

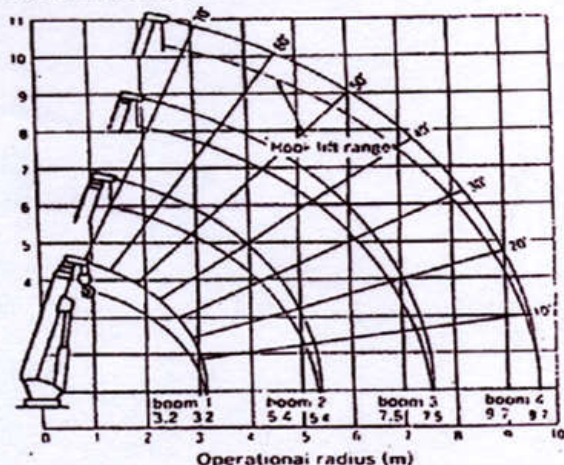
**QLD MINI CRANES**

Special features

- Airborne transportation
- Temporary bridge
- Rough terrain
- Tunnel
- Mountain

RATED LOAD DIAGRAM TC-304HAL

Lift range aboveground (m)

**BOOM A OR B CAPACITY**

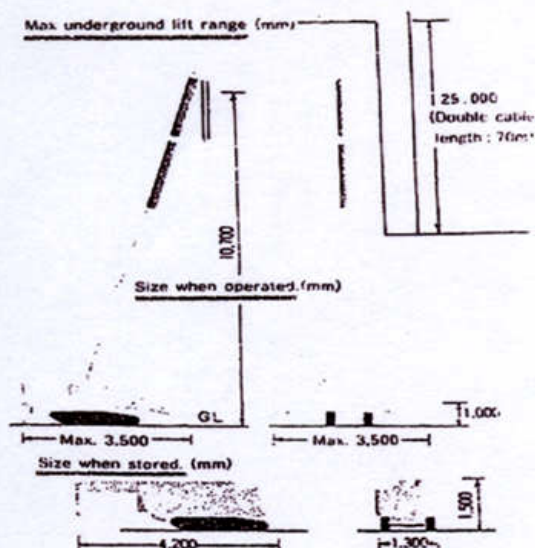
RADIUS (M)	2.0	2.5	3.0	3.5	4.0	4.5	4.9
S.W.L. (TON)	2.88	2.90	2.3	1.75	1.4	1.15	1.05

BOOM A,B, & C CAPACITY

RADIUS (M)	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0
S.W.L. (TON)	2.3	1.75	1.4	1.15	1.0	0.82	0.74	0.82	0.52

BOOM & A,B,C, & D CAPACITY

RADIUS (M)	3.0	4.0	5.0	6.0	7.0	8.0	9.0	9.2
S.W.L. (TON)	1.1	1.1	1.0	0.74	0.52	0.41	0.35	0.34

**TC-304 HAL****QMC007 & QMC008**

PERFORMANCE	
Rated Load	2,900kg
Max. Radius	9.7m
Max. Lift Range aboveground	10.7m
Max. lift range underground	GL-29.0m (double cable)
WINDER	
Hoist winch	Hydraulic motor spur gear reduction
Cable	6 X 37 normal-z 9mm
Cable Length	Standard 60m, max 70m
No. of Cables	Quadruple
Winding Speed	8.6m/min
Hoist Brake	Mechanical brake
EXTENSION/RETRACTION DEVICE	
Boom Length	3.0 - 9.7m
Boom Stage	4
Extension/retraction method	2-stepped by hydraulics
Extension/retraction stroke	4.5m
Extension time	30sec/4.5m
HEAD-UP/DOWN DEVICE	
Boom elevation method	Direct hydraulic cylinder pressure
Boom elevation Angle	0-75°
Time for full angle	17sec
ROTATOR	
Turning method	Hydraulic cylinder pressure
Slewing angle	Non-step 360 deg.
Slewing Speed	1r/min
OUTRIGGER	
Autvigen method	Manual extraction engagement worm gear reduction
SAFETY DEVICE	
Safety equipments	Load meter
Hydraulic safety device	Boom angle gauge
Automatic lock device	Relief valve
Anti-over wind	Counter balance valve pilot check valve
	By a plumb type of buzzer

ENGINE	
Engine	Diesel engine zb600c-i
Power	13ps/3,200rpm
TRANSMISSION	
Clutch	Belt tension type
Steering gear	Inner expansion brake skid steer
Brake	Inner expansion shoe & drum
Transmission	Forward/backward 3-shifts
SPEED	
1 st speed	0.8km/h
2 nd speed	1.2
3 rd speed	2.2
Hill climbing ability	20°
TRACK	
Trank shoe	Rubber crawler
Track width	250mm
Length on ground	2,000(1,550)mm
Pressure to ground	0.33kg/cm ²
Weight	2,750kg
DIMENSION	
Length	4,200mm
Width	1,300mm
Height	1,500mm
HYDRAULICS	
Hydraulic pump	Gear pump
Relief pressure	210kg/cm ²
Oil quantity	60l