goods are available for collection or despatch from 3pm until 4pm the *same* day, and anytime the day after.

If an order is placed *after* 10am (Melbourne time), goods are available for collection or despatch from 12pm until 4pm the *next* day, and anytime the day after that.

## Despatch lead times for order quantities

Wheels and castors	1–50 (VHD 1–20)	51–100	101–300	301–500	500+
General castors (except Very Heavy Duty castors— W, X, V, A)	Same day	2 days	3 days	8 days	Determined upon request
Very Heavy Duty (VHD) castors	3 days	Determined upon request			
Build your own range	Determined upon request				
Trinity and Trinity EBC	3 days	8 days	Determined upon request		
General wheels	Same day	3 days	Determined upon request		
Pneumatic castors and wheels	Same day	3 days	Determined upon request		
Specialised castors and wheels (exceptions noted on product pages)	Determined upon request				
Materials handling equipment	1–2	3-5	6-10	11+	
Electrodrive powered tugs, powered trolleys, bed movers	10 days	16 days	30 days	Determined upon request	
Liftmaster Bin lifters and trailers	10 days	16 days	30 days	Determined upon request	

## Normal delivery lead times from despatch

Within Australia		International	
Next day	Melbourne, Sydney, Canberra, Adelaide	10–15 days	New Zealand
3 days	Brisbane, most Vic, NSW & ACT regional areas	24–30 days	Asia
5 days	Perth, Hobart, Townsville & Far North Qld	30–35 days	North America
6 days	Kalgoorlie, Alice Springs, Darwin, Launceston	30–35 days	Africa
7 days	Remote areas of Australia	35–40 days	Europe

Express freight options available on request. All days are business days. WA freight departs on Tuesdays and Fridays.

# Test summaries for wheels and castors



Applicable standards and test methods	Dynamic test	Brake life	Static load test	Impact test	Brake effectiveness
Hospital bed castors IEC60601-2-52 • Central locking • Trinity & Trinity EBC	1x load capacity with 2.88 km/h speed. Obstacle height 20 mm, 80 mm wide, 90° to travel, 1.5 mm radius on edge. Dynamic run of 10x forward and reverse bumps over obstacle.	Apply brakes 10,000 times without brakes failing.	Apply 3x load capacity for 1 hour. No deformation after 24 hours elapsed time.	N/A	1x load capacity at 10° incline with brakes on. Slippage must be < 10 mm.
Castors for furniture AS1961.3-2004 (ISO 22879:2004) • Castors with a diameter of 50 mm or less	Apply 125% of load capacity, 2 mm bump, space 500 cycles, 6.5 cycles/min.	N/A	Apply 2x load capacity for 24 hours. No deformation after 24 hours elapsed time.	30 kg load capacity: 5 kg from 200 mm free fall drop. 40 kg load capacity: 5 kg from 300 mm free fall drop. Proper function (minor deformation allowed).	Load castor to 1x load capacity, then apply horizontal force of 20% of load capacity without brakes allowing wheel to swivel.
Castors for manually propelled equipment for institutional applications—AS1961.5-2004 (ISO 22881:2004) • Light to medium duty ranges (excluding Economy and castors with diameter < 50 mm)	1x load capacity at 3 km/h speed. Obstacle height 3% of wheel diameter and with a radius 1/3 of height. Number of obstacles to be 10 times x wheel diameter in mm distance apart 1–3m. Initial swivel play less than 4 mm (measured at 200 mm); final swivel play < 8 mm.	Apply brakes 5,000 times without brakes failing.	Apply 1.5x load capacity for 1 hour. No deformation after 24 hours elapsed time.	N/A	Load castor to 1x load capacity, then apply horizontal force of 20% of load capacity without brakes allowing wheel to swivel.
Applications up to 1.1 m/s (4 km/h)—AS1961.7-2004, ISO 22883:2004 • General to heavy duty castors	1x load capacity at 4 km/h speed. Obstacle height: 2.5% of wheel diameter > 90 shore A; 5% of wheel diameter < 90 shore A. Number of obstacles to be 500 and to be 1 m apart, then remainder of 15,000 revolutions of the wheel without obstacles. Initial swivel play < 4 mm (measured at 200 mm). Final swivel play < 8 mm.	Apply brakes 5,000 times without brakes failing.	<b>ABOUT THE BRAKE EFFECTIVENESS TEST</b> The ISO brake effectiveness tests are extremely harsh. They exist to ensure that brakes are ramp-capable by measuring brake traction force. However this greatly reduces the load capacity of the castor that is otherwise appropriate in safely complying with the ISO Static, Dynamic and Impact tests.  At Fallshaw, our approach is to rate the castor for normal use on flat surfaces. However if your application involves brake application on ramps or inclines then you MUST reduce the catalogue load rating by 0–40% in order to comply with the ISO brake effectiveness test (except in hospital bed castors which are fully compliant at published ratings).		Load castor to 1x load capacity, then apply horizontal force of X% of load (3 times x 10 seconds) without brake allowing wheel to swivel. X=10% for tyre hardness > 90 shore A X=15% for tyre hardness < 90 shore A.
Applications over 1.1 m/s (4 km/h) and up to 4.4 m/s (16 km/h) <sup>1</sup> —AS1961.8-2004 (ISO 22884:2004) • Very heavy duty castors (excluding Economy range)	1x load capacity at 6 km/h speed (bumps 1 m apart) and 10 km/h speed (bumps 1.5 m apart). Obstacle height: 2.5% of wheel diameter for tyre hardness > 90 shore A; 5% of wheel diameter < 90 shore A. Number of obstacles at 5 times the wheel diameter. Initial swivel play < 3 mm (measured at 200 mm). Final swivel play < 6 mm.	Apply brakes 5,000 times without brakes failing.			Load castor to 1x load capacity, then apply horizontal force of X% of load (3 times x 10 seconds) without brake allowing wheel to swivel. X=10% for tyre hardness > 90 shore A X=15% for tyre hardness < 90 shore A.

\* The ISO standard for dynamic testing specifies 3 min ON/1 min OFF or 2 min OFF or 3 min OFF. However, we test 3 min ON 3 min OFF in applications where excessive heat build up would not be experienced in the field and is not a failure mode. Change direction each cycle. Obstacles at 45° alternating left/right.

<sup>1</sup> Note that we only provide castors for towing up to 10 km/h.

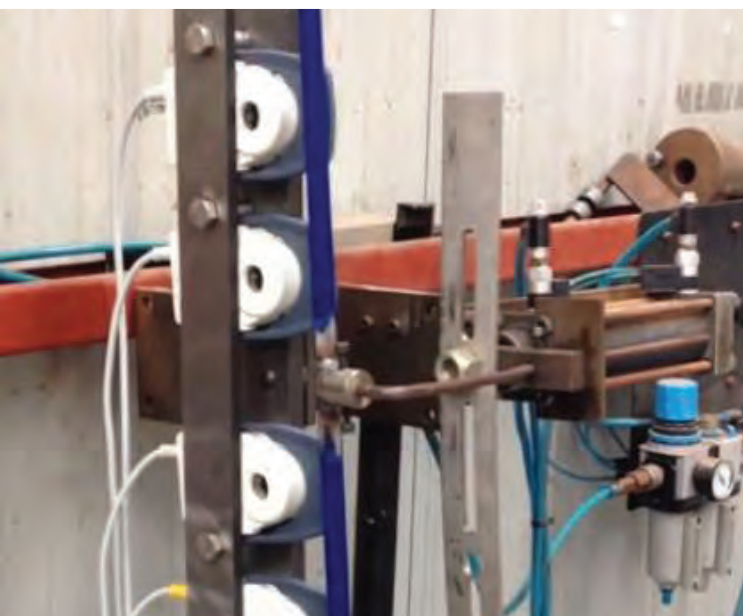


### 3.2 Long Life Brake Cycle Test (60,000 on/off) – EBC Only

Individual Test Report No. – S6468, S6482, S6490

#### Test Requirement

- No of Cycles: Mechanical Brake on/off 20,000 cycles (headrace only)
- No of Cycles: Electrical Brake on/off 40,000 cycles (full castor, feedback system monitored)
- Test Load: 150kg on test trolley (4 castors)
- Rate: 10 Cycles / Minute
- Duration: 100hrs
- Pass Criteria: Fully operational braking system to ISO 22882 at the completion of test, including all EBC functions and no greater than 0.5% failures detected by feedback system.



### Other standards relevant to Fallshaw products

- Shopping trolleys—For general use—AS/NZS 3847.1:1999
- Shower/toilet chairs (mobile and static)—AS/NZS 3973:2005
- Neutral salt spray (NSS) test—AS2331.3.1-2001
- Powder-coating adhesion—AS1580 Method 408.4

### And that is only the beginning




We often develop tests in conjunction with our customers to replicate the harsh conditions or long life cycle expectations that will be experienced by products in real world conditions. We can then supply evidence of testing in video format as well as formal test reports.

Here's one of our favourite examples. One of the 25 tests that Trinity EBC has to pass to meet our standards, is a Long Life Brake Cycle Test. The Trinity EBC has a brake designed for 60,000 brake ON/OFF cycles and we conduct this test over 100 hours, ensuring that Trinity EBC will continue to be dependable out in the field.

1. IEC 60601-2-52 Testing
  - 1.1 Threshold Test
    - 1.1.1 EBC
    - 1.1.2 Trinity 100 (4")
    - 1.1.2 Trinity 125 (5")
    - 1.1.3 Trinity 150 (6")
- 1.2 Instability in Transport - Ramp Test
  - 1.2.1 Trinity 100 (4")
  - 1.2.3 Trinity 125 (5")
  - 1.2.4 Trinity 150 (6")
- 1.3 Cable Pullout Test – EBC Only
- 1.4 Cable Torque Test
2. ISO 22882 (AS 1961.6 2004, EN 12531:1998) Hospital Castor Testing
  - 2.1 Braking Fatigue Test (10,000 on/off)
    - 2.1.3 Trinity 100mm and 150mm
    - 2.1.4 Trinity EBC
  - 2.2 Wheel Braking Test
  - 2.3 Swivel Braking Test
    - 2.3.1 Tested in Total Brake
    - 2.3.2 Tested in Direction Lock
  - 2.4 Static Load Test
  - 2.5 Dynamic Run Test
3. Fallshaw Inhouse Testing
  - 3.1 Long Life Run Test (30,000 Obstacles)
    - 3.1.1 Trinity 100 Pintle and washer mount
    - 3.1.2 Trinity T125 Pintle and washer mount
    - 3.1.2 Trinity 150 EBC
    - 3.1.3 Trinity 150 washer mount
    - 3.1.4 Trinity 150 Pintle Mount
  - 3.2 Long Life Brake Cycle Test (60,000 on/off) – EBC Only
  - 3.3 Dynamic Brake Test – EBC Only
  - 3.4 Side Impact
    - 3.4.1 Tested in Direction Lock
    - 3.4.2 Tested in Total Brake
  - 3.5 Pedal Impact
  - 3.6 Castor Impact
  - 3.7 Linear Swivel Test
  - 3.8 Dynamic Run Test
  - 3.9 Individual Swivel Resistance Test
  - 3.10 Mounted Rolling/Swivel Resistance
  - 3.11 Brake Usage Life Cycle Test – EBC Only
  - 3.12 Intuitive Steer Test
  - 3.13 Direction Lock Side Drag Test
  - 3.14 Direction Lock Bump Test



# Test summaries for materials handling equipment

Relevant legislation and regulations for all powered materials handling equipment (bin lifters, tugs and bed movers)	Tugs	Bed movers	Bin lifters
<ul style="list-style-type: none"><li>Occupational Health and Safety Act 2004 [OH&amp;S Act s40(2)]</li><li>Occupational Health and Safety Regulations 2007 [OH&amp;S Regulations Part 3.5, 6.2.1–6.2.8, Part 1, Schedule 2]</li><li>Equipment (Public Safety) Regulations 2007 [EPS Regulations 801-806, Schedule]</li><li>AS 3000: Wiring Rules</li><li>AS 1319: Safety signs for the occupational environment</li><li>AS 1431: Low Voltage Switchgear and Control gear—Control circuit Devices and Switching Elements.</li><li>AS 1775: Low Voltage Switchgear and Control Gear.</li><li>AS 1939: Classification of degrees of protection provided by enclosures for electrical equipment (IP code).</li><li>AS 2005: Fuses with enclosed fuse links.</li><li>AS 2467: Maintenance of electrical switchgear.</li><li>AS 2700: Colour standards for general purposes.</li><li>AS/NZS 3000: SAA Wiring Rules.</li><li>AS/NZS 3008.1.1: Electrical Installations—selection of cables.</li><li>AS 3147: PVC insulated electric cables and flexible cables for working voltages of up to and including 0.6/1 kV.</li><li>AS 3193: Transformer type battery charges.</li><li>AS/NZS 4836: Safe working on low-voltage electrical installations</li><li>ASC 320: Classification of insulating materials for electrical machinery and apparatus on the basis of thermal stability in service.</li></ul>	<ul style="list-style-type: none"><li>AS2359—Powered industrial trucks (AUST)</li><li>AS4024—Safety of machinery (AUST)</li><li>ANSI/ITSDFB56.9-2007, Safety Standard Operator Controlled Industrial Tow Tractors</li><li>(US) Directive 2006/42/EC (EURO)</li><li>AS 1554.1:2011—Structural Steel Welding</li></ul> 	<ul style="list-style-type: none"><li>IEC60601-1</li><li>IEC60601-2-52</li><li>Medical Device Directive (93/42/EEC) (EURO)</li><li>AS 1554.1:2011—Structural Steel Welding</li></ul> 	<ul style="list-style-type: none"><li>AS4024—Safety of machinery (AUST)</li><li>AS 1554.1:2011—Structural Steel Welding</li></ul> 

Production Testing	Tugs	Bed movers	Bin lifters
Pre-assembly	Bench testing of critical electro-mechanical components including motors & actuators	Bench testing of critical electro-mechanical components including motors & actuators	Bench testing of critical electro-mechanical components including motors & actuators
In process	Current draw test during assembly on electro-mechanical components	Current draw test during assembly on electro-mechanical components	Load testing Cycle testing of hydraulic system Inspection of fluids
Pre-delivery	Output performance check <ul style="list-style-type: none"><li>Record speed &amp; check speed chart</li><li>Record load test &amp; check load chart</li><li>Check appropriate labels are fitted</li></ul>	Output performance check <ul style="list-style-type: none"><li>Record speed &amp; check speed chart</li><li>Record load test &amp; check load chart</li><li>Check appropriate labels are fitted</li></ul>	Check for fluid leaks Test limit switch function Check appropriate labels are fitted
In service	Diagnostics check Functional assessment check	Diagnostics check Functional assessment check	Functional assessment check Review for worn parts

# Warranty

Our products are warranted against defects in materials or workmanship for the following periods:

## Fallshaw general castors

- 3 years

## Fallshaw specialised castors

- M Powder-coat—12 months
- M Stainless steel—3 years
- O Stainless steel—3 years
- Hi/Low temperature—12 months
- Self-aligning—3 years

## Fallshaw medical castors

- Trinity—3 years
- Central locking—3 years
- Wheelchair—3 years

## Fallshaw decorative castors

- 3 years

## Fallshaw wheels

- Hard—3 years
- Soft—3 years
- Pneumatic—12 months

## Electrodrive powered tugs and movers

- Unit—12 months
- Battery—6 months

## Liftmaster bin lifters

- Unit—12 months
- Battery—6 months

## Castors & Industrial materials handling equipment

- Conveyor products (when used within design specifications)—12 months
- Lift tables and turntables—12 months
- Pallet positioners—3 years on unit, lifetime warranty on springs
- Battery powered scissor lifts—12 months, 3 months on batteries
- Mobile scissor lifts, pallet trucks, industrial trolleys, access equipment and hand trucks—12 months
- Adjustable feet—12 months

## Custom Engineered Solutions

- Finished product—12 months

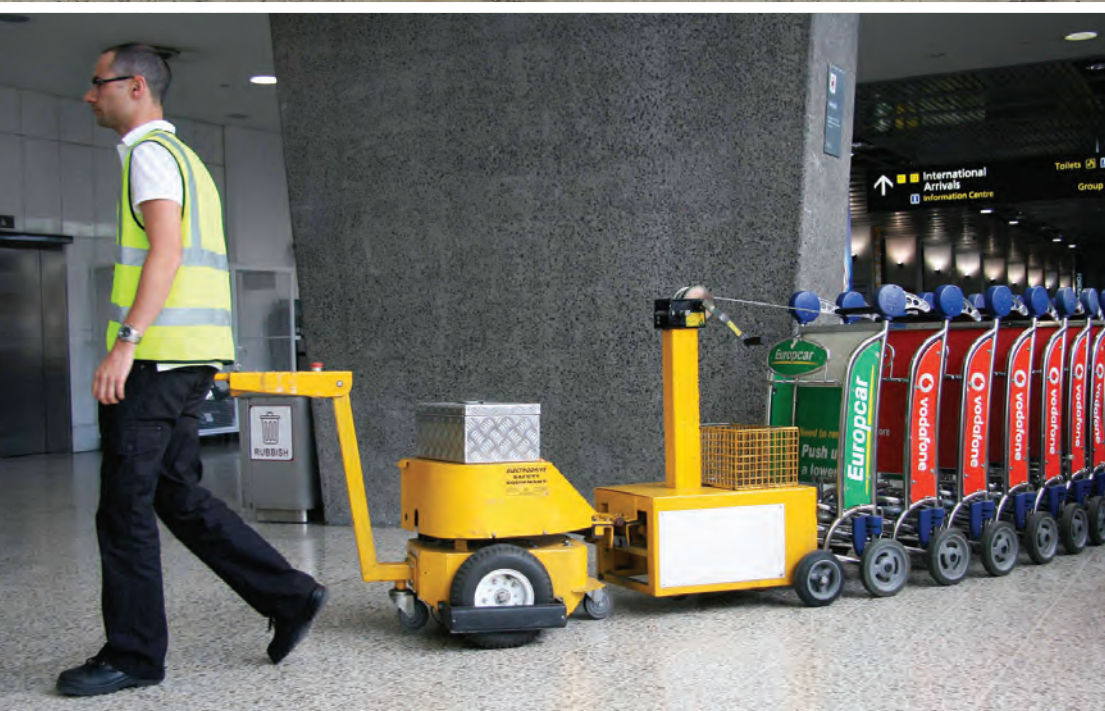
## Serviced Equipment

- Repairs—6 months

Any product that fails within the warranty period will be replaced with an equivalent product, delivered to the customer's store free of charge and freight cost. The warranty does not extend to the fitting of the product. The website, catalogue and operation manuals specify the conditions of use, installation and maintenance for our products. Customers should choose, use and maintain our product according to our recommendations, or they may become unsafe or product life could be compromised, and our liability may be voided.

This warranty excludes the effects of fair wear and tear, abuse, misuse, improper installation and inadequate maintenance. In unusual or severe applications not clearly similar to those on the website or in the catalogue, the customer is invited to submit a written description of the application against which we will make a recommendation, and which will form a part of the acceptable use conditions of the recommended product. If our catalogue is unclear, or if your application is not clearly covered by the examples given in the catalogue, we ask you to contact our staff for advice. We want to help, and we have the technical information to share if we know your needs.











**Fallshaw**  
GROUP

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## Victoria

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**Fallshaw Wheels & Castors**

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Sunshine North VIC 3020  
Australia

**Electrodrive**  
**Liftmaster**  
**Serviced Equipment**

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Australia

## Queensland

**Castors & Industrial**  
**Custom Engineered Solutions**  
**Fallshaw Wheels & Castors**

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Stapylton QLD 4207  
Australia

## New South Wales

**Castors & Industrial**  
**Fallshaw Wheels & Castors**

66 Derby St Silverwater  
NSW 2128  
Australia

