

The image shows a close-up of a gantry system. It features a central black vertical beam with a motor and drive mechanism at the top. This beam is supported by two white L-shaped legs. A horizontal beam, also with a ribbed profile, extends from the top of the black beam to the right, where it is supported by another white L-shaped leg. The entire assembly is set against a solid blue background.

HepcoMotion®

HGS
gantry solutions

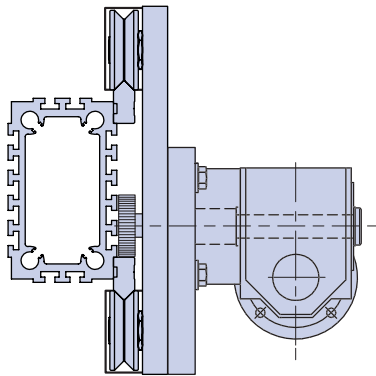
Introducing HepcoMotion® Gantry Solutions

Hepco Gantry Solutions provides a range of gantries constructed around the requirements of your application utilising proven elements and sound design principles. From a light payload, high speed to a heavy payload to be accurately positioned, there is a solution within our range of standard packages.

Our scope of supply is wide and includes all mechanical elements, legs, XZ beams, slides/bearings, rack/pinion/belt drives, cable chains etc to part component supply for the customer to mount to own support structure.

This document outlines general principles and areas of use. For specific details please contact our technical support team who will be happy to prepare a design layout utilising standard Hepco packages.

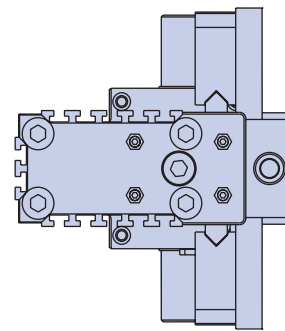
X Axis Solutions



Heavy Duty HB25 Beam

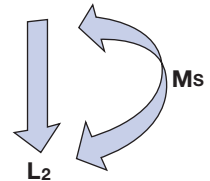
- Rack and Pinion drive
- Integrated rack
- Option for separate rack for higher driving forces
- Bearings and rack lubrication supplied
- Lengths to suit 20 metres is not uncommon
- General speed range 0-3m/s

Capacities	L2	Ms
64ø Vee bearings	6000N	400Nm
95ø Vee bearings	15000N	1150Nm



HDLS

- Belt Drive
- Includes all lubrication
- AT 20 belt 50mm or 75mm wide
- Belt lengths limited to 6 metres
- General Speed Range 0-5m/s
- Ballscrew drive version available, ref: Product code HDF5

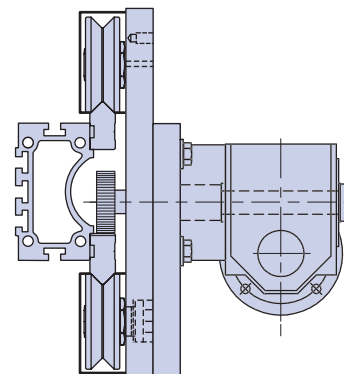


Capacities	L2	Ms
64ø Vee bearings	6000N	400Nm
95ø Vee bearings	15000N	1150Nm

Heavy Duty Compact Beam HDCB

- Smaller more compact beam for lighter loads
- Rack and pinion drive
- Includes all lubrication
- Lengths to suit – generally up to 10 metres
- For max capacity – uses same slides as HB25/HDLS solution
- Option for GV3 NLE slides and 54ø bearings
- General speed range 0-3m/s

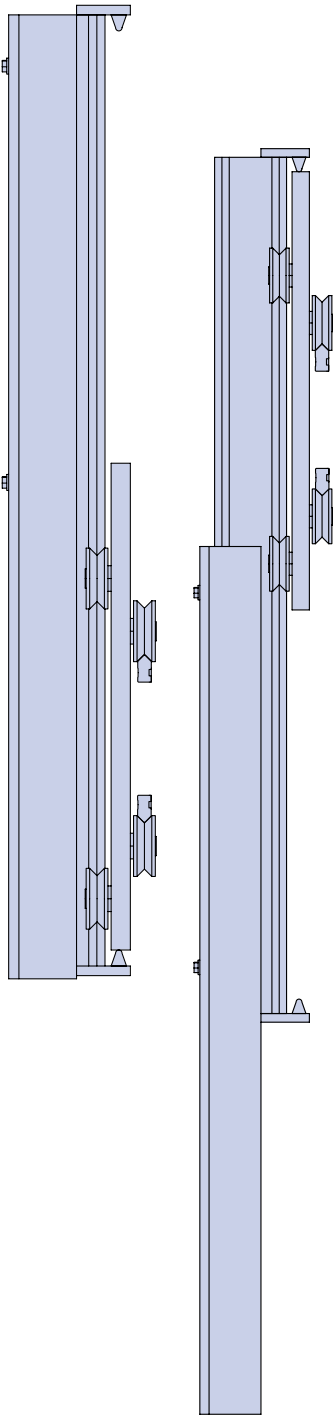
The Heavy Duty Compact Beam can also be fitted with a ballscrew drive ref HDCS and whilst it can be used as an x axis solution, it is mainly used in Z axis applications. Load capacities **L2** and **Ms** are based on 5000km life.



Capacities	L2	Ms
64ø Vee bearings	6000N	300Nm
95ø Vee bearings	15000N	900Nm
54ø Vee bearings	4500N	300Nm

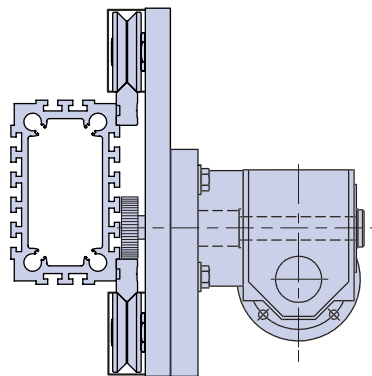
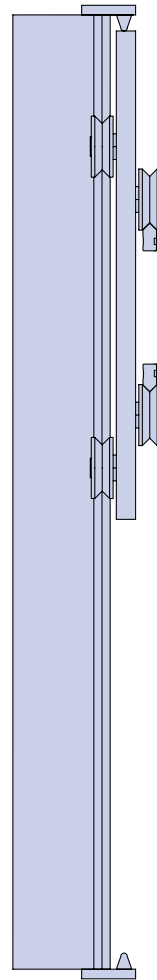
Z Axis Solutions

Many of the elements used as an x axis could, in fact, be incorporated into Z axis installations. As with the x axis, the choice of a particular solution will depend very much on the payload being carried, speed, accuracy of placement during cycle and stroke distance. Please contact our design department for advise and design support.



Telescopic Axis

- Heavy duty compact beam
- 2 stage telescopic action
- 64ø vee bearings
- Stroke range 2m
- Payload range 0-60kg

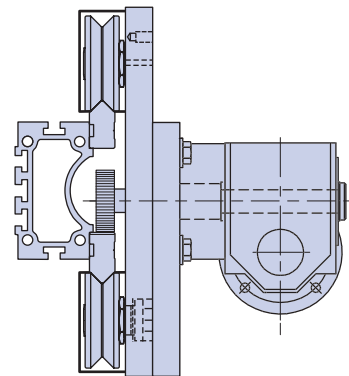
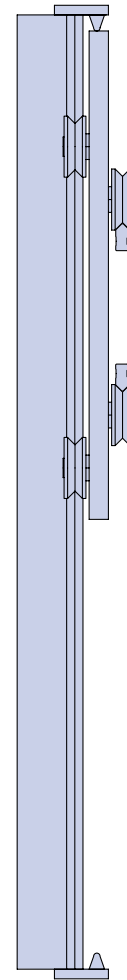


HB25 Beam

As used in x axis

- Rack/pinion drive
- Belt drive – HDLS
- Ballscrew drive – HDFS

	Rack	Belt	Screw
Stroke Range	3.5m	3.5m	3m
Payload Range	120kg	300kg	1000kg



Heavy Duty Compact Beam HDCB

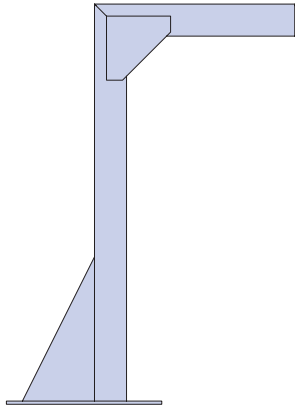
As used in x axis

- Rack/pinion drive
- Ballscrew drive – HDCS

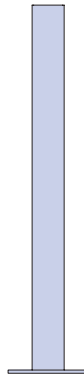
	Rack	Screw
Stroke Range	2.5m	1.5m
Payload Range	120kg	500kg

Gantry Support Legs

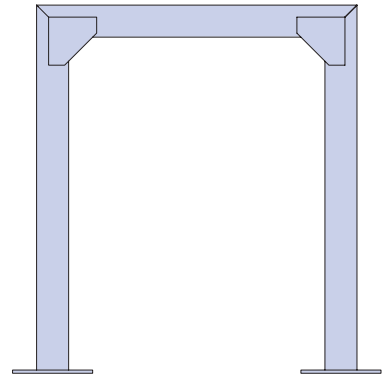
For most applications we will utilise steel box section 200mm x 200mm sq, painted to your requirements. We offer 3 basic support leg constructions which will meet the requirements of most designs. Legs are supplied with jacking screws to simplify levelling.



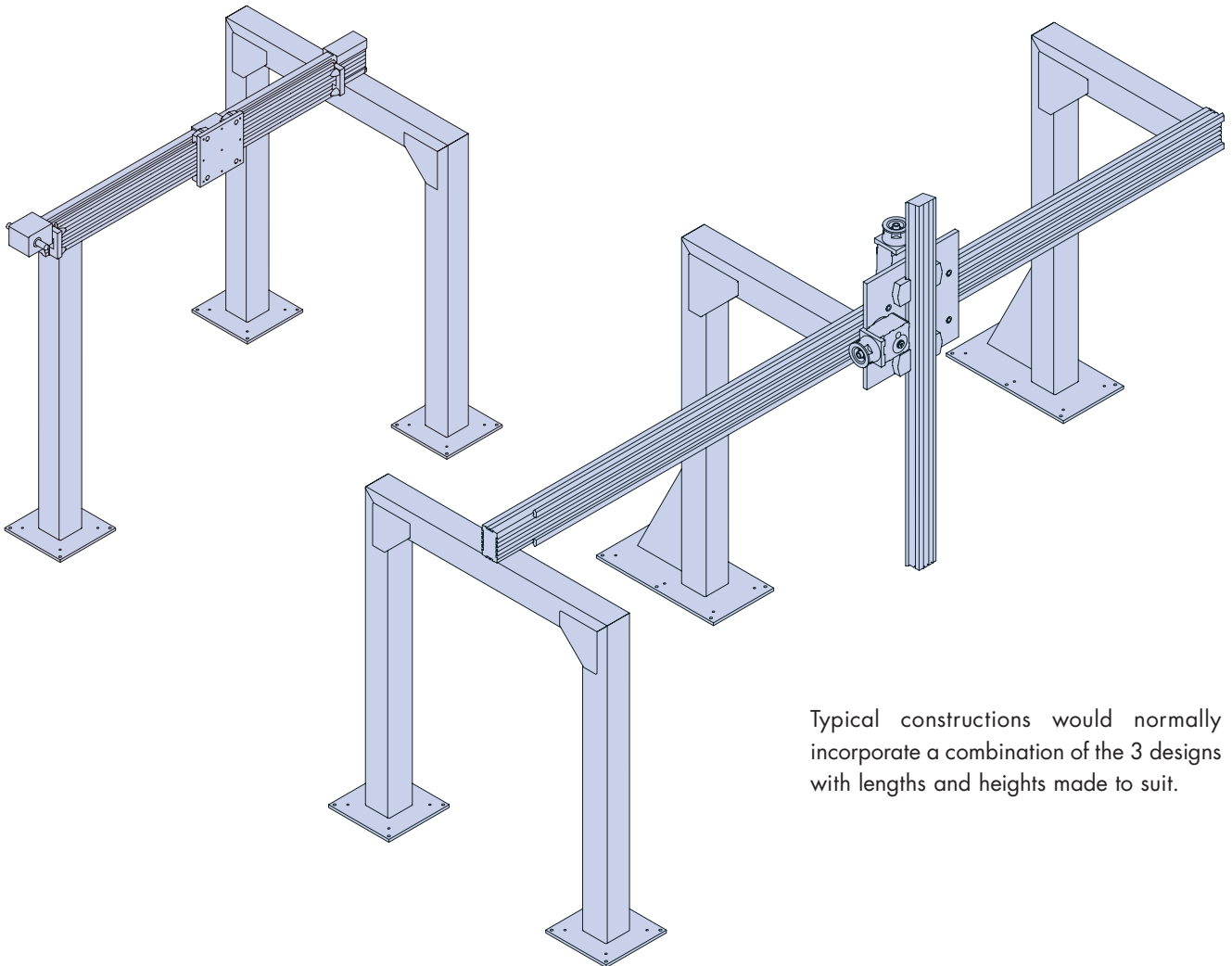
Cantilever



Single



Goalpost



Typical constructions would normally incorporate a combination of the 3 designs with lengths and heights made to suit.