

Power 
Metal
& Steel

Power Metal & Steel (M) Sdn Bhd
Product Catalogue

01 About Us

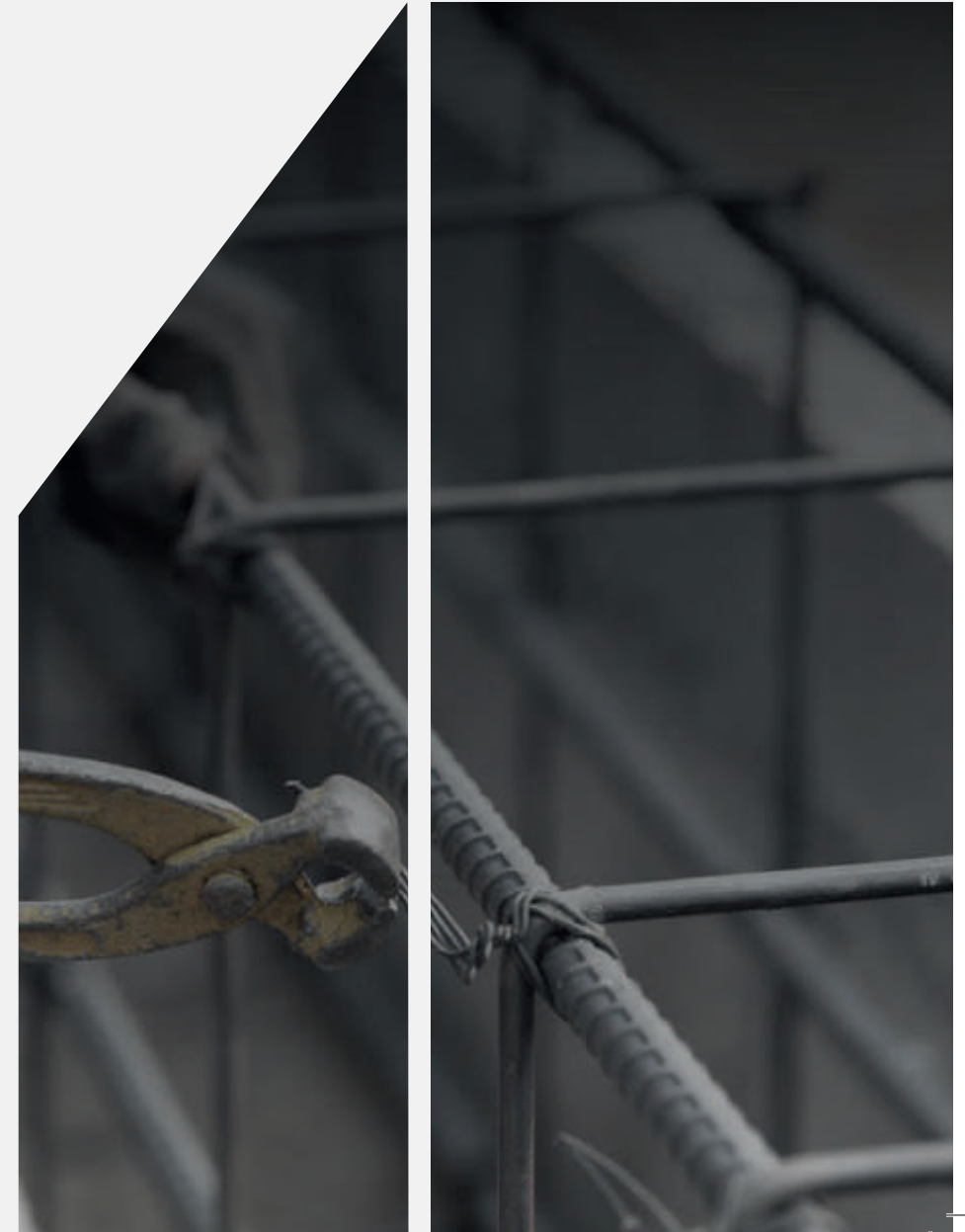
Power Metal & Steel (M) Sdn Bhd and Power Metal Hardware Trading, established since 2009, a company specialized in supply and rent service of reconditioned scaffolding and other steel products, is committed to bring cost saving solutions to valuable customer.

We uphold quality & services based on our slogan

“ Build Safe, Build Affordably ”

to tailor the needs and requirements of our customers from construction, engineering, oil & gas, agriculture industry.

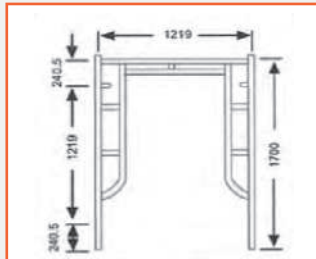
Companies have enjoyed rapid growth throughout the last decade. The key to our success is credited to our competent and committed management team led by our managing director, who has 30 years' experience in building and construction industry. We strive to provide high quality products at competitive price and excellent customer service consistently and continuously in order to meet expectation and satisfaction of customers.



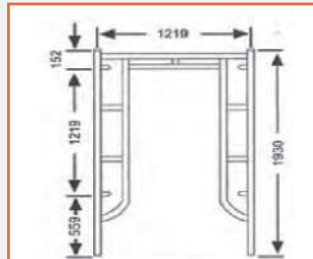
02 Metal Frame Scaffolding

Condition | Reconditioned/ New

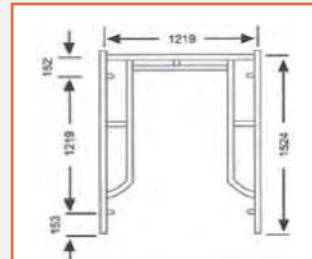
Product Specification | PPS (CIDB) approval – prolong product lifespan leading effective cost competitiveness



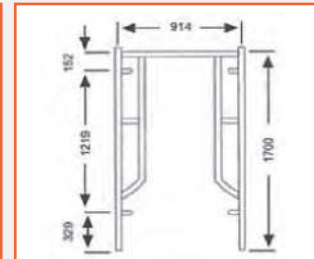
01 Open End Frame



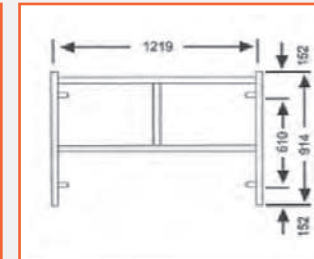
02 Open End Frame



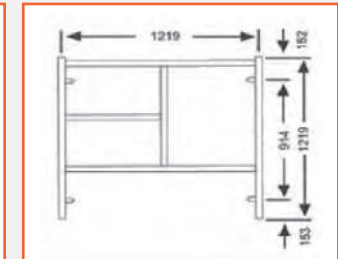
03 Open End Frame



04 Open End Frame

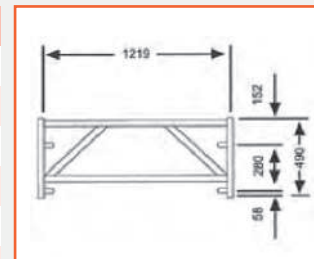


05 Ladder End Frame

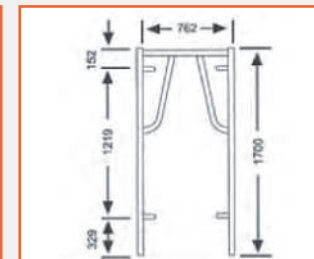


06 Ladder End Frame

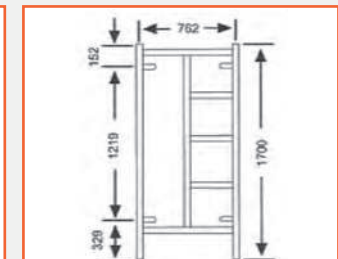
Main Frame	Ø (mm)	Thickness (mm)	Length (mm)	Width (mm)
01	42.7	2.5	1700	1219
02	42.7	2.5	1930	1219
03	42.7	2.5	1524	1219
04	42.7	2.5	1700	914
05	42.7	2.5	914	1219
06	42.7	2.5	1219	1219
07	42.7	2.5	490	1219
08	42.7	2.5	1700	762
09	42.7	2.5	1700	762



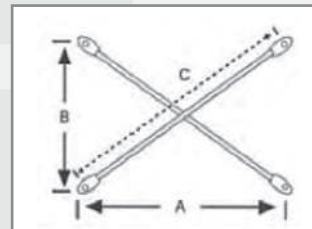
07 Ladder End Frame



08 Ladder End Frame



09 Light Frame



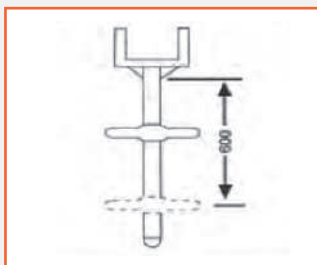
Cross Brace

Cross Brace	Ø (mm)	Thickness (mm)	A(mm)	B(mm)	C(mm)
A14	21.7	2.0	1829	1219	2198
A19	21.7	2.0	1829	914	2045
A08	21.7	2.0	1829	610	1928
A16S	21.7	2.0	1829	280	1850
A13	21.7	2.0	1219	1219	1724
A12	21.7	2.0	1219	610	1363

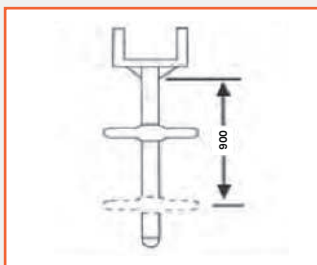
* Product Tolerance ±10 is allowed



Base Plate



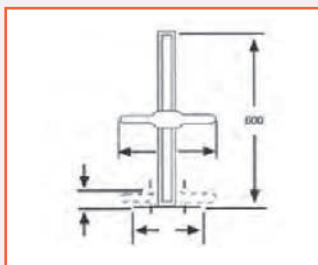
U-Head 600



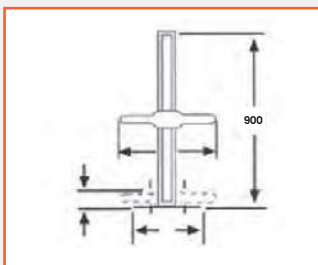
U-Head 900



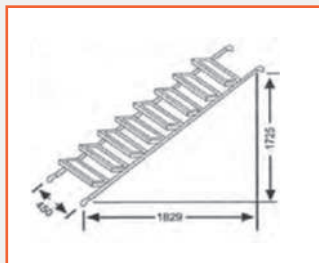
Cat-Walk Plate



Jack Base 600



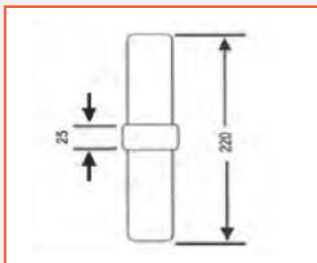
Jack Base 900



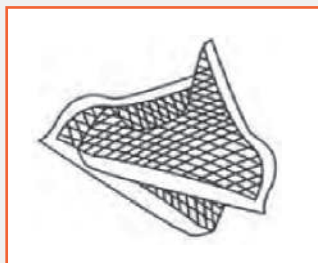
Step



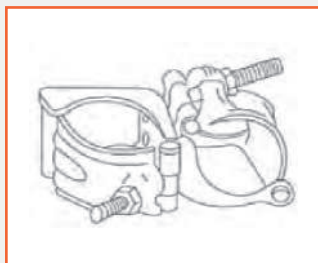
Wall Tie



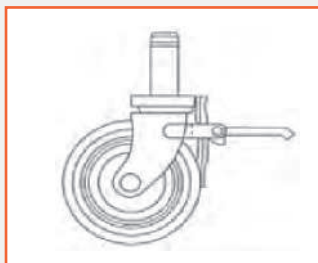
Joint Pin A



Safety Net



Fixed Clamps
Swivel Clamps



Swivel Casters Wheel
Casters Wheel with Brake



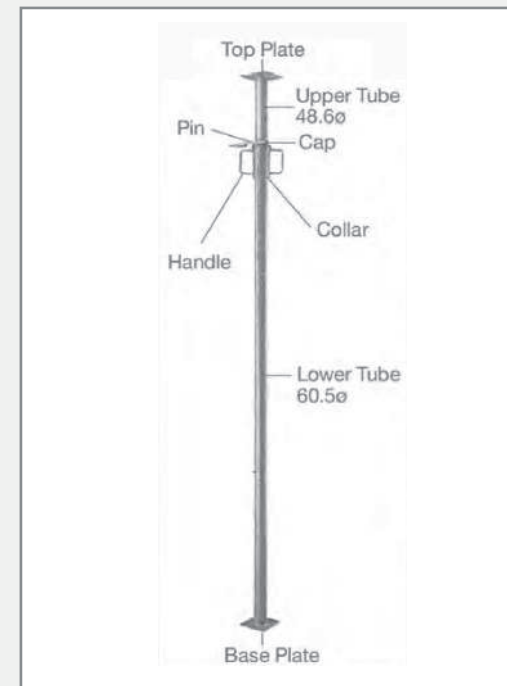
G.I pipe 2.5mm x 6m

Vertical Shore Advantage

1. All Steel Construction Reduce Fire Hazard.
2. A One-Man Operation System Erected in less than a minute.
3. Screw Collar-Adjusts to close tolerances without Wedging.
4. High Grade Steel-Stronger and Lighter.

Model	Fully Extended
VS 2	3,500mm (11'-5')
	2,000mm (6'-5.6')

Model	Fully Extended
VS 3	3,900mm (12'-8')
	2,400mm (7'-8.7')



Vertical Shore / Jack Support

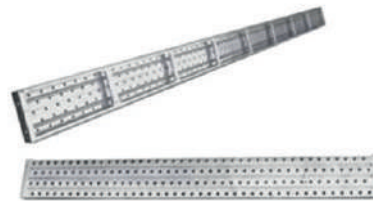
* Product Tolerance ±10 is allowed

03 Tabular Scaffolding System – GI pipe (compliance to BS 1139)

Condition: Reconditioned / New



Thickness 4.0mm BS1139 / EN39 BSP



Metal Deck

Metal Deck – Sizes available in millimeter

	Size
Width (W)	210 240
Length (L)	1,500 2,000 3,000 4,000

Pipe Accessories



Right Angle (Double) Coupler (Forged)



Swivel Coupler (Forged)



Sleeve Coupler



Fixed Beam Clamp



Bone Joint

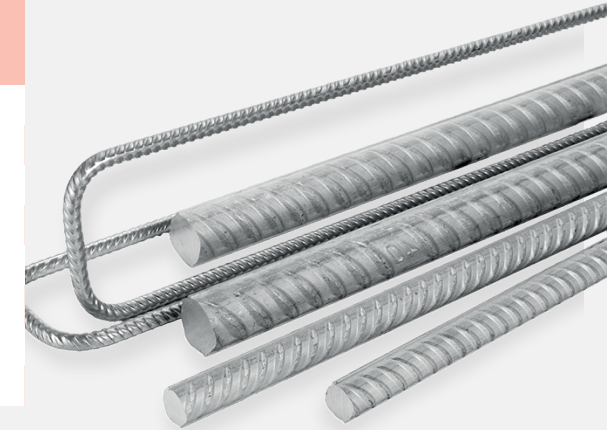


Put Log Coupler

04 High Tensile Deformed Bar

High tensile deformed bar is a steel bar widely used in construction which to use as a tension device in reinforced concrete and reinforced masonry structures to strengthen and hold the concrete in compression.

Nominal Diameter (mm)	Nominal Cross Sectional Area (mm ²)	Nominal Mass Per Metre Run (kg)	No. Pcs Per Bundle (12M Length)	Normal Weight per Bundle (mt)	Tolerance on mass per meter run (%)
10.0	78.5	0.617	138.0	1.022	±4.5
12.0	113.0	0.888	96.0	1.023	
16.0	201.0	1.580	54.0	1.024	
20.0	314.0	2.470	34.0	1.008	
22.0	380.0	2.980	28.0	1.001	
25.0	491.0	3.850	22.0	1.016	
28.0	616.0	4.830	18.0	1.043	
32.0	804.0	6.310	14.0	1.060	



- * High Tensile Deformed Bar Standard Length : 12 metre straight or 12 meter folded.
- * Special cut length from 6m to 15m can be arranged on a certain minimum quantity per size per order upon request.
- * Cut and bend service available.

Tie Rod : A standard tie rod specifically design for use with formwork. For all type of concrete structure. Cutting service available

05 Formwork Accessories



Tie Rod



Wing Nut



Tie Nut 100mm



Hexagonal Nut



Rapid Clamp

06 Corrugated Zinc Sheet / Metal Roofing / Long Run



Available length: Custom cut length available according order.

- ✓ High strength
- ✓ Steel Substrate protected with corrosion infinitive treatment and coating
- ✓ Light in weight, easy to install

Total Coated Tickness (mm)	Width of Coverage (mm)	Depth of Rib (mm)	Max recommended spacing of supports (mm)				Overhang (mm)
			Roofs		Walls		
			End Span	Internal Span	End Span	Internal Span	
0.30	760.0	25.0	600.0	1000.0	1000.0	1000.0	50.0
0.36	760.0	25.0	1300.0	1550.0	1550.0	1750.0	100.0
0.48	760.0	25.0	1500.0	1800.0	1800.0	1950.0	150.0

* Used/ Second grade depends on availability. Feel free to contact our customer service or sales representative.

07 Hollow Section

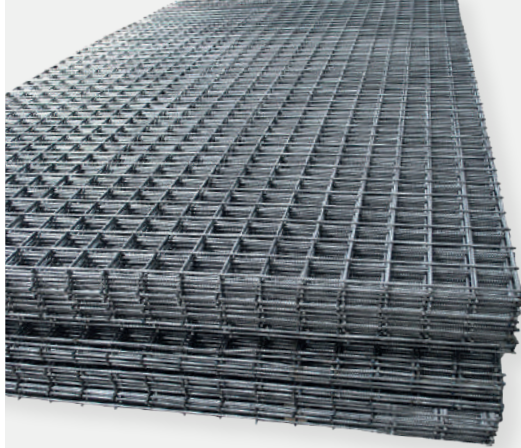
The common size we supply :

		Thickness	Length
SHS	2" x 2"	2.3mm	6m (new / reconditioned)
		3.0mm	
RHS	2" x 4"	2.3mm	6m (new / reconditioned)
	2" x 3"		

* Please consult customer service or sales representative for shorter length.



08 Wire Mesh (BRC)




General Technical Specifications


Reference No.	M.S.145 (*B.S. 4483) Reference No.	Main Wire		Main Wire		Main Wire		MASS per unit area (kg/m ²)
		Diameter (mm)	Pitch (mm)	Diameter (mm)	Pitch (mm)	Diameter (mm)	Pitch (mm)	
A4	A63	4.0	200.0	4.0	200.0	63.0	63.0	0.99
A5	A98	5.0	200.0	5.0	200.0	98.0	98.0	1.54
A6	A142	6.0	200.0	6.0	200.0	142.0	142.0	2.22
A7	A193	7.0	200.0	7.0	200.0	193.0	193.0	3.02
A8	A252	8.0	200.0	8.0	200.0	252.0	252.0	3.95
A9	A318	9.0	200.0	9.0	200.0	318.0	318.0	4.99
A10	A393	10.0	200.0	10.0	200.0	393.0	393.0	6.16
A11	A475	11.0	200.0	11.0	200.0	475.0	475.0	7.46
A12	A565	12.0	200.0	12.0	200.0	565.0	565.0	8.88
A13	A664	13.0	200.0	13.0	200.0	664.0	664.0	10.42


Purchase back **SECOND GRADE** or **USED STEEL PRODUCTS** can sell back to us at a competitive rate. Contact us for further information.


09 Sell to Us

Contact Us

 Lot 413-A, Batu 13 1/2, Jalan Sungai Tiram, 81800 Ulu Tiram, Johor.

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gene.lee@powermetalsteel.com.my
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+6017 – 243 4577

 <https://powermetalsteel.com.my>

C60 Shoring System (Crab® 60 Shoring System)

C60 Shoring System



C60 Shoring System is a multi-directional & multi-level heavy duty shoring equipment to support all types of heavy structures, and is manufactured to comply with British Standard BS 5975 and BS EN 12812.

Efficiencies :

- Quick installation and dismantling
- Multilevelled and Multi-directional
- Interchangeable and Flexible
- Mistake Free
- Durable

01-1 Components



Crab® Triangle 0.7m and 1.5m

Four adjacent triangle enable to form a 1.00m high lift of a tower. The vertical member is equipped with 3 crab stirrups, one end of the horizontal tube is provided with a wedge-clamp.

Triangle	1.5m	0.70m
Weight (kg)	11.50	9.47

Ø 60.3mm x 3.20mm thk
Ø 42.7mm x 2.00mm thk
Ø 70mm x 4.00mm thk

Standard Packing



Total quantity per bundle: 60 pcs



Crab® Basic Standard C60

It facilitates the erection, the tower levelling and the general layout.

Weight = 2.30kg
Ø 60.3mm x 3.2mm thk

Standard Packing



Total quantity per bundle: 500 pcs



Crab® Standard C60 0.3m, 0.5m, 0.75m, 1m and 2m

They are used in conjunction with triangle to erect narrow rows. They can be coupled to a tower in case of load concentrations. Also, they are used for height adjustment.

Weight Stand	0.30m = 2.80kg
	0.50m = 3.70kg
	0.75m = 4.70kg
	1.00m = 5.70kg
	2.00m = 10.33kg

Ø 60.3mm x 3.2mm thk

Standard Packing



Crab Standard C60 0.3m and 0.5m

Total quantity per bundle: 100 pcs
Quantity in horizontal: 10 pcs x 2 pcs
Quantity in vertical: 5 pcs



Crab Standard C60 0.75m 1m and 2m

Total quantity per bundle: 100 pcs
Quantity in horizontal: 10 pcs
Quantity in vertical: 10 pcs

01-2 Components



Crab® Jack Base C60 / 600

It enables to compensate the ground unevenness.

Weight = 5.73kg
Ø 48.3mm x 4mm thk
Plate thickness 9.0mm

Standard Packing



Total quantity per pallet: 200 pcs



Crab® U-Head C60 / 600

It is designed to accomodate primary, secondary, etc...

Weight = 9.01kg
Ø 48.3mm x 4mm thk
Plate thickness 9.0mm

Standard Packing



Total quantity per pallet: 100 pcs

01-3 Components

Crab® Plan Brace



It is used to ensure the squareness of tower.

Weight (kg)	1.5 x 1.5 = 4.55kg
	0.7 x 1.5 = 3.60kg
	0.7 x 0.7 = 2.40kg
	Ø 42.7mm x 2.3mm thk

Standard Packing



Total quantity per bundle: 50 pcs

Crab® Ledger



It is made of tube Ø 48 and is provided at both ends with a wedge-clamp.

0.35m	1.56kg
0.50m	1.90kg
0.70m	2.34kg
1.00m	3.28kg
1.50m	4.63kg
1.80m	5.45kg
2.00m	6.00kg
2.50m	7.50kg
3.00m	8.90kg

Ø 48.3mm x 2.7mm thk

Standard Packing



Total quantity per bundle: 50 pcs
Quantity in horizontal: 12, 11, 10, 9, 8 pcs
Quantity in vertical: 5 pcs

Crab® Brace



It consists in a tube Ø 38 provided at the both ends with a wedge-locking bolt. It ensures the structure vertical bracing. Its size is determined by the braced bay height (H) and length (L)

Ø 38mm x 2.7mm thk

H2xL0.7m	l=2.09m	4.80kg
H2xL1.0m	l=2.19m	5.00kg
H2xL1.5m	l=2.45m	5.44kg
H2xL1.8m	l=2.63m	5.80kg
H2xL2.0m	l=2.76m	7.20kg
H2xL2.5m	l=3.13m	7.26kg
H2xL3.0m	l=3.53m	9.20kg
H1xL0.7m	l=1.17m	3.21kg
H1xL1.0m	l=1.35m	3.62kg
H1xL1.5m	l=1.73m	4.83kg
H1xL1.8m	l=1.98m	5.06kg
H1xL2.0m	l=2.15m	5.61kg
H1xL2.5m	l=2.61m	6.62kg
H1xL3.0m	l=3.08m	7.56kg

Standard Packing



Total quantity per bundle: 50 pcs

01-4 Components

Crab® Walking Board



It is metal platform made of galvanized steel perforated sheet. Fixation by 4 U-shaped hooks with locking and anti-upheaval device.

0.30 x 0.70m	6.20kg
0.30 x 1.00m	8.00kg
0.30 x 1.50m	11.00kg
0.30 x 1.80m	13.50kg
0.30 x 2.00m	14.00kg
0.30 x 2.50m	21.00kg
0.30 x 3.00m	24.50kg
0.20 x 0.70m	5.80kg
0.20 x 1.00m	7.80kg
0.20 x 1.50m	8.50kg
0.20 x 1.80m	10.00kg
0.20 x 2.00m	10.80kg
0.20 x 2.50m	11.20kg
0.20 x 3.00m	15.00kg

Standard Packing



Total quantity per bundle: 20 pcs
Quantity in horizontal: 2 pcs
Quantity in vertical: 10 pcs

Crab® Stair



Weight = 40.0kg

Standard Packing



Total quantity per bundle: 10 pcs

Crab® Stair (Aluminium)



Weight = 23.4kg

Standard Packing



Total quantity per bundle: 5 pcs

01-5 Components

Crab® Displacement Frame C/W Castor Wheel



It enable the tableform or shoring structure to be adjusted up / down and to be moved freely.

Weight = 20.0kg

Crab® S-Pin C60



It is S-shaped and secures the tower for lifting.

02-1 Erection Procedures



Position the jack bases at the intervals determined by the ledgers. Fit the basis standards into the jack bases. Then fit the first plan braces, rings downwards.



Clamp the 1st level of ledgers. Insert and lock the first lift of triangle. Check the structure is level.



Fit the second lift of the triangle, reverse the direction of triangle.



Set up temporary platforms, check the contact of vertical posts/standards using the sighting device provided on each triangle sleeve. The upper and lower tubes should be in contact at each leg.

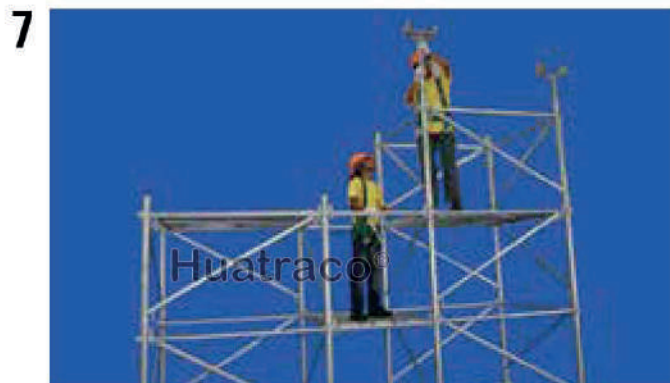
02-2 Erection Procedures



Erection must be carried out from the inside of towers. Fit the triangle at lift 3, provided complying with the safety regulations protected by the triangle of the lower lift. The temporary platforms from lift 1 are moved to lift 2.



Fit triangle at lift 4 and erect safely from second platform. Reverse the direction of the triangle.



Link up the standard with the ledgers. Insert the U-heads into the vertical posts/standards.



Complete the service platform for fitting girders, joists, wall pieces and formwork panels. The platform should remain in position to allow for inspection, levelling and removing of formwork.

02-3 Erection Procedures



Position the jack bases at the intervals determined by the ledgers. Fix the basic standards into the jack bases.



Clamp the 1st level of ledgers.



- Insert the upper standards into the basic standards.
- Clamp the 2nd level of the ledgers.
- Check the structure is level.



Fix the diagonal braces.

02-4 Erection Procedures



Set up the temporary platforms.



- Insert the standards for upper lift.
- Insert S-pins / bolts in between the standards.



Clamp the 3rd level of ledgers, fix the diagonal braces and insert the U-heads.



Place the primary & secondary of soffit formwork and secure plywood / panels on the secondary.

C25 Modular System (Crab® 25 Modular System)

C25 Modular System



C25 Modular System is manufactured and complied with British Standard BS1139 : Part 5 and BS EN 12810 -1&2. This system is approved by the Department of Occupational Safety and Health, Malaysia.

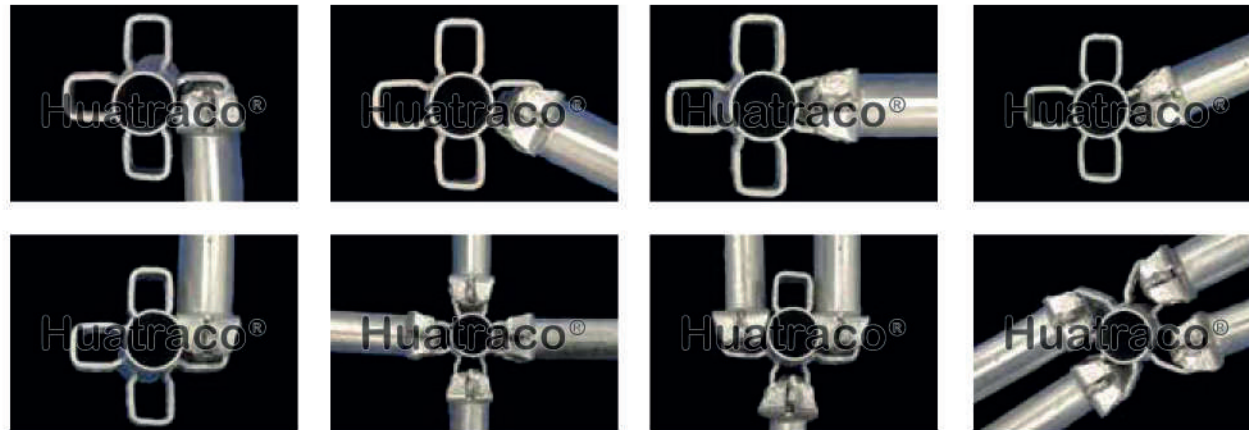
Efficiencies :

- Quick installation and dismantling
- Multilevelled and Multi-directional
- Interchangeable and Flexible
- Mistake Free
- Durable

01 Introduction

Crab® Multi-Directional System

Connection at 20 Directions and more.....



Crab® Multi- Levelled System

Joint at every 500mm vertically



02-1 Components

Crab® Standard C25



It consist a tube \varnothing 48 with four stirrups welded at 90° at 0.50m intervals. One end forms a spigot to centre the standards and avoid any pinned together.

Standard 3.00m	12.66kg
Standard 2.00m	8.77kg
Standard 1.00m	4.52kg
Basic Standard	2.53kg

\varnothing 48.3mm x 2.7mm thk

Standard Packing



Total quantity per bundle: 100 pcs
Quantity in horizontal: 10 pcs
Quantity in vertical: 10 pcs

Crab® Ledger



It is made of tube \varnothing 48 and is provide at both ends with a wedge-clamp.

\varnothing 48.3mm x 2.7mm thk

0.35m
0.50m
0.70m
1.00m
1.50m
1.80m
2.00m
2.50m
3.00m

Standard Packing



Total quantity per bundle: 50 pcs
Quantity in horizontal: 12, 11, 10, 9, 8, pcs
Quantity in vertical: 5 pcs

02-2 Components

Crab® Brace



It consists in a tube \varnothing 38 provided at the both ends with a wedge-locking bolt. It ensures the structure vertical bracing; when doubled, it enables to get large working areas on brackets. Its size is determined by the braced bay height(H) and length(L)

H2.00xL0.70	l=2.09
H2.00xL1.00	l=2.19
H2.00xL1.50	l=2.45
H2.00xL1.80	l=2.63
H2.00xL2.00	l=2.76
H2.00xL2.50	l=3.13
H2.00xL3.00	l=3.53

(l) = locking bolt distance between axis
 \varnothing 38mm x 2.7mm thk

Standard Packing



Total quantity per bundle: 50 pcs

Crab® Jack Base C25 / 500



It enables to compensate the ground unevenness.

Weight = 3.19kg
 \varnothing 38mm x 4mm thk
Plate thickness 6.0mm

Standard Packing



Total quantity per pallet: 200 pcs

Crab® U-Head C25 / 500



It is designed to accommodate primary, secondary, etc

Weight = 4.0kg
 \varnothing 38mm x 4mm thk

Standard Packing



Total quantity per pallet: 100 pcs

02-3 Components

Crab® Board Bearer



It cuts the span of the boards which constitute the working or access areas.

Ø 48.3mm x 2.5mm thk

0.70m	2.66kg
1.00m	3.66kg
1.50m	5.33kg
1.80m	6.34kg
2.00m	7.00kg
2.50m	8.67kg
3.00m	10.35kg

Standard Packing



Total quantity per bundle: 50 pcs
Quantity in horizontal: 10 pcs
Quantity in vertical: 5 pcs

Crab® Toe - Board



It is 150mm high in compliance with the regulations. It is secured by mere housing into the stirrups of the standards.

0.70m	2.80kg
1.00m	3.60kg
1.50m	5.50kg
1.80m	6.50kg
2.00m	7.20kg
2.50m	9.00kg
3.00m	10.80kg

Standard Packing



Total quantity per bundle: 20 pcs

Crab® Reinforced Ledger



It enables to increase the platform working load.

2.50m	13.80kg
3.00m	16.40kg

02-4 Components

Crab® Ladder Beam 4m or 5m



4.00m	39.90kg
5.00m	46.36kg

They are used for bridge passages. In the middle of the upper boom, they comprise a spigot to join positioning a standard.

Crab® Walking Board



It is a metal platform made of galvanized steel perforated sheet. Fixation by 4 U-shaped hooks with locking and anti-upheaval device.

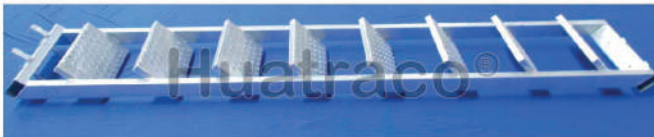
0.30 x 0.70m
0.30 x 1.00m
0.30 x 1.50m
0.30 x 1.80m
0.30 x 2.00m
0.30 x 2.50m
0.30 x 3.00m
0.20 x 0.70m
0.20 x 1.00m
0.20 x 1.50m
0.20 x 1.80m
0.20 x 2.00m
0.20 x 2.50m
0.20 x 3.00m

Standard Packing



Total quantity per bundle: 20 pcs
Quantity in horizontal: 2 pcs
Quantity in vertical: 10 pcs

Crab® Stair



Weight = 40.0kg

Standard Packing



Total quantity per bundle: 10 pcs

02-5 Components

Crab® Stair (Aluminium)



Weight = 23.4kg

Standard Packing



Total quantity per bundle: 5 pcs

Crab® Small Post



Equipped with a wedge-coupler and it is used at the end of the bracket, as a guard-rail post, or onto the horizontal members in order to cut the span of storage or circulation areas.

Weight = 5.51kg
Ø 48.3mm x 2.7mm thk

Standard Packing



Total quantity per bundle: 50 pcs

Crab® Socket base C25



When used with a castor wheel, it enables to erect mobile structures.

02-6 Components

Crab® Caster Wheel



Crab® S-Pin C25



It is S-shaped and firmly secures the standards together.

Weight = 0.17kg

03-1 Erection Procedures



- Set up the jack bases and space them according to the lengths of the longitudinal and transverse horizontal members.



- Fit the basic standards or standard into the jack base.
- Fit the horizontal members.
- Check the structure is level.



- Fit the first working platform to ease the erection.
- Erect the complete working platform at the access bay.



- Build the first lift.
- Fit the horizontal members.

03-2 Erection Procedures



- Fit the access trapdoor platform in the access bay.
- Lower the ladder.
- Check accurately that the structure is level.



- Fit the platform in each cell of the first stage.
- Stabilise the structure longitudinally by fitting diagonal braces at the side away from the working area (inset).