

# Care & Safety Instructions for **Manual Hoists**

## ➤ Safety

Moving heavy loads is hazardous. When lifting equipment is not used correctly or is poorly maintained, accidents and serious injury could result. The following safety precautions should be applied to the operation, maintenance and inspection of PWB Anchor manual hoist products.

## ➤ Before use

- Read the owner's manual and familiarise yourself with the safety instructions.
- Never lift more than the capacity shown on the hoist name plate if the plate is missing, **DO NOT** use the hoist.
- Never operate a hoist if damaged or malfunctioning.
- Check that the hook latches work properly and replace missing or broken hook latches.
- Check if load chain is twisted, kinked, damaged or stretched.
- Check if hook is modified or deformed.
- Never use a hoist in an explosive atmosphere.

## ➤ While in operation

- Never use a hoist for lifting, supporting or transporting people.
- Never lift or transport loads over or near people.
- Never support a load on the tip of the hook.
- Always ensure that the load is properly seated in the hook.
- Never use the hoist load chain as a sling.
- Never swing a suspended load.

### **WARNING**

**IMPROPER use could result in death or serious injury**

# Kito Manual Chain Blocks

## 10 key features of a “Kito Mighty Model M3” Chain Hoist

### 1. Gear case and hand wheel cover resistant to external shocks

Both sides of the hoist are covered with a thick steel gear case and with a strengthened wheel cover. They have the ideal shape and rigidity to maintain bearing alignment and withstand external shock.

### 2. Double enclosure

The braking mechanism, which makes up the heart of the hoist, is enclosed in a double cover: the wheel and the brake covers. These protective covers not only keep out weather elements but also help to prevent mud and dust from entering internal mechanisms.

### 3. Double Pawl Spring

In case one of the pawl springs is damaged, the other maintains its function increasing reliability.

### 4. Mechanical brake

KITO's dry type mechanical brake ensures strong reliable brake performance.

### 5. Hooks

Specifically heat treated top and bottom hooks have enough strength and toughness for the job. The design of the bottom hook, with relatively large dimensions, makes it easy to stabilize a load in a proper position.

### 6. Bearings

Use of ball and needle bearings remarkably increases mechanical efficiency and produces high output power with minimum manual input.

### 7. Stopper prevents excessive lowering

Stopper assembly prevents excessive lowering of a load and also keeps load chain from exiting. When you feel a noticeable increase in pull force to lower the load, you should realize that you cannot lower the load any further.

### 8. Load chain guide

Smooth load chain movement is facilitated by having a chain guide mechanism in the flanged load sheave and guide roller.

### 9. Gears

Compact, highly efficient and durable gears

### 10. Grade 100 Load Chain

This component comprises the heart of the chain hoist, made of heat treated special steel alloy.



# Kito Manual Chain Blocks

## ► CX Series Chain Blocks

The CX003 chain block has been designed with an integral aluminium body with a net weight of 2.4kg. With a rated load of 250kg, the CX003 is equipped with an overload limiter as standard.

Available in standard lift height of 2.5 metres. Optional lift heights also available.

### Standard features include:

- Wide internal diameter of hooks (top and bottom).
- Smart body with non-protruding bolt.
- Equipped with overload limiter.
- High strength load chain.
- Hook latch with tip supporting structure.

**Applications:** Mining, engineering, construction

**Australian Standard:** AS1418.2



Capacity	Part No.	Headroom (mm)	Load Chain Dia (mm) x fall	Weight (kg)	Load Chain Dia x Pitch (mm)	Load Chain Part No.
250kg	45377	217	3.2 x 1	2.4	3.2 x 9	44835

# Kito Manual Chain Blocks

## ► M3 Series Chain Blocks

M3 Series chain blocks are designed for maximum durability and safety in continuous heavy duty applications. Available in standard lift heights of 3 and 6 metres, these premium units can also be close coupled to PWB Anchor push and geared trolleys. Optional lift heights also available.

**Applications:** Mining, engineering, construction

**Australian Standard:** AS1418.2



Capacity	Part No. (3m Lift)	Part No. (6m Lift)	Headroom (mm)	Close Headroom (mm)	Load Chain Dia (mm) x fall	Weight* (kg)	Load Chain Dia x Pitch (mm)	Load Chain Part No.
<b>M3 Series Chain Block</b>								
500kg	43269	47769	360	405	5.0 x 1	10.0	5.0 x 15	44863
1 tonne	43271	47444	410	440	6.3 x 1	11.5	6.3 x 19.1	46722
1.5 tonne	43273	46637	470	495	7.1 x 1	14.5	7.1 x 21	46731
2 tonne	43275	47882	500	520	8.0 x 1	21.0	8.0 x 24	44864
3 tonne	43277	47883	540	595	7.1 x 2	24.0	9.0 x 27	46731
5 tonne	43279	47884	640	720	9.0 x 2	41.0	9.0 x 27	46735
7.5 tonne	43281	63286	810	865	9.0 x 3	63.0	9.0 x 27	46735
10 tonne	49575	49577	780	890	9.0 x 4	83.0	9.0 x 27	46735
<b>M3 Series Chain Block with overload limiter</b>								
500kg	63067	63109	360	405	5.0 x 1	10.0	5.0 x 15	44863
1 tonne	63068	63063	410	440	6.3 x 1	11.5	6.3 x 19.1	46722
2 tonne	63069	63064	500	520	8.0 x 1	21.0	7.1 x 21	44864
3 tonne	63070	63065	540	595	7.1 x 2	24.0	7.1 x 21	46731
5 tonne	63071	63066	640	720	9.0 x 2	41.0	7.1 x 21	46735
10 tonne	64659	64302	730	890	9.0 x 4	83	9.0 x 27	46735

\*Weights shown for Chain Blocks are for standard 3 metre lift models.

# PWB Anchor Manual Chain Blocks

## ► C Series Chain Blocks

PWB Anchor's C Series Chain Blocks have displayed their strength and reliability in industry over many years. They are a cost effective choice, designed to meet demanding applications. Optional lift heights also available.

### Standard features include:

- Compact size and lightweight body.
- Strong robust steel construction.
- Suitable for Rigging and Construction applications.

**Applications:** Manufacturing, construction and mining

**Australian Standard:** AS1418.2



Capacity	Part No. (3m Lift)	Part No. (6m Lift)	Headroom (mm)	Load Chain Dia (mm) x fall	Weight* (kg)	Load Chain Dia x Pitch (mm)	Load Chain Part No.
500kg	48188	48190	295	5.0 x 1	8.0	5.0 x 15	46719
1 tonne	48191	48193	340	6.3 x 1	12.5	6.3 x 19.1	46722
2 tonne	48487	48489	480	10.0 x 1	28.0	10 x 30	46726
3 tonne	48491	48493	550	8 x 2	25.0	8.0 x 24	46734
5 tonne	48495	48497	690	10.0 x 2	39.0	10 x 30	46726
10 tonne	48499	48500	920	10.0 x 4	78.0	10 x 30	46726
20 tonne	48581	63654	1040	10.0 x 8	168.0	10 x 30	46726

\*Weights shown for Chain Blocks are for standard 3 metre lift models.

## ► Mini II Chain Blocks

The lightweight PWB Anchor Mini II Chain Block is a general purpose, compact unit, designed for a wide range of lighter applications.

Available in standard lift heights of 3 and 6 metres.

**Applications:** Mining, construction, engineering, entertainment

**Australian Standard:** AS1418.2



Capacity	Part No. (3m Lift)	Part No. (6m Lift)	Headroom (mm)	Load Chain Dia (mm) x fall	Weight* (kg)	Load Chain Dia x Pitch (mm)	Load Chain Part No.
500kg	43681	43683	295	5.0 x 1	7.5	5.0 x 15	43748
1 tonne	43685	43687	330	6.3 x 1	11.0	6.3 x 19.1	43749
2 tonne	43689	43691	455	9.0 x 1	24.0	9.0 x 27	43750

\*Weights shown for Chain Blocks are for standard 3 metre lift models.

# Kito Lever Hoists

## ► L5 Series Lever Hoists

The L5 series lever hoist offers one of the largest range of capacities on the market.

Lightweight, compact and designed for heavy duty work in rigorous and demanding applications. All models feature the patented 'free wheel safety brake mechanism' and nickel plated load chain.

Supplied in standard lift heights of 1.5 metres and 3 metre, with optional lift heights also available.

L5 Series Lever Hoists have earned their position in industry providing strength, endurance and reliability across various applications.

### *Standard features of a Kito L5 Lever Block*

#### **Compact and light weight**

Kito's original technology has realised innovative size and weight reductions. Operability, portability and storage have become easier and more convenient.

#### **Nickel plated chain**

The nickel plated chain developed and manufactured by Kito has a high strength of 1000N/mm<sup>2</sup>. Besides strength, it is also excellent in both corrosion and wear resistance.

#### **High strength frame**

The frame is an integral structure made of carbon steel. For load bearing supports, induction hardening has been applied. The strength has also increased frame thickness.

#### **Lever strength increase**

Lever strength (bending, torsion, and lever support) has been improved by reviewing the shape and the thickness of the lever.

#### **Hook latch**

A hook latch has been designed to fix securely. The increase of the hook latch thickness has also resulted in greater resistance to deformation and damage.

#### **Weight saving hook**

Alloy steel has been used for the hooks of LB025 to LB090. This has allowed weight saving without changing the overall size.

#### **Reliable brake performance**

A unique dry condition brake has been designed to have strong braking force.

#### **Maintenance improvement**

Cap nuts are used to tighten the gear case and brake cover. This allows maintenance to occur without damaging the screws.



# Kito Lever Hoists

## ► LX Series Lever Hoists

Complementing the Lever Hoist range are the lightweight LX003 and LX005 models. Compact and portable these 250kg and 500kg capacity units are an ideal lever hoist for lifting, lowering or positioning of loads and can be carried or stored in your toolbox. Optional lift heights also available.

### Standard features include:

- Compact and Light.
- Easy to carry and easy to use, even in tight quarters or in elevated work locations.
- Fasteners are designed to protect threads from damage making maintenance easier.
- Nickel plated chain.
- The hook latch is highly resistant to deformation and damage.
- Single-step reduction gear, requires manual fastening force and assured load holding. Reliable load fastening can be provided to the last click of the lever.
- LX003 comes complete with belt bag.

**Applications:** Mining, engineering, construction

**Australian Standard:** AS1418.2



Capacity	Part No.	Lift Height (metres)	Headroom (mm)	Lever Length (mm)	Load Chain Dia (mm) x fall	Weight (kg)	Load Chain Dia x Pitch (mm)	Load Chain Part No.
250kg	44200	1.0	205	150	3.2 x 1	1.6	3.2 x 9	44835
500kg	44201	1.2	246	180	4.3 x 1	2.6	4.3 x 12.0	44836

# Kito Lever Hoists

## ► L5 Lever Hoist

Available with overload limiter for mining and offshore applications.

### Standard features include:

- Unique patented 'Free Wheeling Hub' mechanism.
- Smaller, lighter, high grade (solid), alloy steel frame construction.
- Double brake pads with four braking surfaces.
- Low headroom design.
- Double Pawl & Double Spring Assemblies.
- Nickel plated grade 100 load chain.
- Needle and Ball roller bearings allow maximum mechanical efficiency with minimum effort.

**Applications:** Mining, construction, engineering, entertainment

**Australian Standard:** AS1418.2



Capacity	Part No. (1.5m Lift)	Part No. (3m Lift)	Headroom (mm)	Lever Length (mm)	Load Chain Dia (mm) x fall	Weight (kg)	Load Chain Dia x Pitch (mm)	Load Chain Part No.
<b>L5 Lever Block</b>								
800kg	44202	45890	280	245	5.6 x 1	5.7	5.6 x 15.7	44278
1 tonne	44203	62575	300	245	5.6 x 1	5.9	5.6 x 15.7	44278
1.6 tonne	44204	45891	335	265	7.1 x 1	8.0	7.1 x 19.9	44279
2.5 tonne	44205	61917	375	265	8.8 x 1	11.2	8.8 x 24.6	44280
3.2 tonne	44206	45892	395	415	10.0 x 1	15.0	10 x 28.0	44281
6.3 tonne	44207	45893	540	415	10.0 x 2	26.0	10 x 28.0	44281
9 tonne	44208	61498	680	415	10.0 x 3	40.0	10 x 28.0	44281
<b>L5 Lever Block with overload limiter</b>								
800kg	63090	64934	280	245	5.6 x 1	6.0	5.6 x 15.7	44278
1 tonne	63091	64935	300	245	5.6 x 1	6.2	5.6 x 15.7	44278
1.6 tonne	63092	64936	335	265	7.1 x 1	8.4	7.1 x 19.9	44279
2.5 tonne	63093	64937	375	265	8.8 x 1	11.6	8.8 x 24.6	44280
3.2 tonne	63094	64938	395	415	10 x 1	15.2	10 x 28.0	44281
6.3 tonne	63095	64939	540	415	10 x 2	26.2	10 x 28.0	44281
9 tonne	63096	64940	680	415	10 x 3	40.2	10 x 28.0	44281

\*Weights shown for Lever Hoists are for standard 1.5 metre lift models.

# CM Pullers & Riggers

## ► CM Puller

The CM Puller is a lightweight tool that lifts or pulls with minimum effort. The puller has almost unlimited applications as it can pull or lift in the vertical or horizontal position or at any angle. Overload protection is available as an optional extra.

### Standard features include:

- Designed for heavy-duty construction and industrial applications.
- Aluminium alloy construction, weather proofing and powder coat finish.
- Corrosion resistant .

**Applications:** Manufacturing, construction and mining

**Australian Standard:** AS1418.2



Capacity	Part No. (1.5m Lift)	Headroom (mm)	Lever Length (mm)	Load Chain Dia (mm) x Fall	Weight (kg)	Load Chain Dia x Pitch (mm)	Load Chain Part No.
750kg	45036	273	540	6.1 x 1	6.3	6.3 x 19.1	46722
1.5tonne	45041	362	540	7.9 x 1	10.9	7.9 x 21.8	46747
3 tonne	45046	432	540	7.9 x 2	20.0	7.9 x 21.8	46747
6 tonne	45049	543	540	7.9 x 4	29.5	7.9 x 21.8	46747

## ► CM Rigger

The CM Rigger is designed to handle the rated capacity with minimal effort. Its lightweight, non-kinking, flexible load chain makes the rigger extremely easy to operate. This simple design assures low maintenance, with no special tools required. Hooks are forged steel, heat treated and both top and bottom hooks swivel easily through a full 360°.

### Standard features include:

- Lightweight and compact.
- Designed for light industrial lifting and pulling applications.
- Easily stored in a tool box.

**Applications:** Manufacturing, construction and mining

**Australian Standard:** AS1418.2



Capacity	Part No. (1.5m Lift)	Headroom (mm)	Lever Length (mm)	Load Chain Dia (mm) x Fall	Weight (kg)	Load Chain Dia x Pitch (mm)	Load Chain Part No.
700kg	43194	273	540	4.7 x 1	3.4	4.7 x 14.2	46754
1400kg	43195	318	540	4.7 x 2	5.7	4.7 x 14.2	46754

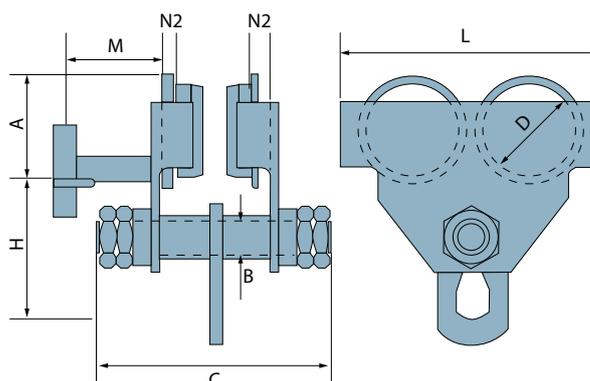
# PWB® Girder Trolleys and Clamps

## ➤ Geared Trolley

Designed to travel along rolled steel joists, universal beams and universal columns. Suits a variety of beam widths. 2.5 metre standard drop hand chain (optional lengths available on request).

**Applications:** Construction, manufacturing, mining and general engineering.

**Australian Standard:** AS 1418.2



Capacity	Beam Range (mm)	Part No.	Weight (kg)	Headroom* H (mm)	Wheel Dia. Running surface D (mm)	Min.Radius (m)	A (mm)	C (mm)	L (mm)	M (mm)	N2 (mm)	Hand chain size	Hang Pin Dia (B)
<b>Single Hanger Pin Trolley - Standard Beam</b>													
1 tonne	64-210	49183	20	136	88	0.9	102	352	274	120	22/22	5	30
2 tonne	89-210	49184	30	155	100	1.5	117	371	310	120	22/22	5	36
3/4 tonne	102-210	49185	54	200	130	1.8	145	411	376	166	28/28	5	48
5/6 tonne	114-210	49187	86	252	155	2.4	173	437	460	166	28/28	5	56
<b>Single Hanger Pin Trolley - Wide Beam</b>													
1 tonne	210-268	63697	25	136	88	0.9	102	423	214	120	22/22	5	30
1 tonne	268-330	61605	28	136	88	0.9	102	488	214	120	22/22	5	30
2 tonne	210-268	44102	32	155	100	1.5	117	439	310	120	22/22	5	36
2 tonne	268-330	63698	35	155	100	1.5	117	505	310	120	22/22	5	36
3 tonne	210-268	49186	70	200	130	1.8	145	489	376	166	28/28	5	48
3 tonne	268-330	62318	82	200	130	1.8	145	553	376	166	28/28	5	48
5 tonne	210-268	49188	97	252	155	2.4	173	515	460	166	28/28	5	56
5 tonne	268-330	49625	102	252	155	2.4	173	579	460	166	28/28	5	56
<b>Dual Hanger Pin Trolley</b>													
10 tonne	127-210	49189	175	288	195	3.7	214	468	544	218	36/36	6.3	56
10 tonne	210-330	64124	205	288	195	3.7	214	583	544	218	36/36	6.3	56
20 tonne	210 -330	64125	355	270	195	NA	Dimensions available on request						

\*Running surface of track wheel to hooking surface of hanger plate

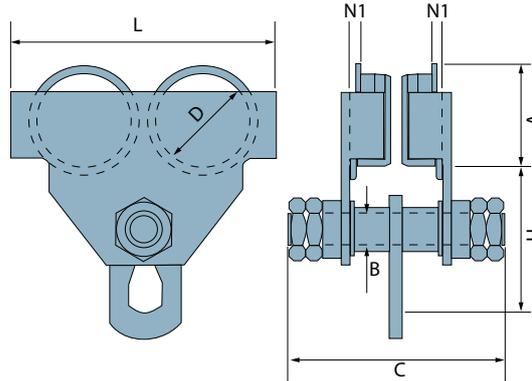
# PWB® Girder Trolleys and Clamps

## ► Push Trolley

Designed to travel along rolled steel joists, universal beams and universal columns. Suits a variety of beam widths.

**Applications:** Construction, manufacturing, entertainment, mining and general engineering.

**Australian Standard:** AS1418.2



Capacity	Beam Range (mm)	Part No.	Weight (kg)	Headroom* H (mm)	D (mm) Wheel Dia. Running surface	Min. Radius (m)	A (mm)	C (mm)	L (mm)	N1 (mm)	Hang Pin Dia. (B)
<b>Single Hanger Pin Trolley - Standard Beam</b>											
250kg	32-51	44439	3	86	48	0.9	54	116	178	10/10	16
500kg	64-152	49175	7	110	58	0.9	70	256	216	14/14	25
1 tonne	64-210	49176	16	136	88	0.9	102	328	274	14/14	30
2 tonne	89-210	49177	24	155	100	1.5	117	350	310	14/14	36
3/4 tonne	102-210	49178	44	200	130	1.8	145	384	376	14/14	48
5/6 tonne	114-210	49180	74	252	155	2.4	173	414	460	16/16	56
<b>Single Hanger Pin Trolley - Wide Beam</b>											
500kg	64-210	49353	16	110	58	0.9	70	348	216	14/14	25
500kg	210 - 268	49354	18	110	58	0.9	70	412	216	22/22	25
1 tonne	210-268	49355	18	136	88	0.9	102	423	274	22/22	30
1 tonne	268-330	49282	20	136	88	0.9	102	448	274	22/22	30
2 tonne	210-268	44103	27	155	100	1.5	117	439	310	22/22	36
2 tonne	268-330	44641	29	155	100	1.5	117	505	310	22/22	36
3 tonne	210-268	49179	52	200	130	1.8	145	489	376	28/28	48
3 tonne	268-330	49696	54	200	130	1.8	145	553	376	28/28	48
5 tonne	210-268	49181	85	252	155	2.4	173	515	460	28/28	56
5 tonne	268-330	49296	87	252	155	2.4	173	585	460	28/28	56
<b>Dual Hanger Pin Trolley</b>											
10 tonne	127-210	49182	155	288	195	3.7	214	468	544	36/36	56
10 tonne	210-330	49760	170	288	195	3.7	214	583	544	36/36	56

\*Running surface of track wheel to hooking surface of hanger plate

# PWB® Girder Trolleys and Clamps

## ➤ Girder Clamps

Featuring a single threaded adjustment pin for simple and easy installation, PWB Anchor Girder Clamps are supplied in a durable electrostatic enamel finish.

Note: Maximum headroom for narrowest beam width. Headroom decreases as beam width is increased.

**Applications:** Construction, manufacturing, entertainment, mining and general engineering.

**Australian Standard:** AS1418.2



Capacity	Part No.	Beam Range (mm)	Headroom (min/mm)	Headroom (max/mm)	Suspension pin dia.(mm)	Weight (kg)
1 tonne	48246	65-230	78	135	20.3	4.8
2 tonne	48247	65-230	78	135	20.3	5.5
3 tonne	48248	100-250	100	160	22.1	11.8
5 tonne	48249	100-320	119	159	40.0	16.0
10 tonne	48476	130-320	150	205	53.0	31.0

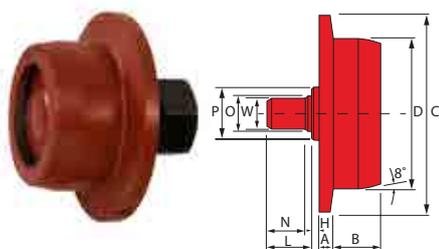
# PWB® Cast Iron Wheels

## ➤ Trolley Wheels

The PWB Anchor range of single flanged plain trolley wheels are designed from 250kg to 10 tonne capacities (over 4 wheels). Each wheel has a machine cut tread for smooth running on rolled steel joists, universal columns or universal beams. Supplied in high quality cast iron, these trolley wheels are complete with bearings, knurled axle, nut, dust cover and circlip.

**Applications:** Engineering

**Australian Standard:** AS1418.2



Capacity (on 4 wheels)	Part No.	D (mm)	A (mm)	B (mm)	C (mm)	W (mm) Thread	H (mm)	L (mm)	N (mm)	P (mm)	O (mm)
250kg*	49476	48	5	14	60	M12	1.5	17	14	22	12
500kg	49477	58	8	27	82	M20	3	27	22	30	20
1 tonne	49478	88	8	27	116	M20	3	27	22	30	20
2 tonne	49479	100	8	32	133	M24	3	33	25	33	24
3 tonne	49480	130	8	37	159	M30	3	40	30	36	30
5 tonne	49481	155	10	43	190	M36	3	49	35	45	36
10 tonne*	49482	195	12	48	232	M42	21	61	43	75	42

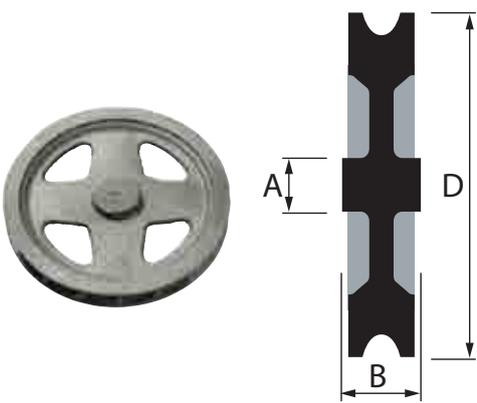
\*non-knurled axle, supplied with sellok pin

# PWB® Cast Iron Wheels

## ► Hand Wheels

Manufactured from cast iron with an un-machined, solid boss, these hand chain wheels are easily identified by their pattern number and ANCHOR markings and are used in conjunction with the appropriate PWB Anchor Hand Chain.

**Applications:** Engineering



D (mm)	Part No.	Pattern Number	A (mm)	B (mm)	Hand Chain Dia (mm)	Hand Chain Part No.
132	46342	463	31	32	5.0	40261
170	46338	425	34	25	5.6	46763
180	46328	294	45	25	6.3	46768
210	46343	378	76	27	6.3	46768
245	46330	257	63	33	6.3	46768
265	46339	433	63	33	6.3	46768
330	46331	405	63	38	6.3	46768
380	46333	406	70	38	6.3	46768
460	46335	204	70	38	6.3	46768
610	46336	280	80	64	6.3	46768

## Commonly Asked Questions

### ► Chain Blocks

**What is the difference between a Chain Block and a Lever Block?**

A chain block is a lifting device operated by a hand chain. A lever block is a lifting device operated by rotation of a handle.

**What is the difference between a chain block and a chain hoist?**

A chain block is a manual lifting device. A chain hoist is a power operated lifting device.

### ► Hand & Trolley Wheels

**Are the PWB Hand Wheels machined or un-machined?**

Cast wheels are supplied un-machined.

**What material are the PWB Trolley Wheels made from?**

Trolley wheels are manufactured from cast iron.

### ► Lever Hoists

**Is the LX Series Lever Hoist suitable for use in underground coal mines?**

No. The basic body of the LX Lever Hoist is manufactured from aluminium, therefore it is susceptible to sparks.

**What is the nickel plated load chain on Kito LX and L5 lever hoists?**

Grade 100 chain, special high strength alloy, built for high resistance to corrosion and wear.