



**POWERFEED  
SYSTEMS**

## INSTALLATIONS & MAINTENANCE INSTRUCTIONS



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## BEAMRIDER™ I-BEAM FESTOON SYSTEMS

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The track section of "I" section being RSJ, UB, IPE, or IPN profile should be installed with particular attention paid to the general alignment and levelling, especially at joints where the recommended form of joint is chamfered pre-treatment followed by a good quality weld, which should be ground flush to finish, thus ensuring that there are no possible obstructions for the wheel units on the travelling trolleys across a joint position.

If absolutely essential to join track sections by a bolted assembly it is recommended that some form of adjustment, generally by bolt clearances, is made available with a facility ideally to lock screws after setting in order to achieve a smooth secure unit.

In general, tracks should be horizontal and level however, on occasions slight inclines might be recommended and for these instances specific installation instruction are given related to each particular contract.

It is normal practice to install a system at the storage end of the track length, commencing with the attachment of all trolleys, generally being fitted one by one at the end of the track, or if one space does not allow, or alternative stops are fitted, then it is necessary to assemble each trolley around the track section by the detachment and re-assembly of the wheel units.

The final item to be placed on the track is the static end clamp, this being either welded in position, or alternatively drilled to suit the track section and bolted according to customer's preference.

The towing end clamp is fitted to a mast or cantilever tow arm, again either welding or bolting to customer's requirement. However, on occasions this item is replaced by an actual tow trolley and for these instances this item being track mounted, should be the first item to be installed in a system on the track section as it is the leading unit.

If strainer wire assemblies are being utilised these items should be fitted between adjacent trolleys and end clamps via the "O" shackle provided which locates in the clearance hole facility on trolleys/end clamps and after securing in position it is recommended that the system be traversed along the track section in order to ensure that the lengths of the wire ropes and general traverse capacity meets with the requirements of the system.

Following this, cables can then be inserted, ensuring that the length of the cables is slightly in excess of the length of the strainer wires in order to ensure that the strain is taken at all times by the strainer wire assemblies and not the cables themselves. Before clamping cables in position, a check should be made to ensure that the general alignment and loop arrangement is neat and tidy, as this can have an influence in the future with regard to general system operation and cable life.

After securing all cables in position then the loop clamps, if supplied, should be fitted in the required position, the alternatives according to each individual contract being two clamps per loop in a position

approximately two thirds of the overall loop depth from the trolley for flat cables arrangements only if it is possible to fit one clamp per loop at the bottom of the cable loop.

After completing the installation as described above, a check should be made to ensure all items are secure and that all fasteners are fully tightened and plastic covers replaced where fitted to protect the bolt/screw assemblies. Following this, the system can then be traversed slowly under observation in order to ensure that everything is set and functioning according to the requirements with the traverse facility required. If everything is found to be correct then further installation operations can follow i.e. the clamping of cables in fixed positions after the end clamps/towing trolley and their ultimate termination in the required position.

As a general guide the length of strainer wires is calculated to allow for a 5-10% over travel facility and the cable lengths in a system, excluding tail/termination allowances is calculated on the basis of the track length (traverse plus storage) PLUS 15%. This factor, allowing for catenary effect as well as the additional cable around the cable support, and cable loop bends.

All trolleys are maintenance free since the wheel units are pre-lubricated and sealed for life with resin free greases having a temperature range of -30C up to 120C.



The tightness of all fastenings should be checked at six monthly intervals. Apart from this periodic inspection to ensure that all items are undamaged and operating efficiently, there should be no further maintenance required.

These recommendations are considered by our company to be a standard safety procedure which should be applied to all overhead equipment installed over a working area.



## POWERFEED SYSTEMS

- Festoon Systems
- Standard & Custom Reeling Drums
- Cable & Hose Drag Chains
- Conductor Systems
- Collector Columns
- Flexible Cables
- Plug & Sockets
- Pendant Control Stations
- Radio Remote Pendants
- Worm Gear Limit Switches
- Foot Switches

## SAFETY SYSTEMS

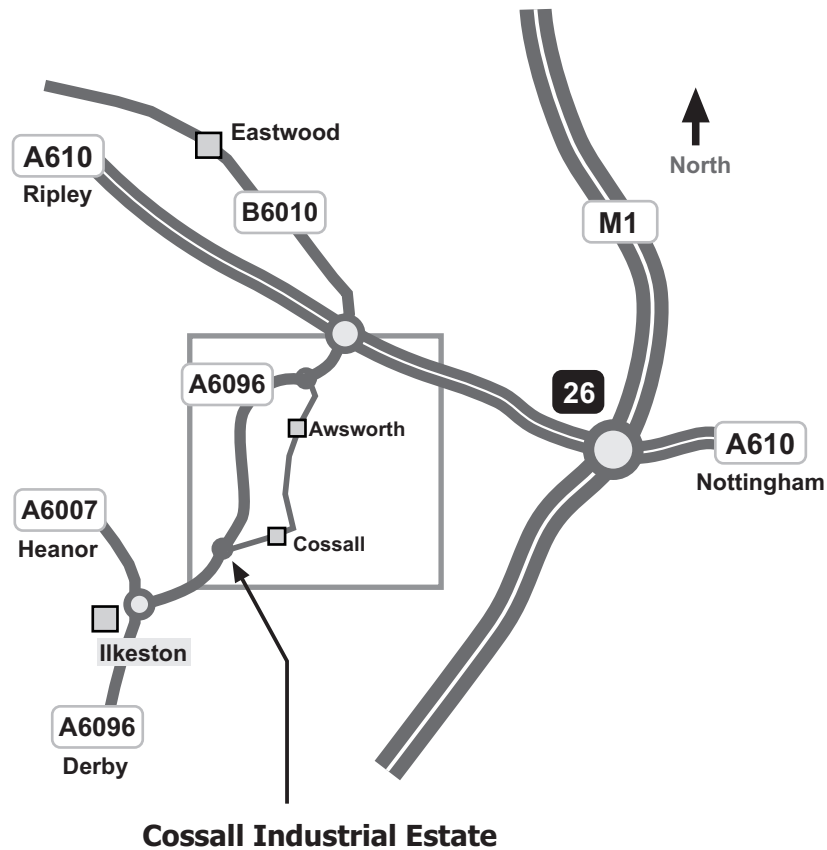
- Vertical Fall Arrest Ladder Systems
- Safetrack Horizontal Track Systems
- Horizontal Wire Systems

## MECHANICAL HANDLING

- **MET-TRACK**® Light Cranes
- **MET-TRACK**® Monorails & Conveyors
- **MET-TRACK**® Sliding Door Gear
- **MET-TRACK**® Custom Track Systems
- **Alu-Lift**® Portable Aluminium Gantry
- Tool Balancers

## OFFSHORE DIVISION

- Cable & Hose Drag Chains
- Cable & Hose Festoon Systems
- Cable & Hose Booms
- Cable & Hose Reeling Drums



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