

# **Huatraco®** C60 Shoring System

(Crab® 60 Shoring System)



Huatraco® 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



Condominium Building, Kuala Lumpur, Malaysia



▲ Condominium Building, Kuala Lumpur, Malaysia

▲ Office Building, Putrajaya, Malaysia

# **Huatraco**<sup>®</sup> C60 Shoring System (Crab<sup>®</sup> 60 Shoring System)



▲ Power Plant, Port Dickson, Malaysia

▲ Head Office Setia City, Klang, Selangor, Malaysia



Power Plant, Manjung Coal Fired, Perak, Malaysia





Residential & Commercial Building, Sunway South Quay CP3, Bandar Sunway, Selangor, Malaysia

### **Huatraco**<sup>®</sup> C60 Shoring System (Crab<sup>®</sup> 60 Shoring System)

### **Projects - Building Construction**

Tun Razak Exchange (TRX), Kuala Lumpur, Malaysia ▼





▲ SKYZ RESIDENCES, Puchong, Selangor, Malaysia



▲ Condominium LE PAVILLION, Puchong, Selangor, Malaysia



▲ Condominium, Bukit Jalil, Selangor, Malaysia



Condominium, Pantai Dalam, Kuala Lumpur, Malaysia



Commercial Development, Petaling Jaya, Selangor, Malaysia





▲ Airport, Sepang, Malaysia



▲ Office Building, Singapore

▲ Commercial Building, Singapore









▲ LRT, Shah Alam, Selangor, Malaysia



▲ LRT, Persiaran Klang, Selangor, Malaysia



▲ MRT LINE 1





▲ MRT, Damansara, Selangor, Malaysia



▲ MRT, Sungai Buloh-Kajang, Malaysia



▲ MRT, Sungai Buloh, Selangor, Malaysia





▲ LRT, Singapore



LRT, Manila, Philippines



MRT, Dubai UAE



Kuala Lumpur, Putrajaya Highway, Malaysia



### Projects - Bridge Construction



Sungai Johor Bridge, Senai-Pasir Gudang-Desaru, Highway, Malaysia



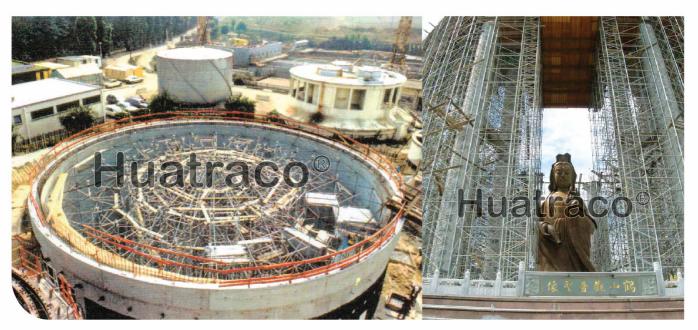
▲ East Klang Valley Express (EKVE), Sungai Long, Malaysia

▲ Link Brigde, Ninoy Aquino International Airport 3, Philippines

### Projects - Tank & Roof Construction



Elevated Water Tank, Kuala Lumpur, Malaysia



▲ Treatment Plant, Kuala Lumpur, Malaysia

▲ Roof Construction, Penang, Malaysia

### 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

 $\emptyset$  60.3mm x 3.20mm thk  $\emptyset$  42.7mm x 2.00mm thk  $\emptyset$  70mm x 4.00mm thk





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



#### 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

### Components

#### Crab® Plan Brace



It is used to ensure the squareness of tower.

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

4.80kg

5.00kg

5.44kg

5.80kg

7.20kg

7.26kg

9.20kg

3.21kg

3.62kg

4.83kg

5.06kg

5.61kg

6.62kg

7.56kg

H2xL0.7m l=2.09m

H2xL1.0m I=2.19m

H2xL1.5m l=2.45m

H2xL1.8m I=2.63m

H2xL2.0m l=2.76m

H2xL2.5m l=3.13m

H2xL3.0m l=3.53m

H1xL0.7m l=1.17m

H1xL1.0m l=1.35m

H1xL1.5m l=1.73m

H1xL1.8m l=1.98m

H1xL2.0m l=2.15m

H1xL2.5m l=2.61m

H1xL3.0m l=3.08m

#### 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

#### Standard Packing



Total quantity per bundle: 50 pcs

#### Crab® Walking Board



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

### Components

#### 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

#### **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.

### **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.



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.

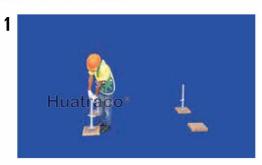


Link up the standard with the ledgers. Insert the U-heads into the vertical posts/standards.



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.

### **Erection Procedures**



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



Clamp the 1 st level of ledgers.



- Insert the upper standards into the basic standards.

  • Clamp the 2<sup>nd</sup> level of the ledgers.

  • Check the structure is level.



Fix the diagonal braces.



Set up the temporary platforms.



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



Clamp the 3<sup>rd</sup> 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.