MET-TRACK® WORKSTATION CRANES

KIT FORM CRANES MANUFACTURED TO YOUR SPECIFICATION

FREE STANDING & CEILING MOUNTED

CAPACITIES UP TO 2000 KGS
SPANS UP TO 10m

www.jdn.com.au

JDN MONOCRANE

WORKSTATION CRANES

SIMPLY EFFORTLESS!

MET-TRACK® Workstation Bridge Cranes enable you to achieve effortless and reliable area-serving overhead handling for a wide variety of applications. Each system is configured with the operator in mind and includes the principle feature of ease of movement, designed to reduce fatigue and ensure accurate load positioning.

Our range include both ceiling and floor mounted workstation bridge cranes, monorails and jib cranes.

Quality materials and construction ensure operational reliability and safety and facilitate long life combined with minimum maintenance.

SPECIAL DESIGNED SOLUTIONS

As a supplier of major materials handling projects worldwide, we are well experienced in dealing with turnkey installations where standard cranes are not considered ideal. We believe that providing the customer with all the required systems configured exactly to their needs is essential to ensure the installed project is 'fit for purpose'. If you have a materials handling project and would like to take advantage of our experience then simply contact our sales team for further information.

SYSTEM FEATURES

- Loads up to 2000Kgs
- Bridge lengths up to 10m
- Runway supports up to 9m
- Kit form
- Low cost
- Simple to install and extend
- Large range of mounting options
- Mixed capacity systems
- Bridge buffers
- Telescopic bridges
- Cantilever bridges
- Motorised tractor units
- Track transfer units

ENCLOSED TRACK PROFILES MAKE FOR AN ERGONOMIC DESIGN

The **MET-TRACK®** steel track design is one of high strength and low weight by combining the running track profile with standoff reinforcement to considerably increase span distances. The 'V' shaped profile of the running track ensures alignment of the trolleys and end carriage and prevent dirt accumulation inside the tracks.

Machined wheels with crowned tread and precision sealed bearings fitted ensure absolute minimum rolling resistance and provide long operational life.

SYSTEM FEATURES:

- Four running track profiles to select from – 400, 500, 600 and 700 Series
- Long spans allow systems to be installed with the minimum of supports, maximising the work cell layout
- Enclosed track cranes are up to three times easier to move than traditional bridge cranes
- Small sized profiles for bridges, runways and headers allow systems to be installed where headroom is a problem

EASY INSTALLATION AND MODULAR DESIGN

The **MET-TRACK®** pre-engineered modular design allows for easy relocation and/or expansion by simply adding runway sections and/or additional bridges.

Splice joints connect the track sections and are complete with vertical and horizontal adjustment screws, facilitating precise alignment of the track sections.

Floor mounted cranes can be installed on any normal 150mm reinforced concrete floor. If no movement of the support assembly is preferred then we recommend the use of bracing (not included). For further details contact our sales team.

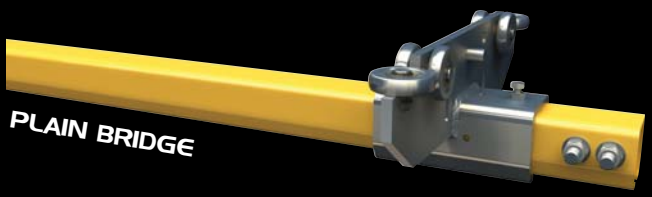
For ceiling mounted cranes it is imperative that you seek professional advice on whether your building structure is capable of withstanding the forces generated by the workstation crane. A data sheet giving details on the applied forces relative to a crane system is available please contact our sales office for further information.

PLAIN RUNWAY

TRUSSED RUNWAY

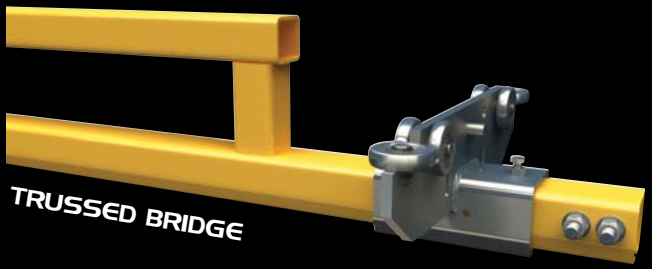
RUNWAY PROFILES

Capacity (kg)	Profile	Spine Style	Maximum Span (mm)	Running Track
125	400M	Plain	1800	400
	RU420	Trussed	6000	400
	RU425	Trussed	7500	400
	RU430	Trussed	9000	400
250	500M	Plain	1800	500
	RU520	Trussed	6000	500
	RU525	Trussed	7500	500
	RU530	Trussed	9000	500
500	600M	Plain	1800	600
	RU620	Trussed	6000	600
	RU625	Trussed	7500	600
	RU630	Trussed	9000	600
1000	700M	Plain	1800	700
	RU720	Trussed	6000	700
	RU725	Trussed	7500	700
	RU730	Trussed	9000	700
2000	RU820	Trussed	6000	700
	RU825	Trussed	7500	700
	RU830	Trussed	9000	700



PLAIN BRIDGE

FLAT SPINE BRIDGE

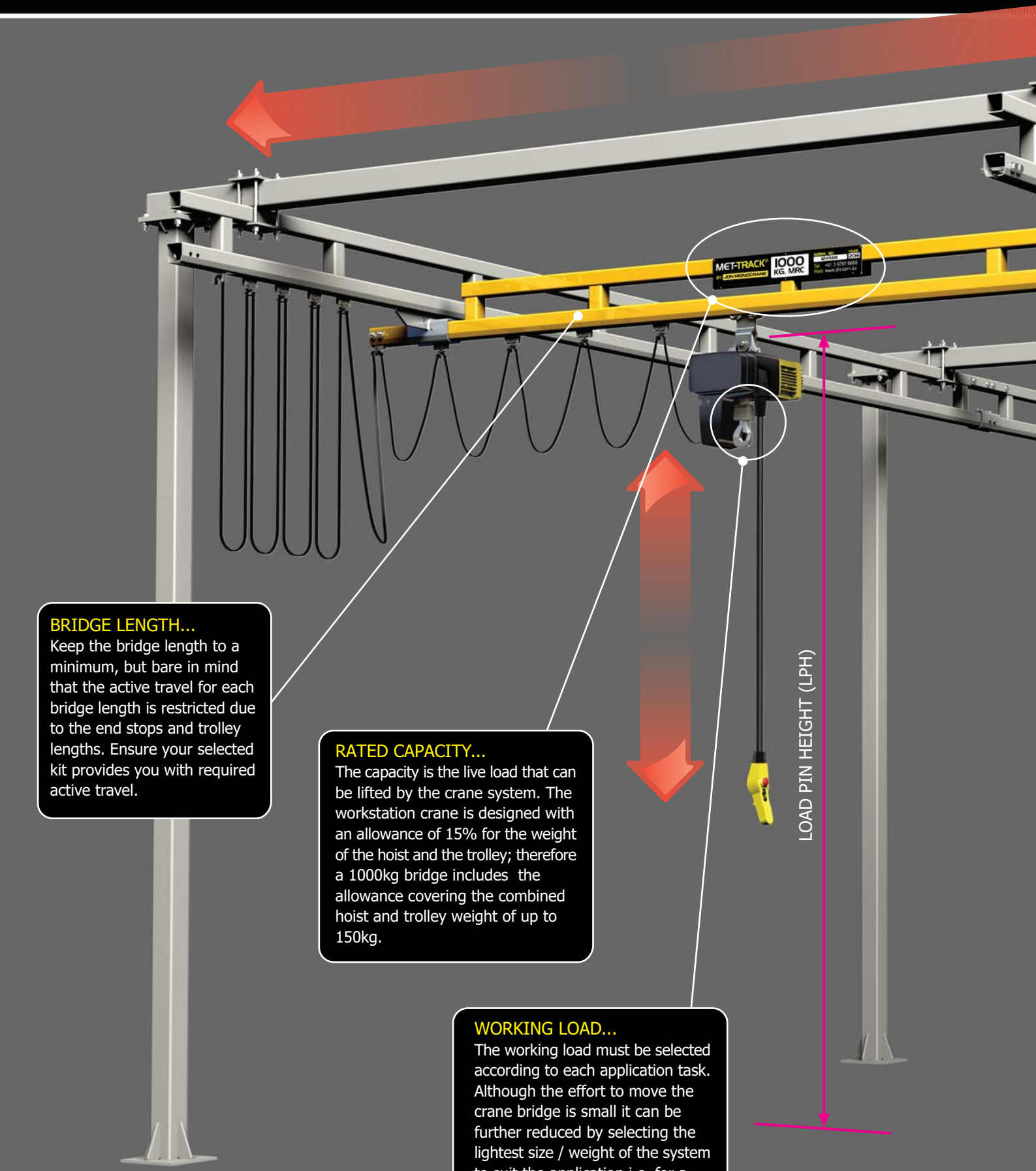


TRUSSED BRIDGE

BRIDGE PROFILES

Capacity (kgs)	Profile	Spine Style	Max CBL (mm)	Running Track
125	400M	Plain	1800	400
	400F	Flat Spine	3000	400
	BR401	Trussed	4500	400
	BR402	Trussed	6000	400
	BR403	Trussed	7000	400
	BR404	Trussed	8500	400
	BR405	Trussed	10000	400
250	500M	Plain	1800	500
	500F	Flat Spine	3000	500
	BR501	Trussed	4500	500
	BR502	Trussed	6000	500
	BR503	Trussed	7000	500
	BR504	Trussed	8500	500
	BR505	Trussed	10000	500
500	600M	Plain	1800	600
	600F	Flat Spine	3000	600
	BR601	Trussed	4500	600
	BR602	Trussed	6000	600
	BR603	Trussed	7000	600
	BR604	Trussed	8500	600
	BR605	Trussed	10000	600
1000	700M	Plain	1800	700
	700F	Flat Spine	3000	700
	BR701	Trussed	4500	700
	BR702	Trussed	6000	700
	BR703	Trussed	7000	700
	BR704	Trussed	8500	700
	BR705	Trussed	10000	700
2000	BR801	Trussed	3000	700
	BR802	Trussed	4500	700
	BR803	Trussed	6000	700
	BR804	Trussed	7000	700
	BR805	Trussed	8500	700

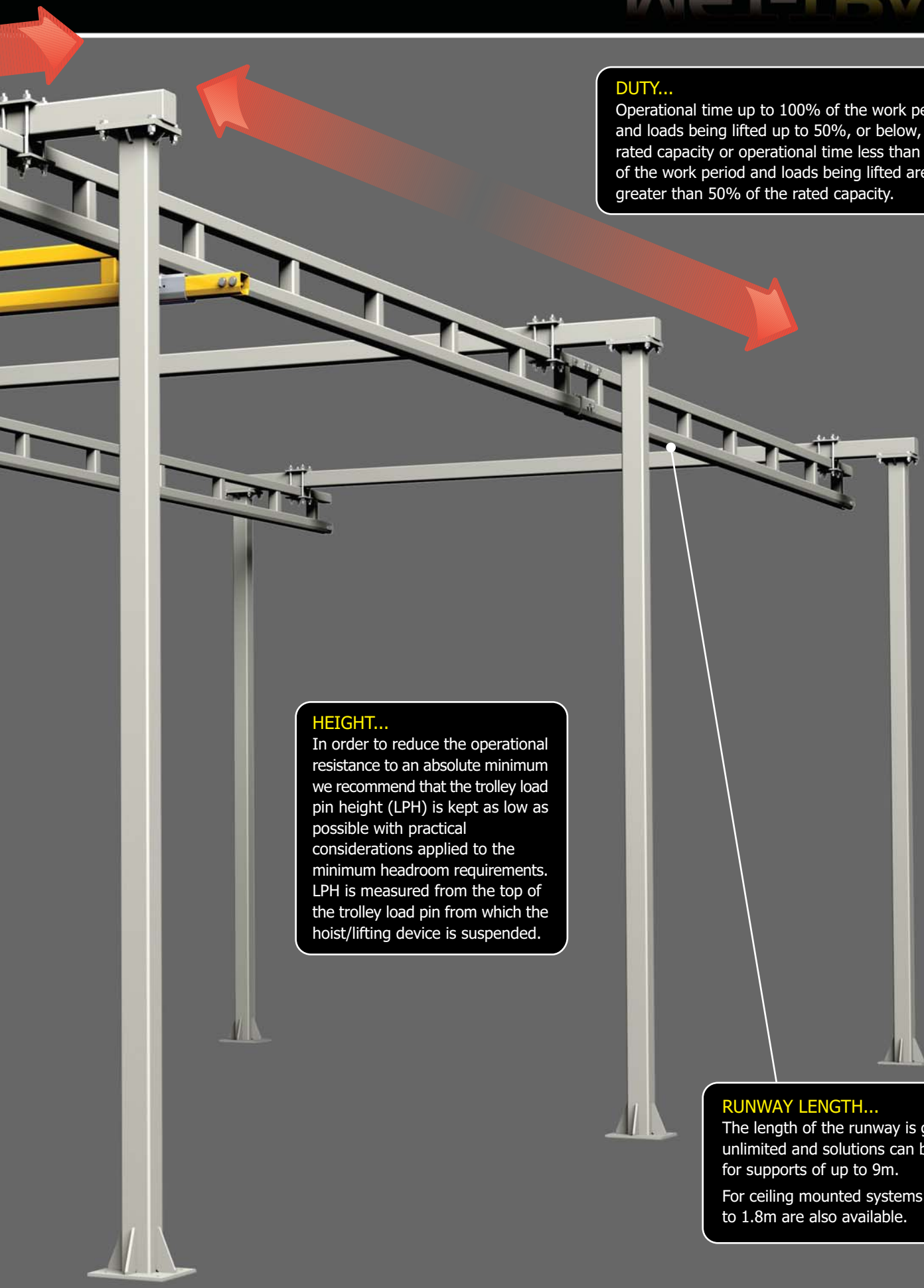
WORKSTATION CRANES
DESIGN & ERGONOMIC CONSIDERATIONS



BRIDGE LENGTH...
Keep the bridge length to a minimum, but bare in mind that the active travel for each bridge length is restricted due to the end stops and trolley lengths. Ensure your selected kit provides you with required active travel.

RATED CAPACITY...
The capacity is the live load that can be lifted by the crane system. The workstation crane is designed with an allowance of 15% for the weight of the hoist and the trolley; therefore a 1000kg bridge includes the allowance covering the combined hoist and trolley weight of up to 150kg.

WORKING LOAD...
The working load must be selected according to each application task. Although the effort to move the crane bridge is small it can be further reduced by selecting the lightest size / weight of the system to suit the application i.e. for a 180kg maximum load select a 250kg capacity and not 500kg.



DUTY...
Operational time up to 100% of the work period and loads being lifted up to 50%, or below, the rated capacity or operational time less than 50% of the work period and loads being lifted are greater than 50% of the rated capacity.

HEIGHT...
In order to reduce the operational resistance to an absolute minimum we recommend that the trolley load pin height (LPH) is kept as low as possible with practical considerations applied to the minimum headroom requirements. LPH is measured from the top of the trolley load pin from which the hoist/lifting device is suspended.

RUNWAY LENGTH...
The length of the runway is generally unlimited and solutions can be provided for supports of up to 9m.

For ceiling mounted systems supports up to 1.8m are also available.

CONFIGURATIONS

BASIC CRANE

The **MET-TRACK®** crane system consists of bridges, runways, runway joint kits, end carriages, hoist trolleys and end bolts. These basic components can then be supported by standard floor mounted structures, ceiling mounted assemblies or special arrangements according to the application requirements. In addition it is possible to add either festoons or conductor systems to enable powerfeed for the chosen lifting device.

FLOOR MOUNTED

Floor mounted systems are not a permanent part of your factory and therefore can easily be relocated in the future. The installation is often much simpler and does not apply stresses to the building roof structure.

MONORAIL SYSTEMS

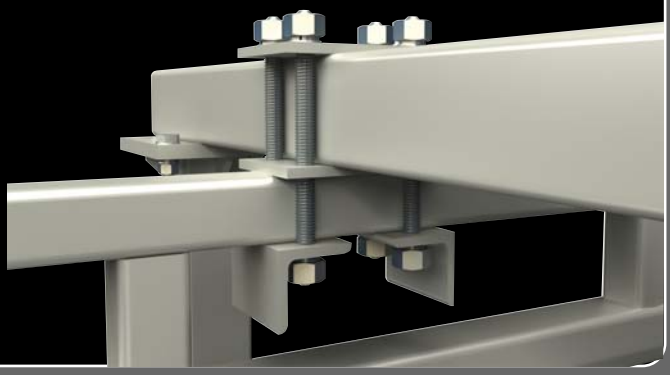
Using the same profiles as the crane runways we also have available a complete range of monorail capacities. We can offer either a single line configured monorail or one with curves, switches and turntables to form a closed loop facility for such as paint lines etc. Again these can either be floor or ceiling mount.

CEILING MOUNTED

Ceiling mounted systems are ideal when floor space is limited or access by other equipment is required where floor support steels would normally be needed. This option does require that the support structure is suitable for the loads imposed.

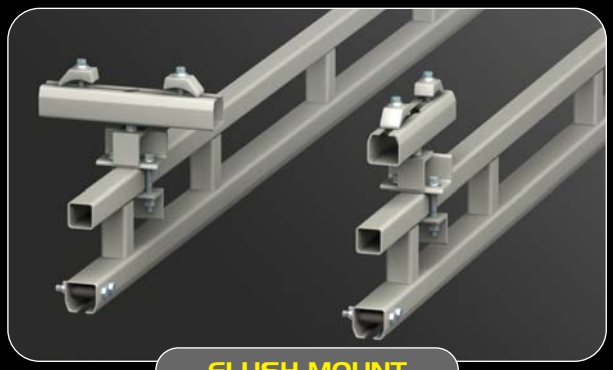
FLOOR MOUNT ASSEMBLIES

- Flush mount hanger assemblies
- Adjustment both laterally and longitudinally
- Low weight headers for easier handling during installation



CEILING MOUNT ASSEMBLIES

- Flush mount hanger assemblies
- Adjustment both laterally and longitudinally
- Sway Bracing - If complete stability is required



FLUSH MOUNT
- Trussed Runway
Parallel or Perpendicular

DROP ROD
- Plain / Trussed Runway Parallel
or Perpendicular 600 or 1800mm

FLUSH MOUNT
- Plain Runway
Parallel or Perpendicular

MOUNTING CONFIGURATIONS

We offer many different mounting configurations to suit most requirements.

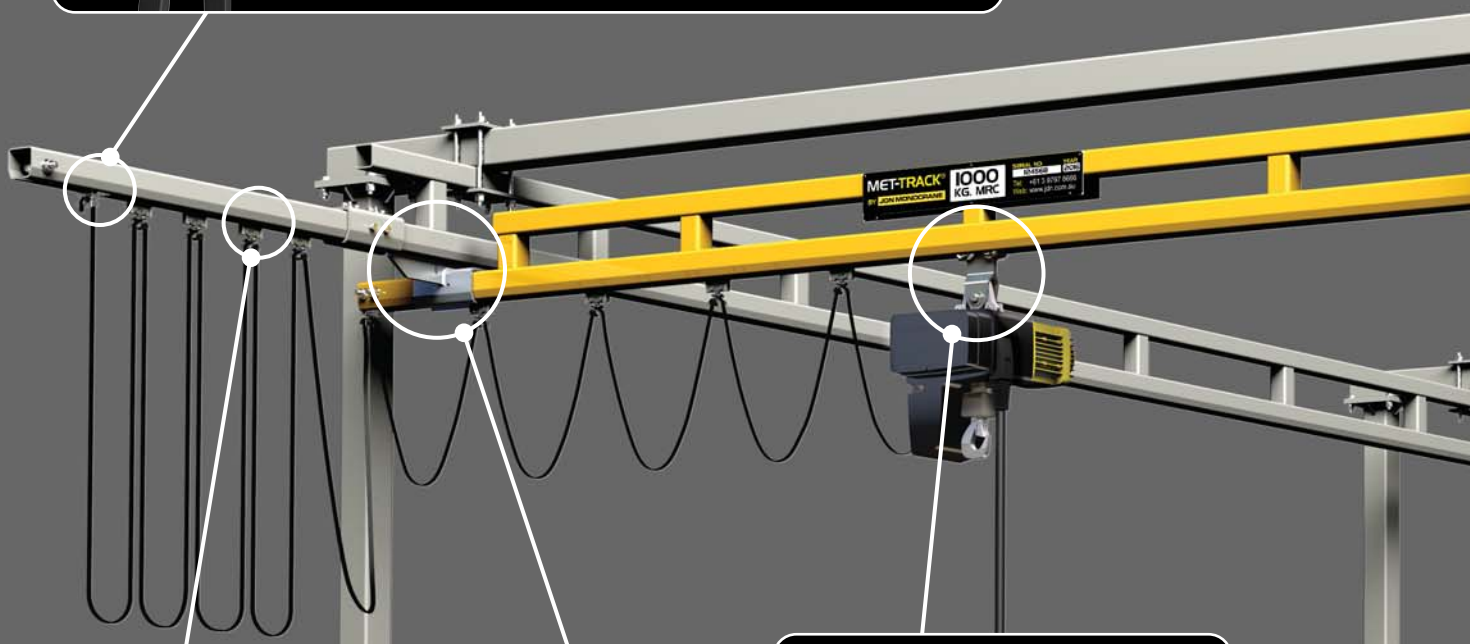
Here you can see the most common mounting options available. For other options please contact our sales office.

SWAY BRACING

Ceiling mounted kits require sway bracing in all circumstances except where the runway is flush mounted to the support steelwork. Sway bracing kits are available, please refer to our sales office.

WORKSTATION CRANES
COMPONENTS

END CLAMP
Fitted at the end of the crane bridge and at the end of the runway festoon section. Utilised as standard on all systems with festoon power supply.



HOIST TROLLEY
Facilitates the suspension of the hoist/lifting device from the bridge.

FESTOON TROLLEY
Utilised on power hoist systems for carrying the flat/round cable or hose from the static source to the moving hoist or bridge.

END CARRIAGE
Provides a smooth running connection between the bridge and runway track. The horizontal side guidance wheels guard against 'crabbing action' which can arise if the runway tracks are installed slightly out of parallel.

OPTIONAL CONDUCTOR SYSTEM: PLEASE SEE THE RELEVANT CHAPTER WITHIN THIS BROCHURE

END STOP
Fastened into the track via a through bolt. Resilient rubber bumper helps absorb impact forces at the track ends. (standard on all systems)

SPLICE KITS
Connect the top chord of the structure and link track sections for precise alignment.

FESTOON EXTENSION (Option Illustrated)
Supplied for attachment to the end of one runway track to provide a storage section for the retractable cable/hose trolleys. Allows complete end to end travel of the bridge.

RUNWAY & BRIDGE CONDUCTOR SYSTEMS

The principle of a workstation bridge crane is to make the work of a user easier by designing the system to move freely. When power is required to the lifting equipment it is traditional that standard festoons provide this function, however not without problems.

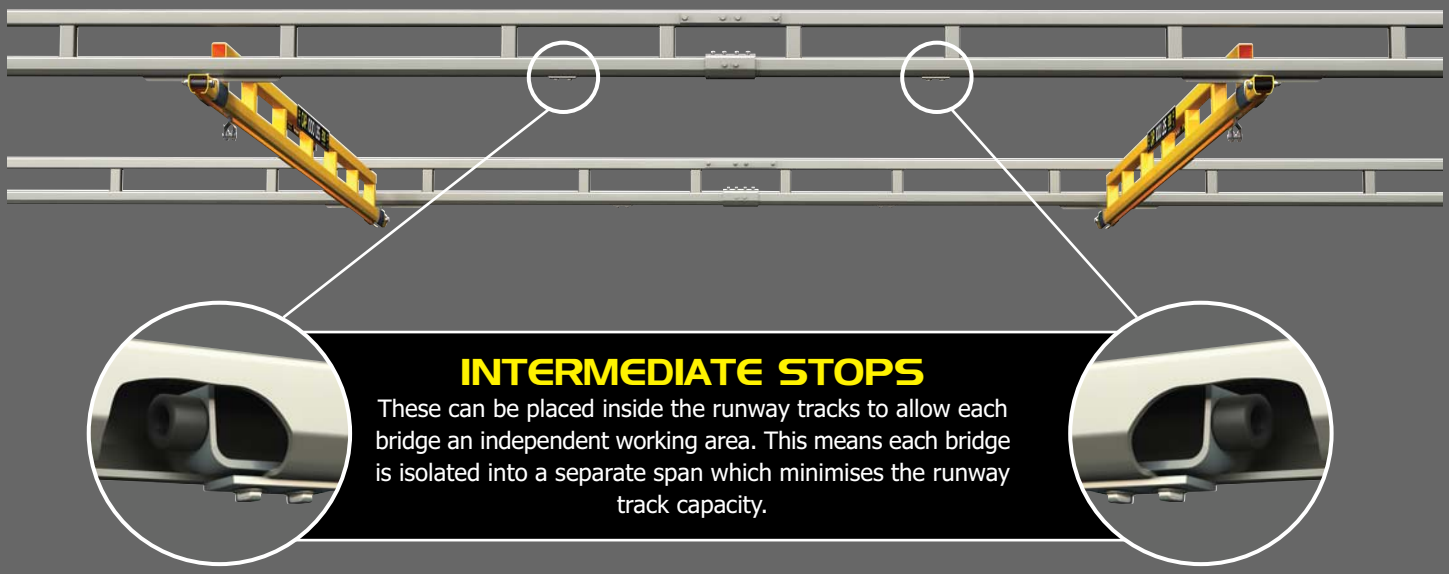
As a standard upgrade option the **MET-TRACK®** system has available an enclosed conductor system, named 4DUCTOR, that can be fitted to the runway and bridge if festoon loops would pose a problem. This simple to add system offers no resistance to the easy movement of a workstation crane but benefits the installation of end to end travel removing the need for festoon storage.

FEATURES OF **4DUCTOR**:

- Continuous Copper Conductors
- Range of Standard Capacities
- Minimum Brush Wear
- Totally Enclosed Profile
- Simple to Install & Maintain

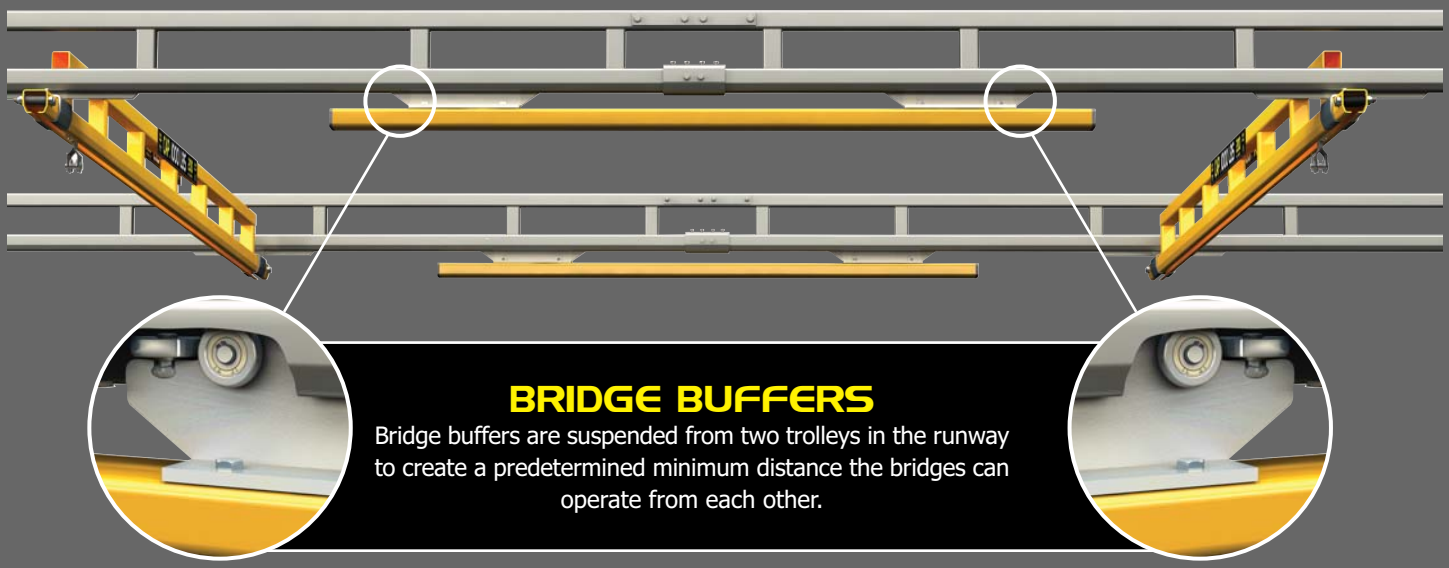
Conductor Capacity	up to 4
Current Capacities	50, 80, 125A
Protection:	IP23
Housing Lengths:	2m and 4m
Temperature Range:	-30°C to +60°C
Maximum Speed:	60m/min

BRIDGE TRAVEL WITH 4-DUCTOR® COMPARED TO FESTOON SYSTEM



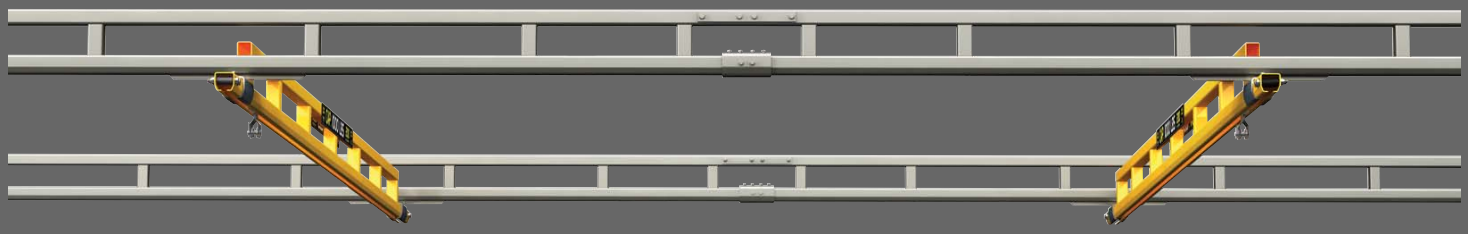
INTERMEDIATE STOPS

These can be placed inside the runway tracks to allow each bridge an independent working area. This means each bridge is isolated into a separate span which minimises the runway track capacity.



BRIDGE BUFFERS

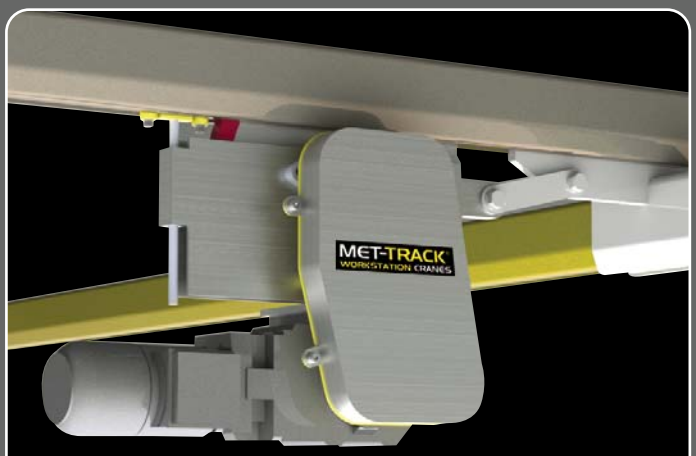
Bridge buffers are suspended from two trolleys in the runway to create a predetermined minimum distance the bridges can operate from each other.



MIXED CAPACITY

Multiple bridges can be used with mixed capacities with only the runway steelwork having to be of a heavier design i.e. two 250kg bridges can work anywhere when installed on 500kg runway kits.

WORKSTATION CRANES
OPTIONS



TRACTOR DRIVES
A standard range of tractor drives are available for applications where powered travelling of the crane bridge and/or hoist trolley is required.

TRANSFER UNITS
Designed to provide a safe, efficient, and easy to operate transfer of a hoist trolley from the bridge to an adjacent bridge or monorail system.

TELESCOPIC BRIDGES
Designed to run within a standard bridge and their extension facilitates working outside the normal crane working area.

CANTILEVER BRIDGE
Where required one or both ends of a bridge can be cantilevered beyond the standard 300mm overhang in order to stop the bridge festoon trolleys reducing the available hoist trolley travel.

PLEASE COMPLETE THIS FORM TO RECEIVE A CRANE QUOTATION

1 MOUNTING CONFIGURATION

☐ Floor Mounted Crane System

☐ Ceiling Mounted Crane System

2 BRIDGE MAXIMUM LOAD CAPACITY

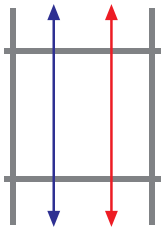
_____ kgs

3 NUMBER OF BRIDGES

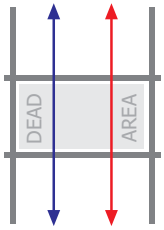
☐ One ☐ Two ☐ Three ☐ Four ☐ Five

* If one bridge is required item No.4 does not apply

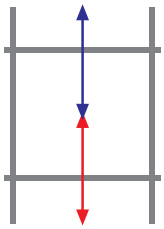
4 MULTIPLE BRIDGE TYPE



☐ **Mixed Capacity Systems**
Multiple bridges can be used with mixed capacities with only the runway steelwork having to be of a heavier capacity i.e. dual 250kg bridge system requires 500kg runway capacity.



☐ **Bridge Buffer Systems**
Bridge buffers are suspended from two trolleys in the runway track to create a predetermined minimum distance the bridges can operate from each other. This provides a moving 'dead area' shown in grey.



☐ **Intermediate Stops**
These can be placed inside the runway tracks to allow each bridge an independent working area, this means each bridge is independent from each other. This minimizes the runway track capacity.

5 ACTIVE TRAVEL (AT) or BRIDGE LENGTH (CBL)

_____ mm **or** _____ mm

6 RUNWAY LENGTH (GTL)

_____ mm

☐ Let the website decides the most economic spans

OR

☐ We have problematic spans (ideal spans listed below)
Maximum span length 9000mm

Span L1 _____ mm	Span L2 _____ mm	Span L3 _____ mm
Span L4 _____ mm	Span L5 _____ mm	Span L6 _____ mm
Span L7 _____ mm	Span L8 _____ mm	Span L9 _____ mm

7 FLOOR MOUNT - SUPPORT STEEL WORK

Load Pin Height _____ mm

☐ Sway Brace **NOT** Required / By Others

☐ Optional Internal Sway Brace Required

8 CEILING MOUNT - SUPPORT STEEL WORK

☐ Fixed Height, No Sway Bracing Required

☐ Adjustable Height

☐ Sway Bracing Kit

9 HOIST OPTIONS

☐ Manual Hoist - no power required

☐ Electric Hoist
- ☐ Festoon Long Travel & Cross Travel
- ☐ Conductor Long Travel Festoon Cross Travel

☐ Vacuum Lifter - Vac Hose Trolleys

☐ Powered Drive
- ☐ Cross Travel
- ☐ Long Travel
- ☐ Both Cross & Long Travel

JDN MONOCRANE

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