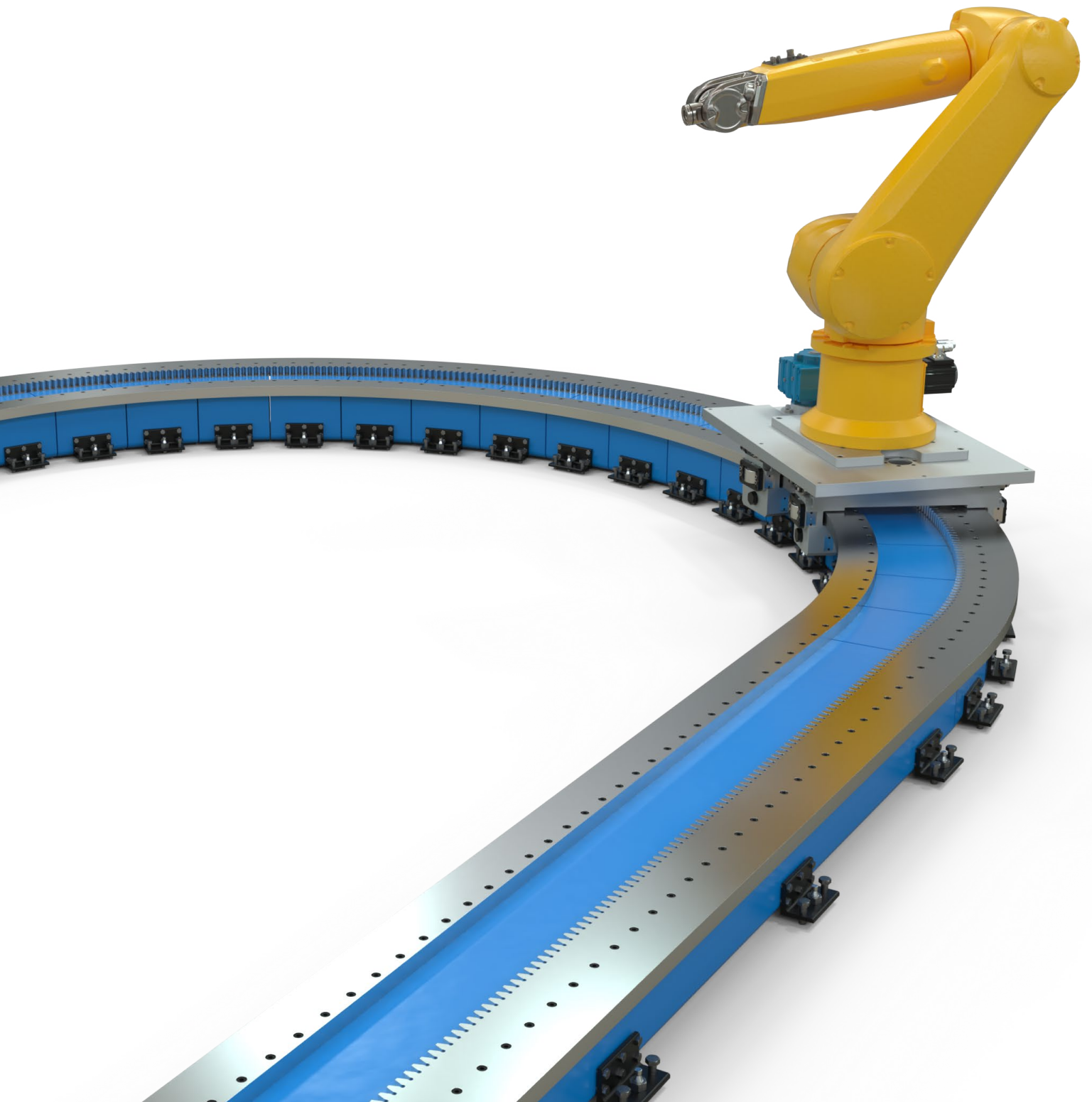


MHD 7th Axis Track System



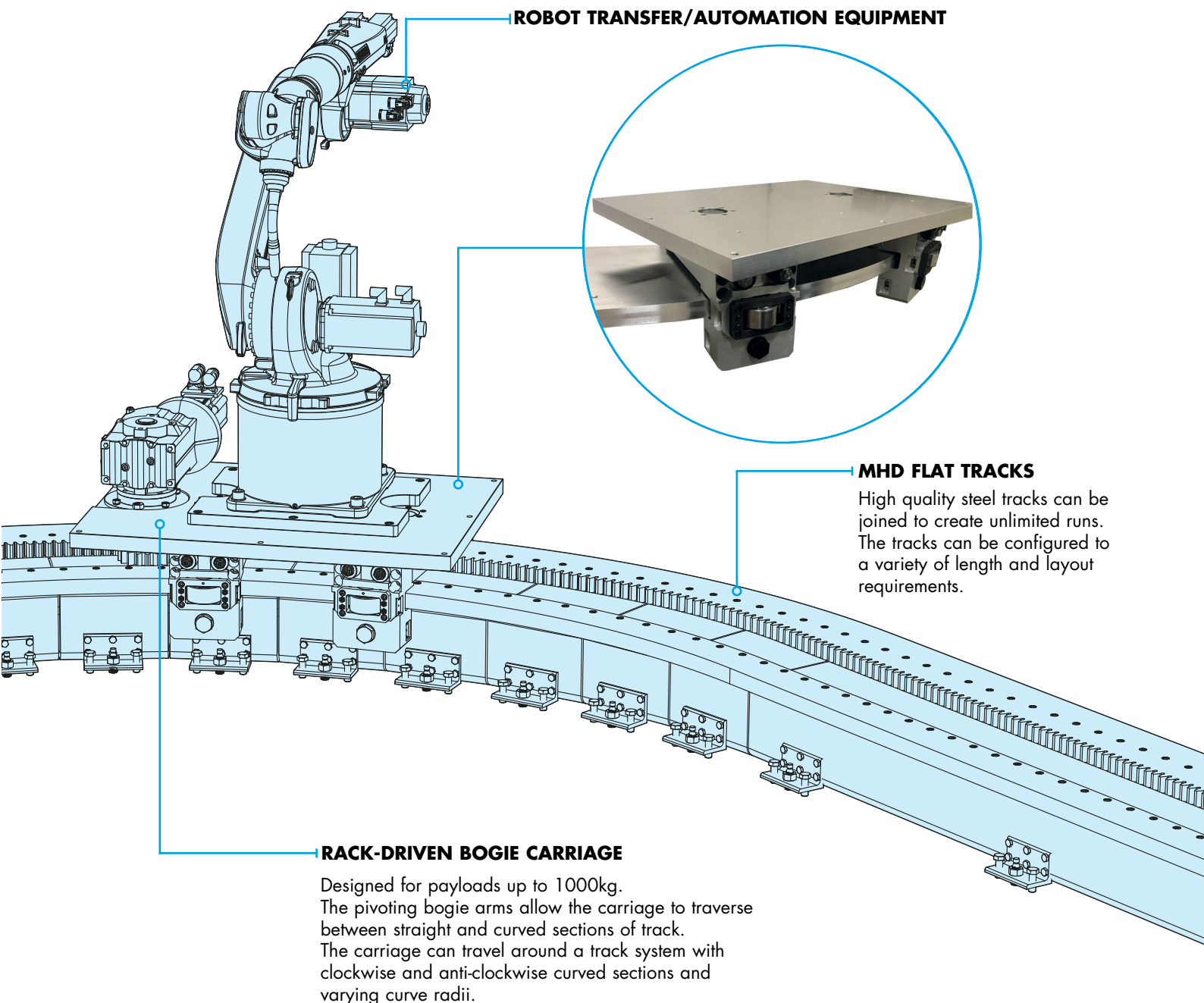
MHD 7th Axis Track System Overview

The MHD 7th Axis Track System is designed for durability and long life. The system is ideally suited to moving large 7th axis robotic systems and transporting heavy automation equipment.

The rack-driven, heavy duty carriage can travel around curved and straight sections of track. The unique bogie mechanism means a single carriage can travel around curves of different radii and varying directions on the same track system. The large carriage size offers stability and high moment load capacity for E-stop situations.

High capacity twin taper roller bearings provide accurate, durable and low-friction movement for a long, trouble-free service life. The bearings are sealed for life and the large diameter wheels make them tolerant of debris. Lubricators in the bearing blocks apply a coating of oil to each bearing to maximise life. The carriage has substantial capacity in all directions but is designed for horizontal use, with particular strength in the downward direction to cater for heavy payloads.

Track systems are built using 40mm thick MHD flat tracks and are available with a generously sized rack to accommodate high driving forces. A wide range of track layouts can be built, with curve diameter and straight lengths tailored to most application requirements.



DRIVE FLANGE & GEARED MOTOR

The integrated drive flange assembly includes a plate for mounting a geared motor to drive the carriage.

SWIVEL BEARING

A heavy-duty swivel bearing allows the carriage to traverse curved and straight sections of track.

CARRIAGE PLATE

Provides a large platform for mounting automation equipment and 7th axis robots. The 40mm thick aluminium plate includes tapped holes for customer use.

LUBRICATORS

Lubricated felts apply oil to each bearing to maximise life.

BOGIE ARMS

Connect bearing blocks to the carriage plate via the swivel bearing. Can be configured to suit different track widths.

MOMENT ROLLERS

Support the carriage as moment loads are applied during movement.

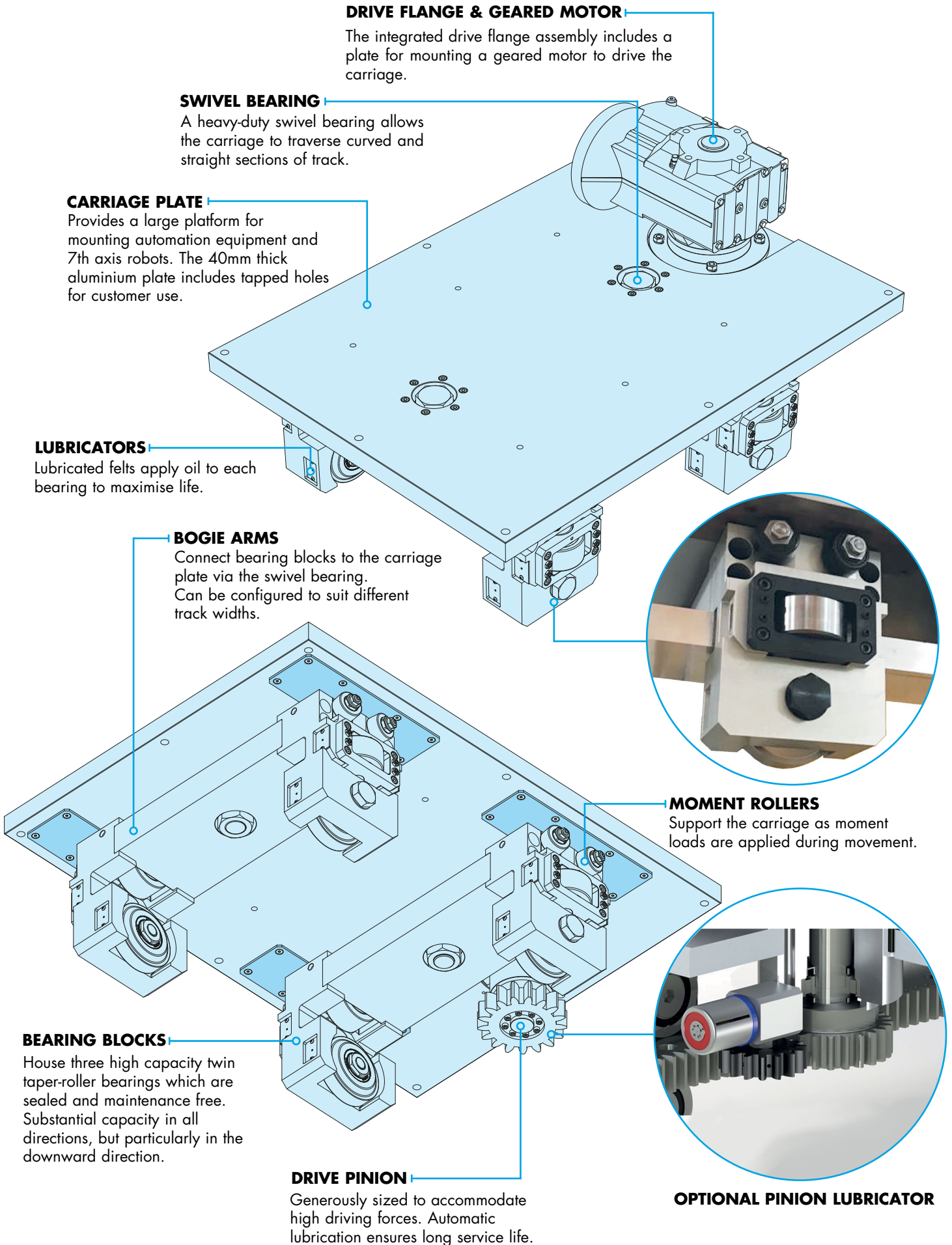
BEARING BLOCKS

House three high capacity twin taper-roller bearings which are sealed and maintenance free. Substantial capacity in all directions, but particularly in the downward direction.

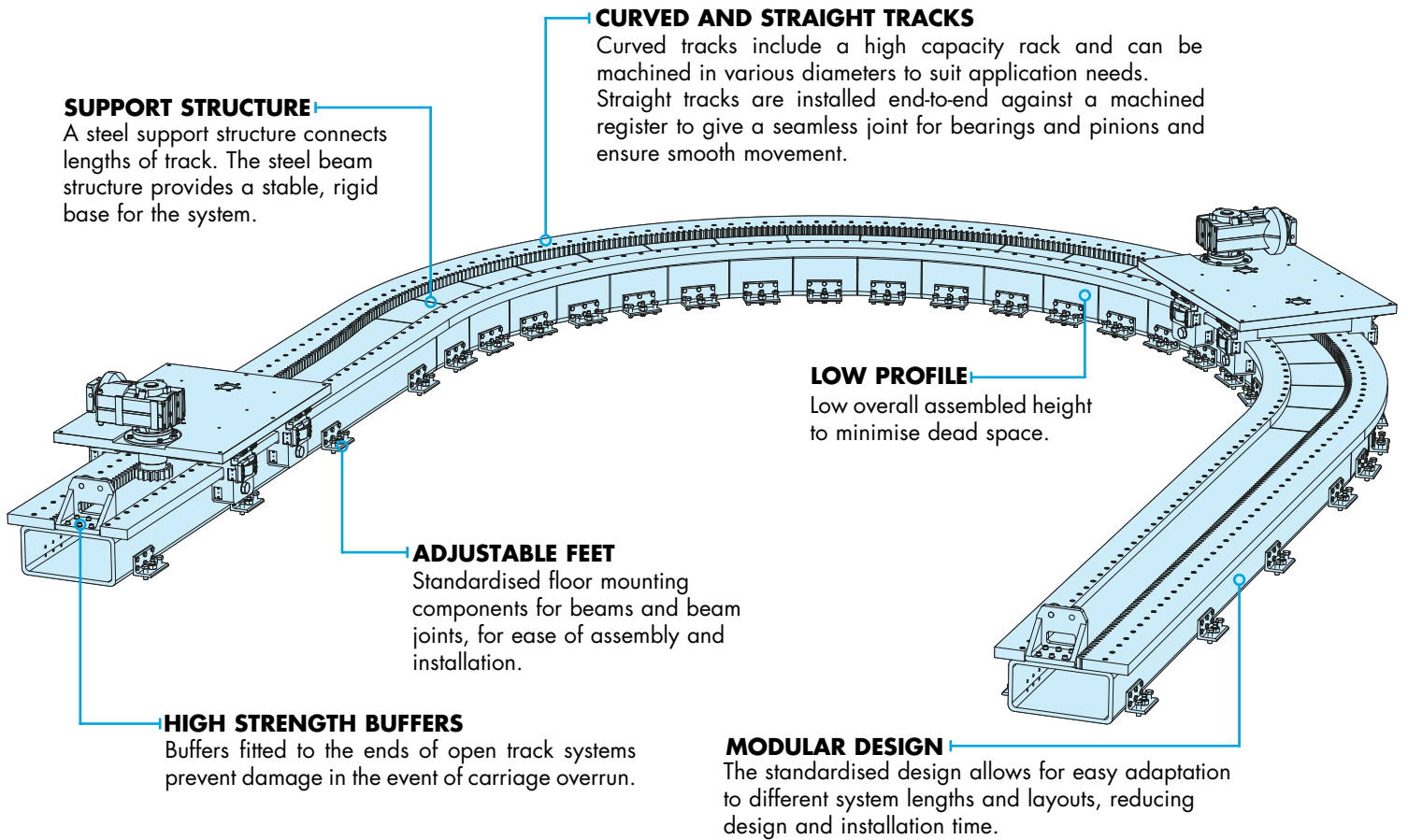
DRIVE PINION

Generously sized to accommodate high driving forces. Automatic lubrication ensures long service life.

OPTIONAL PINION LUBRICATOR



MHD 7th Axis Track System Features



Configurable Layouts

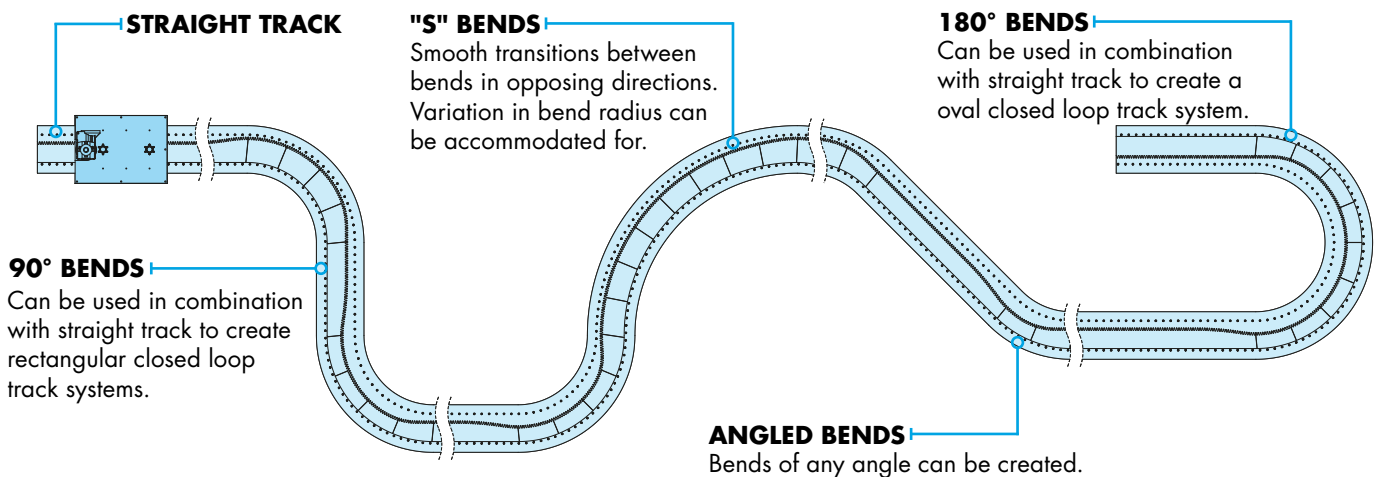
The MHD track system can be built in a range of configurations to support different layout needs:

- Closed and open circuits
- Different shapes: Oval, Rectangular, Circular, 'J', 'U' and 'S' shapes
- Varying curve radii can also be used on the same track system

Connecting elements join the track support structure, allowing long straight lengths to be achieved.

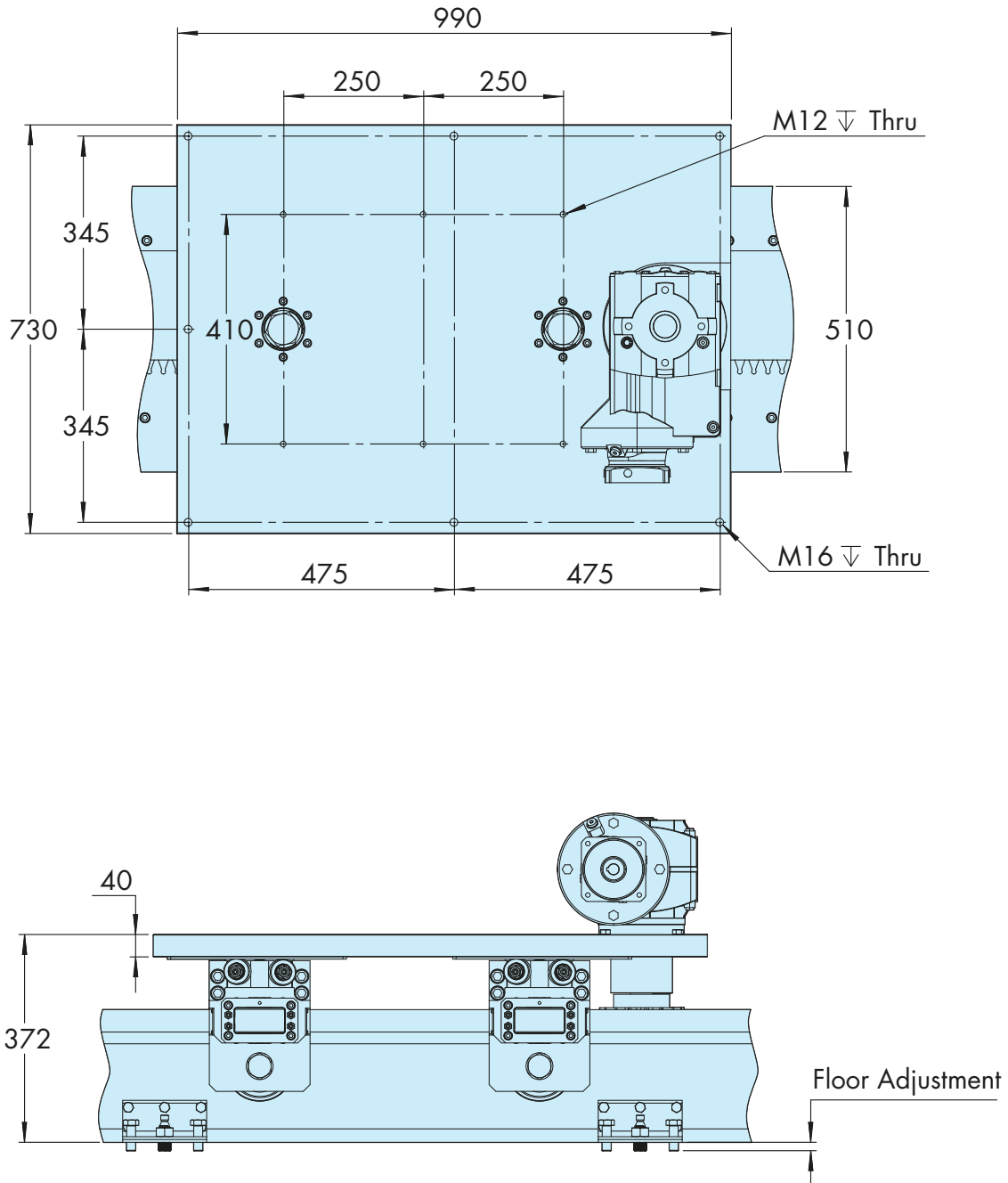
Curved track sections can be machined in a range of diameters - please discuss your application needs with HepcoMotion.

The illustration below shows some of the different track configurations available, which can be used to create a custom track system to meet your requirements:



A 40mm thick aluminium carriage plate is specified as standard. Bearing spacing, carriage plate size and holes for customer use can generally be tailored to application requirements.

The illustrations below show an example carriage assembly with holes for customer use. Please discuss the dimensional requirements of your application with our Technical Sales team at sales@hepcotion.com.



Note: The details shown in this brochure are for communication of the MHD 7th Axis Track System design and layout options and are subject to change.

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