



KNIGHT GLOBAL
CREATING A NEW STANDARD

Rails form
the Foundation
of your System



**Workstation Crane
and Rail Series**

VER. 12/12

Knight's lightweight enclosed aluminum rail series is manufactured from high strength aluminum alloy that is the ideal solution; whether your load is located directly under the system or cantilevered off to the side. The Aluminum Rail eases installation and reduces overhead rail load requirements. Knight offers (12) different series of aluminum rail that is available in multiple shapes and configurations. The Aluminum Rail load capacity varies by size and lengths of hanger spans.

Aluminum Series Features

- Mechanical Properties:
 - ASTM B221 6005-T5 Series Aluminum Rail.
- Various Configuration Types.
- Overhead and Floor Mounted Options.
- Transfer Loads in the "X" and "Y" Directions.
- Pre-Assembled Accessories.
- Load Trolleys and End Trucks are designed for cantilevered and direct load applications.
- All Load Hangers and End Trucks are designed to prevent binding of bridges and runways.
- Rail Lengths: Up to 30 ft. [9.1m]. without splices.
 - * Max. lengths vary by rail model.
- Maximum Capacity: *Varies by length.*



Enclosed Track Rail Series

The enclosed track rail series is extruded from high strength aluminum alloy that allows for the trolley to travel inside the rail. The enclosed track series is offered in four (4) sizes:

Model	Size(in.)	Max Capacity(lbs)	Deflection Ratio
RAD7510	8 in.	Varies by length	1:350
RAD6110	6 in.	Varies by length	1:350
RAD4110	4 in.	Varies by length	1:350
TR2000	2 in.	Varies by length	1:350

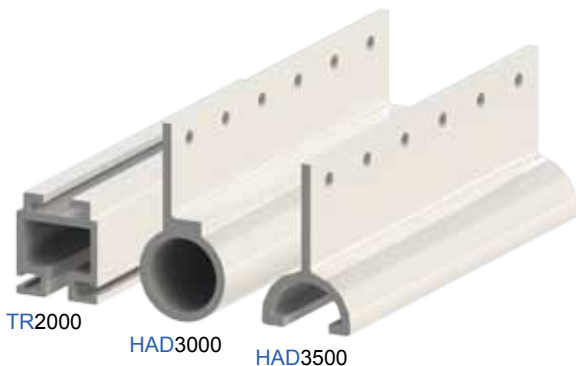
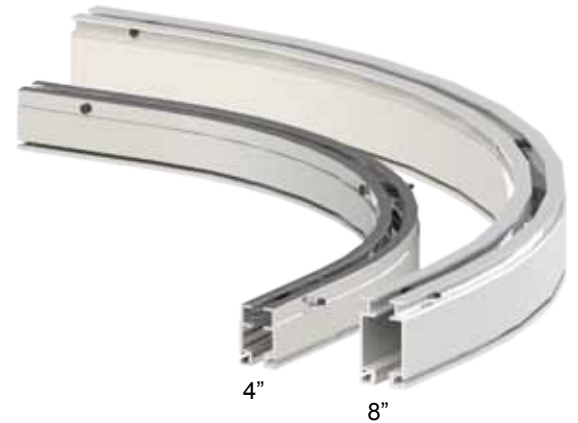
* For more detailed information on size, capacities and lengths, contact your local Knight Global representative or visit www.knight-ind.com.

Curved Rail Series

The curved rail series is an enclosed rail track molded into a radius, and split into two halves allowing for the trolley traveling inside it to transfer loads in the "X" and "Y" directions. Curved rail can be mounted in an overhead or floor mounted configuration.

Size(in.)	Max Capacity(lbs)	Min/Max Radius(ft)	Deflection Ratio
8 in.	Varies by length	5-8 ft.	1:350
4 in.	Varies by length	3-6 ft.	1:350

* For more detailed information on size, capacities and radius, contact your local Knight Global representative or visit www.knight-ind.com.



Tool Rail Series

Tool rail is easily installed on C-Channel or angle iron structures. The TR2000 series offers the greatest weight capacity and allows for festooning trolleys and plant utilities to be attached. The HAD3000 series chambered rail can be used as a fluid power distribution system for water, air, oil and other non-caustic fluids.

Model	Size(in.)	Max Capacity(lbs)	Deflection Ratio
HAD3500	2 in.	Varies by length	1:350
HAD3000	2 in.	Varies by length	1:350
TR2000	2 in.	Varies by length	1:350

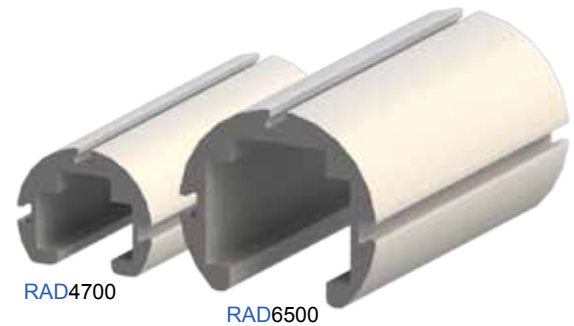
* For more detailed information on capacities, size and length, contact your local Knight Global representative or visit www.knight-ind.com.

Engineered Round Rail Series

Engineered round rail is ideal for low friction vertical or horizontal linear movements. It is capable of handling direct or offset loads as well as high torque applications. Round rail is designed to handle heavier loads when compared to traditional linear motion products.

Model	Size(in.)	Max Capacity(lbs)	Deflection Ratio
RAD6500	6 in.	Varies by length	1:350
RAD4700	4 in.	Varies by length	1:350

* For more detailed information on capacities, size and length, contact your local Knight Global representative or visit www.knight-ind.com.



Engineered Linear Rail Series

Engineered linear rail is ideal for floor mounted or wall mounted low friction horizontal movements. Capable of handling direct or offset loads. Linear rail is a lower maintenance alternative to hardened ground rail and bearing blocks. Its binding is significantly reduced due to its flexible tolerances. The linear rail can be mounted in a horizontal or vertical configuration.

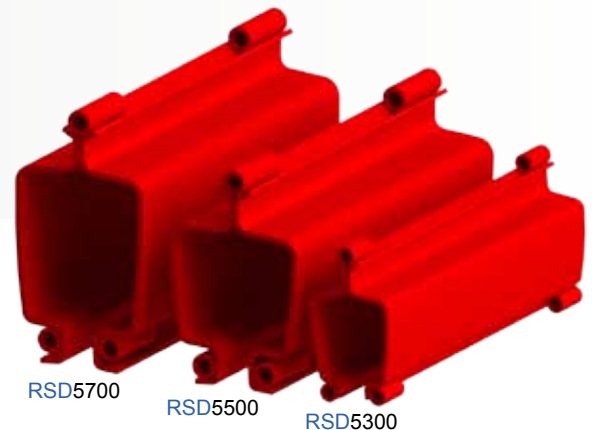
Model	Size(in.)	Max Capacity(lbs)	Deflection Ratio
LRD9500	9 in.	Varies by length	1:350

* For more detailed information on capacities, size and length, contact your local Knight Global representative or visit www.knight-ind.com.

Knight Steel Rail Series

Knight's enclosed steel rail series is manufactured from high grade hot rolled carbon steel and is designed with compatibility in mind. Steel rail is an ideal solution for offset, side and direct load applications that require heavy load carrying capabilities.

Knight offers three (3) different series of steel rail that is available in multiple lengths and weight capacities. The heavy duty steel rail can be mounted overhead or in floor mounted configurations. The steel rail is designed with a bottom flange on which a powered trolley can run for automatic returns. The Steel Rail series load capacity varies by size and length.



Steel Rail Series

Model	Size(in.)	Max Capacity(lbs)	Deflection Ratio
RSD5700	7 in.	Varies by length	1:450
RSD5500	6 in.	Varies by length	1:450
RSD5300	4 in.	Varies by length	1:450

* For more detailed information on capacities, size and length, contact your local Knight Global representative or visit www.knight-ind.com.

* For more detailed information on Workstation Cranes and Rail. Please visit www.knight-ind.com or contact a Knight representative.

Knight Global follows material handling industry standards in determining the capacity and safety factor ratings for enclosed track overhead workstation crane systems. Each component (e.g. rail, hangers, trolleys, etc.) is individually tested to establish its ultimate failure point. From this number, a safe working load is then assigned to the component. Each rail span length is then tested to determine the maximum single point load required to achieve a predetermined deflection based on a 1:350 ratio (1" of deflection for each 350" of length) or a 1:450 ratio (1" of deflection for each 450" of length). Each rail or rail system is then assigned its capacity and safety factor rating. For more information on the recommended rated capacities, please contact your local Knight representative or visit www.knight-ind.com.

Rail Series Accessories

To view our full line of rail accessories please visit www.knight-ind.com.

Knight Global offers a diverse selection of Workstation Crane and Rail System Accessories. Whether your looking for a replacement item or an upgrade, Knight has the rail accessories your looking for. Knight Global manufactures and stocks all rail accessories in-house for immediate processing. Contact us and a Knight Representative will assist you in selecting the correct rail system accessory.



Redundant End Caps
Combination of an end cap and a mid-rail stop that prevents load trolleys or end trucks from exiting the rail.
Model# MRAS4454 (Shown)



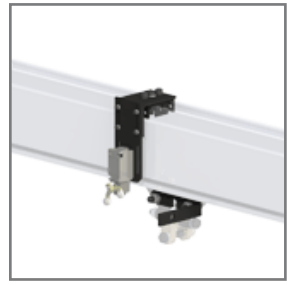
End Caps with Shock
Dampens the impact of a load trolley striking the end cap.
Model# MRAA4805 (Shown)



Mid-Rail Stop with Shock
Typically used to separate the working area of a bridge or runway and/or to prevent a bridge from over travel.
Model# MRAA4498 (Shown)



Bridge Stop Assembly
Prevents bridge rails from colliding into each other.
Model# MRAA4926 (Shown)



End of Travel Switch
Mountable stop to prevent over travel on a rail system. Trolley mounted actuator has a bypass feature.
Model# MRAA4228 (Shown)



Adjustable Bridge Brace
Adjustable bridge brace used to secure parallel rails at specific distances.
Model# MRAA4205-25 (Shown)



Rail Brake
Pneumatic stop that allows operator to park a bridge or arm on the rail. Bolts to most Knight trolleys and end trucks.
Model# MRAA4359 (Shown)



Rail Splice
Joins runways or monorails. A hanger must always be used within 12 inches of a splice for support.
Model# MRHA7503 (Shown)



Inspection Gate
Allows for removal, insertion and inspection of a trolley or end truck without having to remove it from the end of the rail system.
Model# MRMA6160(Shown)



Load Trolleys
Designed to carry loads in a variety of different ways. They allow for effortless movement along the rail.
Model# MRTA7706 (Shown)



End Trucks
End Trucks carry the bridge along the runways of a crane system. Available in a variety of different configurations.
Model# MRES7717(Shown)



Same Plane End Truck
Designed to elevate bridge to the same height as the runway. System stack-up heights can be reduced by as much as 11.5 inches.
Model# MRES7528 (Shown)



Rigid End Truck
Eliminates bridge skew for applications that will require added stability.
Model# MRES7575 (Shown)



Rigid Hanger
I-beam flange hanger used for kick-up loads such as arms or offset loads. Hanger is adjustable up to 1.5 inches vertically.
Model# MRHS40381 (Shown)



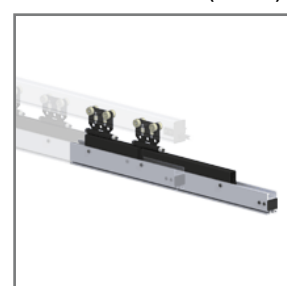
C-Channel Bolt-on Hanger
Non-adjustable hanger used for cantilevered or direct loads.
Model# MRHA4035 (Shown)



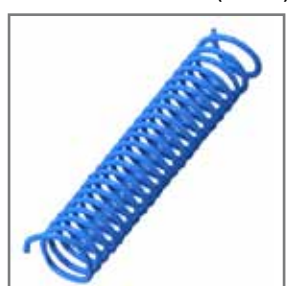
Rod and Ball Hanger
Used for direct loads such as hoists or balancers. Fits I-beam flange widths 2-11 inches. Recommended for light duty use only.
Model# MRHS40361 (Shown)



C-Channel Rod and Ball Hanger
Hanger with threaded rod leveling adjustments. Used for direct loads such as hoists or balancers.
Model# MRHS4034 (Shown)



Telescoping Rail
Extends the reach beyond the working limits of a bridge.



Hose
Hose is available in 1/2" blue coiled nylon hose [5" coil] or 3/8" blue 400 psi straight non-conductive hose. (Hose is ordered per ft.)



Hose Management
Kit includes brackets, fittings and the cable for festooned, coiled hose or messenger cable. (Hose sold separately)
Model# MRMS4202 (Shown)