

Wicke

Toole Group Pty Ltd

www.wickeau.com.au



CASTORS & WHEELS



www.wickeau.com.au

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Wicke AU -Toole Group Pty Ltd
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Founded in 1866, Wicke Australia has been providing quality castor solutions in Australia since 2005. Purchased in 2021 By Toole Group Pty Ltd a specialised metal engineering company. With our specialised technical experience in the metal work industry we have the knowledge to get any project off the ground in a timely and professional manner.

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User information

Type of Wheel

The choice of tyre with the correct wheel or castor is crucially important. The castor should be chosen knowing the required load capacity, the application and environmental conditions.

Poyamid(Nylon)

The wheels are made in thermoplastic in-jection moulding productions for free running on smooth floors, nearly unbreakable under high loads for a long life. Hard Tyres

Elastic rubber

A high quality tyre with long rolling resistance. The rim seat is secured by a wire mesh foot in the tyre.

In case of high vertical forces a tyre with steel band foot can be supplied on request. As an alternative we offer a direct vulcanised high quality elastic rubber which is bonded by chemical adhesives firmly on the rim. Soft Tyres

Polyurethane

Polyurethane is a high quality polyurthane made in a moulding operation by polyaddition. The necessary bonding to the rim and steel band foots is guaranteed by a careful pretre-atment of the metal and chemical adhesives.

Polyurethane has rubber-elastic characteristic features and can be used for hardest purposes. Hard Tyres

Wheel Bearing Type



Plain bearings

Simple, almost maintenance free bearing. Resistant to shocks.

Polyamid sleeve. Suitable for use in wet conditions. For low speed vehicles polymer bearings won't rust. Also used to reduce cost (the cheapest kind of basic' bush-Stainless or zinc).

Roller bearings

Sturdy, resistant, almost maintenance free bearings, low friction, shock resistant. Permanent lubrication. For low speed vehicles.



Ball bearings

For heavy duty purposes with high performance.

High load capacity. Adjustable play.

Precision industrial ball bearing offer the lowest friction and therefore the lowest push effort- they are also the most expensive type of bearing in our range.

Type of Frames

Bolt hole (Zinc , Stainless steel G304)

Swivel bolt hole



Brake bolt hole

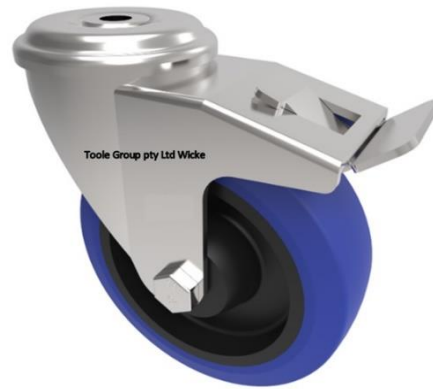


Plate (Zinc , Stainless steel G304)

Swivel plate



Brake plate



Fixed plate



Bolt Hole Fitting Expansion - Round tube / Square tube



Calculating The required load capacity

For Example



Identify your castors's load capacity. We have chosen a castor with a 150kg load capacity in our scenario.

You are building a trolley and require 4 castors, the total load capacity of these castors is 600kg. $(150 \times 4 = 600)$

Now you need to minus 25% of the overall load capacity to find the recommended load capacity for our your trolley.

Calculation Step

STEP 1

$4 \text{ (castors)} \times 150\text{kg} \text{ (load capacity per castor)} = 600\text{kg}$ (The total load capacity of 4 castors)

STEP 2

$0.25 \times 600 = 150$ (25% of the overall load capacity is 150kg)

STEP 3

600kg (The total load of 4 castors) - 150kg (25% of the overall) = 450kg



Recommended load capacity is 450kg

This calculation accounts for situations when you can't guarantee that will be touching the ground on uneven surfaces.

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 - load rating: 20kg to 200kg**

- Trolleys and carts, shop fittings and displays, Mobile storage

- **General duty to heavy duty - load rating: 200kg to 500kg**

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

- **Very heavy duty - load rating: 500kg to 1000kg**

- stock trolleys for automotive plants, Shipping containers, Multi purpose industrial trolleys.

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

- **Outdoor 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 floors 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.

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.)

4. Choose the bearing type

- Plain bearing, Roller bearing, Ball bearing (More information on page1)

5. Choose the type of brake and castor configuration

- Basic castor configurations: The three basic castor configurations are:

- **Four wheel Swivel:** A trolley with traditional type of configuration has a swivel castors on each corner.

Both four-wheel configurations can be modified by using a mix of fixed and swivel and brake castors.



- **Six wheel Swivel:** A six wheel configuration is ideal for heavier loads or long trolleys, as it has excellent load bearing capacity and superior stability. The swivel castors on each corner provide excellent manoeuvrability and a small turning circle, but a trolley with this configuration can't move sideways.

6. Bolt hole fittings

- Suitable for installing into tubular legs. (More information on page2)








7. Plate mount

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



BN Wheel - Blue Elastic Rubber black nylon rim










 mm Diameter	 mm Wheel Width	 mm bore Dia	 mm Hub Length	 mm Hub Width	 Load Capacity	 Bearing Type	Code
80	35	12	40	40	120kg	Plain	502110
100	36	12	40	40	150kg	Plain	192507
125	36	15	50	50	200kg	Plain	192508
80	35	12	40	40	120kg	Roller	521601
100	36	12	40	40	150kg	Roller	166393
125	36	15	50	50	200kg	Roller	166395
160	48	20	60	60	350kg	Roller	166398
200	48	20	60	60	400kg	Roller	166400
250	50	20	60	60	500kg	Ball	179288

Wheel Feature

1. High elasticity , mute, acid and alkail resistant, low rolling resistance.
- 2.Wear-resisting, without any marks after walking on the floor. Medium or above load,Suitable variety of roads.

TPR Wheel - Thermo Plastic Grey Rubber










 mm Diameter	 mm Wheel Width	 mm bore Dia	 mm Hub Length	 mm Hub Width	 Load Capacity	 Bearing Type	Code
75	32	8	36	36	70kg	Ball	170294
100	32	8	36	36	100kg	Ball	170296
125	32	8	36	36	100kg	Ball	170296

Wheel Feature

1. Good Resistance to wearing and weathering, Environmental protection, silence rolling;
2. Medium or above loads.

PE Wheel - Polyurethane Aluminium rim only Ball bearing










 mm Diameter	 mm Wheel Width	 mm bore Dia	 mm Hub Length	 mm Hub Width	 Load Capacity	 Bearing Type	Code
100	40	12	40	40	300kg	Ball	100865
125	40	20	50	50	400kg	Ball	100866
160	50	20	60	60	600kg	Ball	100869
200	50	20	60	60	800kg	Ball	100891

Wheel Feature

1. Ultra-wearing, high strength
2. Super heavy or above loads.

KN Wheel - White Nylon wheel



 mm Diameter	 mm Wheel Width	 mm bore Dia	 mm Hub Length	 mm Hub Width	 Load Capacity	 Bearing Type	Code
150	36	12	40	40	140kg	Plain	100676
100	36	12	40	40	180kg	Plain	100678
125	38	15	50	50	200kg	Plain	100680
150	40	20	60	60	280kg	Plain	143219
150	40	20	60	60	600kg	Double Ball	100809
200	50	20	60	60	400kg	Plain	100690
200	50	20	60	60	800kg	Double Ball	100812

Wheel Feature











1. Good resistacne to impact, high strength.
2. Wear-resisting, easy to recycle, Heavy or above loads.



BN Series- Blue elastic rubber Top plate Castor

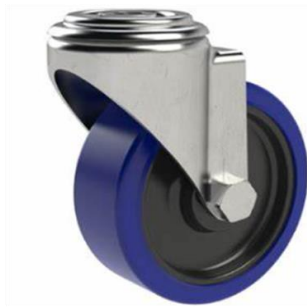


BN- Top plate Swivel & Brake & Fixed

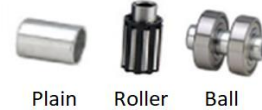
 mm Diameter	 mm Width	 mm Plate size	 mm hole size	 mm Overall height	 Load Capacity	 Bearing Type	 code Swivel	 code Brake	 code fixed
80	35	105 x 80	9	100	120kg	Plain	178349	178350	178351
80	35	105 x 80	9	100	120kg	Roller	178352	178353	178354
100	36	105 x 80	9	128	150kg	Plain	170204	170206	170205
100	36	105 x 80	9	128	150kg	Roller	170209	170208	173102
125	38	105 x 80	9	155	200kg	Plain	178358	178359	178360
125	38	105 x 80	9	155	200kg	Roller	166893	166894	166895
160	48	135 x 110	11	190	350kg	Roller	166896	166897	166898
200	48	135 x 110	11	235	400kg	Roller	166877	166878	166879
250	50	135 x 110	11	290	500kg	Ball	179309	179311	179320



BN Series- Blue elastic rubber bolt hole Castor












Bearing Type



Plain Roller Ball

BN- Both hole Swivel & Brake

 mm Diameter	 mm Width	 mm Bolt hole Dia	 mm Plate Dia	 mm Overall height	 Load Capacity	 Bearing Type	 code Swivel	 code Brake
80	35	13	69	115	100kg	Plain	188349	188350
80	35	13	69	115	100kg	Roller	172950	172951
100	36	13	69	124	150kg	Plain	188351	188352
100	36	13	69	124	150kg	Roller	172952	172953
125	38	13	69	154	180kg	Plain	188353	188354
125	38	13	69	154	180kg	Roller	172954	172955
160	48	16.7	88	185	300kg	Roller	179291	179292
200	48	16.7	88	230	350kg	Roller	179295	179296

EXPANDER ADAPTORS- SQUARE

Code	construction	Item name	Size (Internal min- max)
172465	Adaptor	Tube Square	□ 21.5mm - 24 mm
172467	Adaptor	Tube Square	□ 27mm - 30mm
173498	Adaptor	Tube Square	□ 32mm - 35mm
173497	Adaptor	Tube Square	□ 36mm - 40mm

EXPANDER ADAPTORS- ROUND

Code	construction	Item name	Size (Internal min- max)
172461	Adaptor	Tube Round	∅ 19mm - 21.5mm
172462	Adaptor	Tube Round	∅ 21.5mm - 24mm
172464	Adaptor	Tube Round	∅ 27mm - 30mm
172466	Adaptor	Tube Round	∅ 32mm - 35mm
182330	Adaptor	Tube Round	∅ 36mm - 40mm

**** Please contact us available stock**





TPR - Thermo Plastic Grey Rubber bolt hole Castor



Plain



Ball

Bearing Type












Plain



threadguards

TPR- Bolt hole Swivel & Brake

 mm Diameter	 mm Width	 mm Bolt hole Dia	 mm Plate Dia	 mm Overall height	 Load Capacity	 Bearing Type	 code Swivel	 code Brake
75	30	13	58	100	75kg	Plain	179755	172116
75	30	13	58	100	75kg	Ball	168931	172117
100	32	13	58	134	100kg	Plain	168897	172118
100	32	13	58	134	100kg	Ball	168930	172119
125	32	13	58	159	100kg	Plain	168903	172120
125	32	13	58	159	100kg	Ball	168929	172121

EXPANDER ADAPTORS- SQUARE

Code	construction	Item name	Size (Internal min- max)
172465	Adaptor	Tube Square	□ 21.5mm - 24 mm
172467	Adaptor	Tube Square	□ 27mm - 30mm
173498	Adaptor	Tube Square	□ 32mm - 35mm
173497	Adaptor	Tube Square	□ 36mm - 40mm



EXPANDER ADAPTORS- ROUND

Code	construction	Item name	Size (Internal min- max)
172461	Adaptor	Tube Round	∅ 19mm - 21.5mm
172462	Adaptor	Tube Round	∅ 21.5mm - 24mm
172464	Adaptor	Tube Round	∅ 27mm - 30mm
172466	Adaptor	Tube Round	∅ 32mm - 35mm
182330	Adaptor	Tube Round	∅ 36mm - 40mm



**** Please contact us available stock**



TPR - Thermo Plastic Grey Rubber Top plate Castor













Bearing Type



Plain

threadguards

TPR- Top plate swivel & brake & Fixed











 mm Diameter	 mm Width	 mm Plate size	 mm hole size	 mm Overall height	 Load Capacity	 Bearing Type	 code Swivel	 code Brake	 code fixed
75	35	105 x 80	9	103	75	Plain	183034	183042	182388
75	35	105 x 80	9	103	75	Ball	183035	183043	183051
100	36	105 x 80	9	137	100	Plain	183036	183044	182389
100	36	105 x 80	9	137	100	Ball	183037	183045	183053
125	38	105 x 80	9	162	100	Plain	183038	183046	183034
125	38	105 x 80	9	162	100	Ball	183039	183047	183055



KN - White Nylon Top plate Castor



KN - White Nylon Top plate Swivel & Brake & Fixed

 mm Diameter	 mm Width	 mm Plate size	 mm hole size	 mm Overall height	 Load Capacity	 Bearing Type	 code Swivel	 code Brake	 code fixed
80	35	105 x 80	9	100	150kg	Plain	131544	152003	142380
100	36	105 x 80	9	125	180kg	Plain	120003	146275	120046
125	38	105 x 80	9	155	200kg	Plain	120007	146198	120050
150	40	135 x 110	11	185	350kg	Plain	143222	148928	143225
200	50	135 x 110	11	235	350kg	Plain	120018	152665	120061

****150mm, 200mm Ball bearing product available to purchase, please send us an enquiry.**

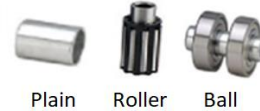













KN Series- White Nylon bolt hole Castor



Bearing Type



BN- Both hole Swivel & Brake

 mm Diameter	 mm Width	 mm Bolt hole Dia	 mm Plate Dia	 mm Overall height	 Load Capacity	 Bearing Type	 code Swivel	 code Brake
80	35	13	76	115	150kg	Plain	155213	155214
100	36	13	76	124	150kg	Plain	155217	155218
125	38	13	76	154	180kg	Plain	145548	145546
150	40	16.7	100	185	350kg	Plain	161868	161865

****150mm Brake castor product currently low stock available please send us an enquiry.**

****150mm Ball bearing product available to purchase, please send us an enquiry.**

EXPANDER ADAPTORS- SQUARE

Code	construction	Item name	Size (Internal min- max)
172465	Adaptor	Tube Square	□ 21.5mm - 24 mm
172467	Adaptor	Tube Square	□ 27mm - 30mm
173498	Adaptor	Tube Square	□ 32mm - 35mm
173497	Adaptor	Tube Square	□ 36mm - 40mm

EXPANDER ADAPTORS- ROUND

Code	construction	Item name	Size (Internal min- max)
172461	Adaptor	Tube Round	∅ 19mm - 21.5mm
172462	Adaptor	Tube Round	∅ 21.5mm - 24mm
172464	Adaptor	Tube Round	∅ 27mm - 30mm
172466	Adaptor	Tube Round	∅ 32mm - 35mm
182330	Adaptor	Tube Round	∅ 36mm - 40mm

**** Please contact us available stock**















PE - Polyurethane Aluminium Top plate Castor



PE - Polyurethane Aluminium Top plate Castor

 mm Diameter	 mm Width	 mm Plate size	 mm hole size	 mm Overall height	 Load Capacity	 Bearing Type	 code Swivel	 code Brake	 code fixed
100	40	105 x 80	9	130	280kg	Ball	183459	183460	*181360
100	40	135 x 110	11	130	350kg	Ball	183459V	183460V	181360V
125	40	105 x 80	9	155	350kg	Ball	183461	183462	*181361
125	40	135 x 110	11	155	400kg	Ball	183461V	183462V	181361V
160	50	135 x 110	11	190	500kg	Ball	183465	183466	*181363
200	50	135 x 110	11	235	700kg	Ball	120350	183483	*120355

***Have duty 100mm 125mm currently limited stock to purchase, please send us an enquiry.**

***Fixed Plate is not currently available to purchase, please send us an enquiry.**

***Bolt hole castors please send us an enquiry.**













Stainless Steel Castors

White Nylon Stainless Steel Top Plate Castor (G304)



KN-Top Plate Swivel & Brake & Fixed











 mm Diameter	 mm Width	 mm Plate size	 mm hole size	 mm Overall height	 Load Capacity	 Bearing Type	 code Swivel	 code Brake	 code fixed
80	35	105 x 80	9	106	200kg	Plain	142303	143847	
100	38	105 x 80	9	125	220kg	Plain	142304	143341	
125	38	105 x 80	9	155	230kg	Plain	142305	143495	*142312

*125mm Fixed Plate size: 105x90 -currently low stock available please send us an enquiry

Blue elastic rubber Stainless Steel Top plate Castor (G304)



BN- Top Plate Swivel & Brake & Fixed

 mm Diameter	 mm Width	 mm Plate size	 mm hole size	 mm Overall height	 Load Capacity	 Bearing Type	 code Swivel	 code Brake	 code fixed
80	35	105 x 80	9	100	200kg	Plain	192303	193847	
100	36	105 x 80	9	128	220kg	Plain	192304	193341	
125	38	105 x 80	9	155	230kg	Plain	192305	193495	*192312










*125mm Fixed Plate size: 105x90 -currently low stock available please send us an enquiry



TPR Stainless steel Top plate Castor (G304)



TPR- Top Plate Swivel & Brake

 mm	 mm	 mm	 mm	 mm				
Diameter	Width	Plate size	hole size	Overall height	Load Capacity	Bearing Type	code Swivel	code Brake
100	36	105 x 80	9	128	200kg	Ball	183061	183062
125	38	105 x 80	9	155	220kg	Ball	183063	183064

**** 125mm Fixed Plate size: 105x90**

****160mm Stainless steel currently low stock available please send us an enquiry.**

**** Fixed Stainless steel product please send us an enquiry.**












Stainless Steel Castors

White Nylon Stainless Steel Bolt Hole Castor (G304)












KN- Both hole Swivel & Brake

 mm Diameter	 mm Width	 mm Bolt hole Dia	 mm Plate Dia	 mm Overall height	 Load Capacity	 Bearing Type	 code Swivel	 code Brake
80	35	13	76	117	200kg	Plain	153545	153546
100	38	13	76	124	230kg	Plain	153547	153548
125	38	13	76	154	300kg	Plain	153549	153550

Blue elastic rubber Stainless Steel Bolt Hole Castor (G304)



BN- Both hole Swivel & Brake










 mm Diameter	 mm Width	 mm Bolt hole Dia	 mm Plate Dia	 mm Overall height	 Load Capacity	 Bearing Type	 code Swivel	 code Brake
80	35	13	76	115	180kg	Plain	193545	193546
100	36	13	76	124	220kg	Plain	193547	193548
125	36	13	76	154	230kg	Plain	193549	193550



TPR Stainless Steel Bolt Hole Castor (G304)



TPR- Both hole Swivel & Brake

 mm Diameter	 mm Width	 mm Bolt hole Dia	 mm Plate Dia	 mm Overall height	 Load Capacity	 Bearing Type	 code Swivel	 code Brake
100	36	13	76	124	180kg	Ball	183065	183066
125	38	13	76	154	200kg	Ball	183067	183068

****Adapters is not stainless steel**

EXPANDER ADAPTORS- SQUARE

Code	construction	Item name	Size (Internal min- max)
172465	Adaptor	Tube Square	□ 21.5mm - 24 mm
172467	Adaptor	Tube Square	□ 27mm - 30mm
173498	Adaptor	Tube Square	□ 32mm - 35mm
173497	Adaptor	Tube Square	□ 36mm - 40mm

EXPANDER ADAPTORS- ROUND

Code	construction	Item name	Size (Internal min- max)
172461	Adaptor	Tube Round	∅ 19mm - 21.5mm
172462	Adaptor	Tube Round	∅ 21.5mm - 24mm
172464	Adaptor	Tube Round	∅ 27mm - 30mm
172466	Adaptor	Tube Round	∅ 32mm - 35mm
182330	Adaptor	Tube Round	∅ 38mm - 40mm

**** Please contact us available stock**



At our sister company Toole stainless steel we can custom build all your metal fabrication projects with our state of the art bending cutting rolling and welding services.

www.toolestainlesssteel.com.au

Folding



□ 4000mm, 200tonne Bystronic brake press with a bending capacity of 12mm stainless steel 18mm mild steel

Laser cutting



□ 4000mm x 2000mm Bystronic laser cutting with the capacity to cut up to 16mm stainless steel and 26mm mild steel

Guillotine



- We can cut up to 5mm mild steel over 4000mm

Rolling



- We can roll from 110mm diameter and up to 5mm mild steel 2400mm long

Welding



- Precision Tig and Mig welding services in all metal types



Some of the products we can create

Custom Stainless steel strip drains in mesh and tile insert



- 304 or 316 Grade Stainless steel
- 304 or 316 Wedge wire
- Versatile and long lasting

Custom Trolleys



Custom Fabrication





YOUNG LASER

TOOLE GROUP PTY LTD

TOOLE STAINLESS STEEL

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