

# MARR

## MARR TRANSIT SYSTEM (MTS)

EXTENDING THE REACH &  
CAPACITY OF MARR'S FLEET

FOR USE WITH ANY CRANE  
IN MARR'S FLEET





# MARR TRANSIT SYSTEM

## MTS DESIGN BASIS & PURPOSE

Originally designed to extend the reach and coverage of our fleet\*, the Marr Transit System (MTS) helps to reduce congestion and complexity on the work front by reducing the number of cranes required on large projects.

Allowing our cranes to work at full free stand while stationary or to carry a load under pick and carry conditions in line with load chart capacity\*, the MTS is available for use with Marr's Heavy Lift Luffer (HLL) and general fleet.

\*No restrictions apply to the operation of the crane when on the MTS.



**REDUCES SITE CONGESTION  
& COMPLEXITY**



**EXTENDS THE REACH & COVERAGE  
OF MARR'S FLEET**



**IMPROVES SAFETY**



## APPLICATIONS FOR USE

The MTS is suited to large construction sites including:

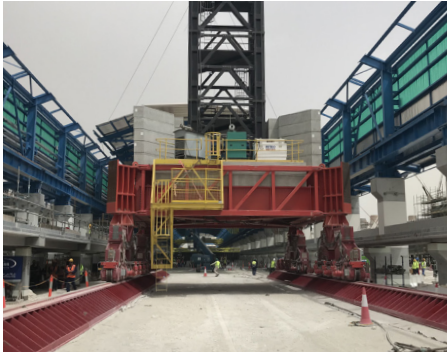
- Industrial, mechanical and civil construction works where extensive areas of work need to be covered, and
- Construction works where heavy lifting and travel is required within a limited space.

Suitable sectoral applications include:

- Power generation – new build, retrofit projects & turnarounds
- Oil & gas – new build, retrofit projects & turnarounds
- Infrastructure – rail stations, bridges & airports
- Construction – ports, harbours, dams, jetties, data centres & stadia



# MARR TRANSIT SYSTEM



## MTS FEATURES

### MODULAR RAIL BEAMS

The MTS travels on Marr-designed modular rail beams, which means that a short section can be relocated to give an infinite operating length with:

- Rails that can be relocated by the operating crane or other means such as a forklift
- Allowance for 8m free space between the track with standard 10m rail centres
- Clearance under the base of 3.6m allowing for vehicular access under controlled conditions. The clearance height can also be increased to suit project needs
- Typical rail: 5.8m (length) x 2m (width) x 0.7m (height)
- Typical rail weight: 6t

### HEAVY DUTY HYDRAULIC DRIVE BOGEYS

Designed and built by Marr's engineering team, each wheel of our heavy-duty hydraulic drive bogeys is designed take a load of up to 100t with a maximum corner load of 800t.

### HYDRAULIC POWER PACK

- Bogeys are driven by a hydraulic power pack directly linked to hydraulic drive motor
- The whole system is independent of any power source - no need for additional power to run adjacent to travel system

### OPERATOR'S ACCESS & DRIVE STATION

- Access to the crane and MTS operators' station is via an access way adjacent to the rail
- Drive station positioned on the second tower allowing the operator to have good visibility of the rail beam and the ability to operate the MTS independent of crane operations
- Control station fitted with an emergency stop
- Control system allows for infinite variation in travel speed
- Optional camera system can be fitted to give driver full visibility of drive path

### TRAVEL LIMIT SWITCH & END

- Switches to limit the length of travel
- Moveable end-stop at the end of each rail as a final safety stop
- Emergency stops fitted at the end of every bogey set

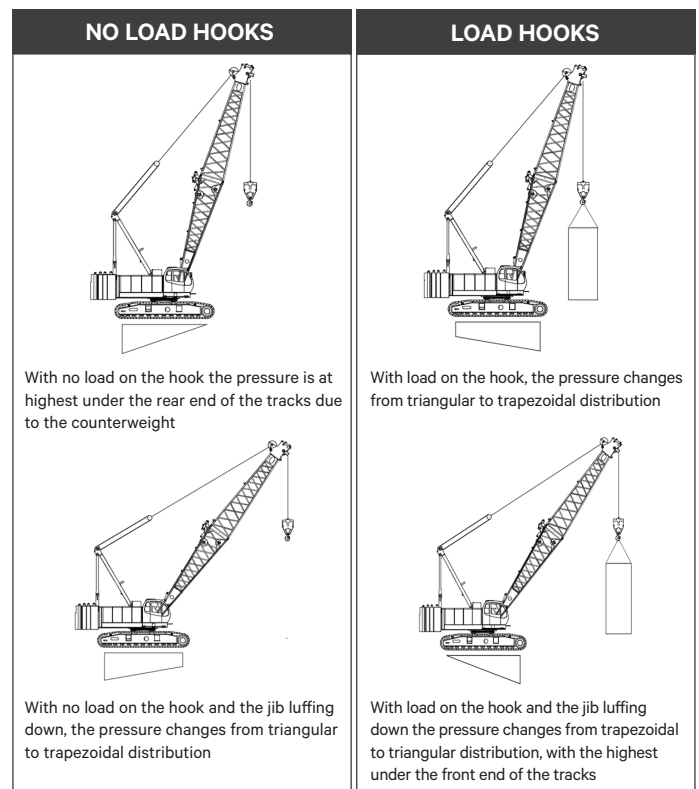
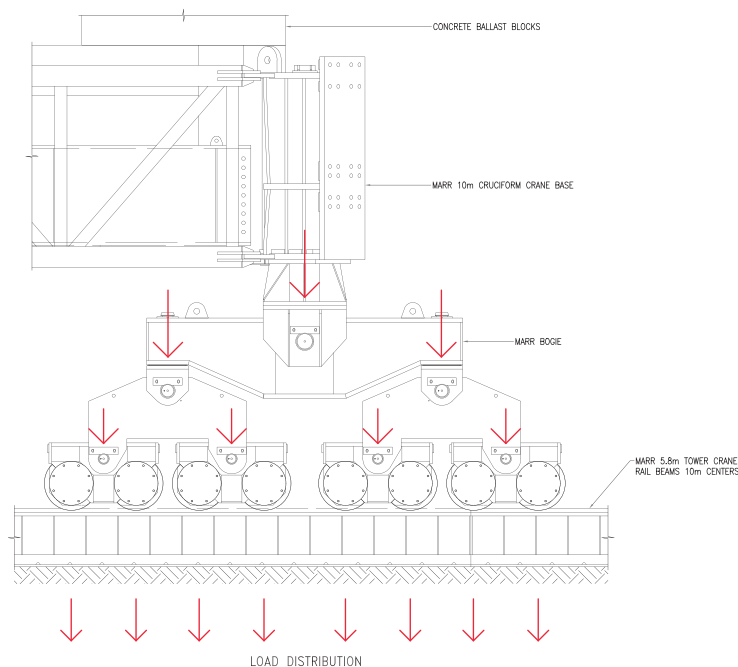


# MARR TRANSIT SYSTEM

## MTS FEATURES

### LOAD DISTRIBUTION

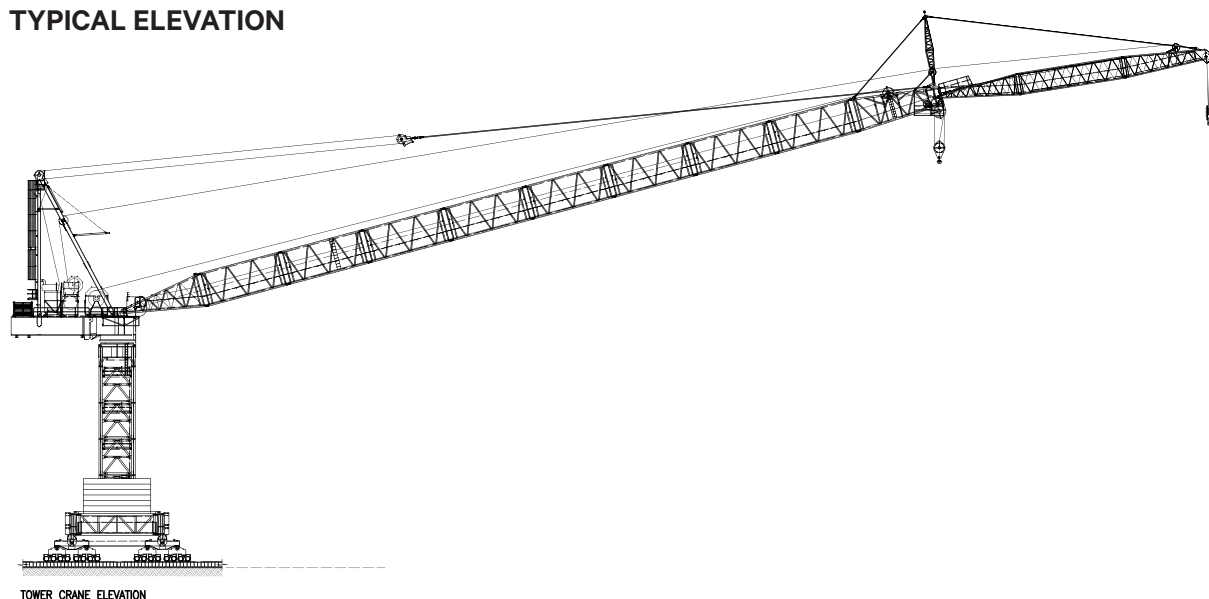
Unlike the tracks on a crawler crane, the MTS delivers even load distribution to the supporting surface through its load bearing geometry.



### MINIMAL GROUND PREPARATION REQUIRED

The MTS requires minimal ground preparation. Traditionally, the ground directly under the rail beam is improved as required to meet the required bearing pressures. In the majority of cases there are no structural improvements required to existing ground beyond localised geotechnical improvements. This is subject to a geotechnical engineering assessment based on existing ground conditions.

### TYPICAL ELEVATION



# MARR TRANSIT SYSTEM





## LOAD CHART SUMMARY

	M2480D – the largest capacity tower crane in the world	M1680D – evolved from the growing demand for heavy lift tower cranes in the construction industry	M1280D – the first of Marr's heavy lift tower cranes developed for the construction of a hydroelectric power station	M860 – developed as a crossover between heavy industry, infrastructure and general construction
Lift capacity	330 tonnes	200 tonnes	150 tonnes	96 tonnes
Maximum radius	120 metres	91 metres	82 metres	71 metres
Lift: radius ratio	100 tonnes: 45 metres	100 tonnes: 28 metres	100 tonnes: 25 metres	96 tonnes: 12 metres
Capacity at shown radius	25 tonnes (at 100 metres)	15 tonnes (at 80 metres)	13 tonnes (at 80 metres)	7 tonnes (at 70 metres)
Main winch hoist capacity	55 tonnes	50 tonnes	50 tonnes	32 tonnes
Auxiliary winch hoist capacity	25 tonnes	12 tonnes	12 tonnes	12 tonnes
Maximum allowable wind speed	20 metres / second	20 metres / second	20 metres / second	20 metres / second



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