



HepcoMotion®

**The Complete
Product Range**

HEPCO[®]
www.HepcoMotion.com

HepcoMotion® are world leaders in linear motion technology – we originated the V guide principle and have spent the last 35 years developing it to meet the demanding needs of today's automation and general industrial markets.



Tiverton UK – Head office at main manufacturing site

Our products have provided thousands of customers with:

- **Total reliability in hostile or no maintenance applications**
- **Reduction in machine down time, increase in bottom line profits**
- **Ability to work at high speed for long periods with total reliability**
- **Reduction in noise**
- **Simplified design using a wide range of system packages and assemblies**

Today we manufacture many variations of the V guide from light high precision systems for accurate positioning at high speed to heavy load slow moving applications in hostile, no maintenance installations.

In order to satisfy the widest range of engineering challenges we offer, in addition to individual components, a range of driven products, belt, ballscrew, rack and pinion assemblies, or complete machine gantries. We can also supply systems which utilise assembled HepcoMotion components to provide the basis of a complete machine solution.

In our Complete Products Leaflet you will find, for ease of reference, the products categorised as:

Linear Motion Products

Circular & Continuous Motion

Machine Construction & Automation Elements

Driven Options

With this range we are confident you will find a product suitable for your complete machine building needs from basic linear slide systems to telescopic slides, linear actuators and frames to mount components and systems onto. Product drawing files are available in either 2D or 3D formats on CD or are downloadable from our web site www.HepcoMotion.com. Technical product catalogues are also available from our site in pdf format.

HepcoMotion's team of Applications Engineers, Product Specialists and network of Field Sales Engineers are available to provide application assistance and to help you select the most cost effective solution for your application.

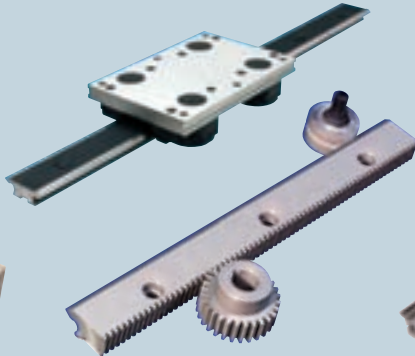
In addition we make many special products to customers' own designs always at competitive prices and with sensible delivery times.

We look forward to being of service for all your machine needs.

Linear Motion Products pgs 3-10



GV3
Linear Guidance &
Transmission System



HDCB
Heavy Duty
Compact Beam



Simple Select
Vee Slide Linear
Guidance System



HDS2
Heavy Duty
Slide System



LoPro®
Aluminium Based
Slide System



SL2
Stainless Steel
Based Slide System



DualVee®
Single Edge
Slide System



UtiliTrak®
Lightweight U
Channel Guideway



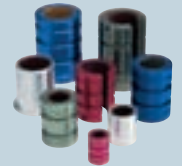
Mini Rail
Miniature
Linear Guides



HTS
Telescopic Ball
Bearing Slides



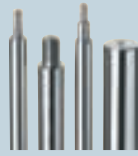
MHD
Max Heavy
Duty



Pacific
Simplicity™ Linear/
Rotary Bearings



ASK
Ball Bushing Units



LGB
Linear Ball Guides



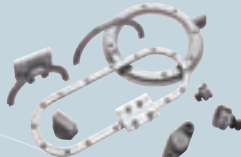
SH
Shock Absorbers

Shaft
Precision Steel
and Aluminium Shaft

Circular & Continuous Motion pgs 10-11



DTS
Driven Track System



PRT
Ring Slides and
Track System



HDRT
Heavy Duty
Ring & Track

Driven Options pgs 13-17



PDU2
Profile Driven
Unit



DAPDU2
Double Acting
Profile Driven Unit



DLS
Linear Transmission
and Positioning System

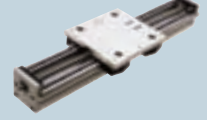
Machine Construction & Automation Elements pgs 11-13



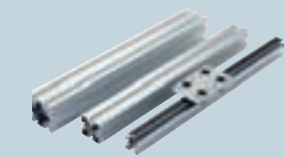
HPS
Powerslide-2 Guided
Rodless Cylinder



HDLS
Heavy Duty
Driven Linear System



HDCS
Heavy Duty
Compact Screw



MCS
Aluminium Frame and
Machine Construction System



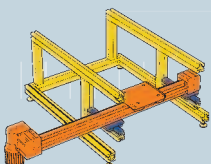
HGS
Gantry Solutions



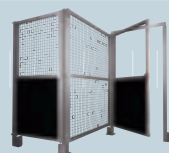
PSD120
Profile Screw
Driven Unit



SBD
Sealed Belt Drive



HSS
System Solutions



MFS
Machine Fencing
System



BSP
Ballscrew Premier

Linear Motion Products

Products from this range will be suitable for use in machine designs where it is required to incorporate a component or linear product into the machine structure and a separate drive is attached.

Assembled units can be fixed simply to steel bases or mounted on to our MCS aluminium profile sections which, in turn, make ideal machine structures.

All assembled units allow the easy attachment of a drive whilst a rack and pinion facility is provided on both GV3 and HDS2 ranges.

With an assembled unit it really is the ultimate in 'Fit and Forget' solutions as lubrication is provided through our proven cap wiper technology.

For maximum flexibility though individual components can be selected across the range and built into any construction to achieve a linear motion. The most simple of linear motion can be achieved by the use of one slide and four bearings all built into the machine design, with of course, cap wipers for maximum performance.

GV3 – Linear Guidance and Transmission System

Simple Select – Vee Slide Linear Guidance System

HDS2 – Heavy Duty Slide System

HDCB – Heavy Duty Compact Beam

SL2 – Stainless Steel Based Slide System

DualVee® – Single Edge Slide System

LoPro® – Aluminium Based Slide System

UtiliTrak® – Lightweight U Channel Guideway

HTS – Telescopic Ball Bearing Slides

MHD – Max Heavy Duty

Pacific – Simplicity™ Linear/Rotary Bearings

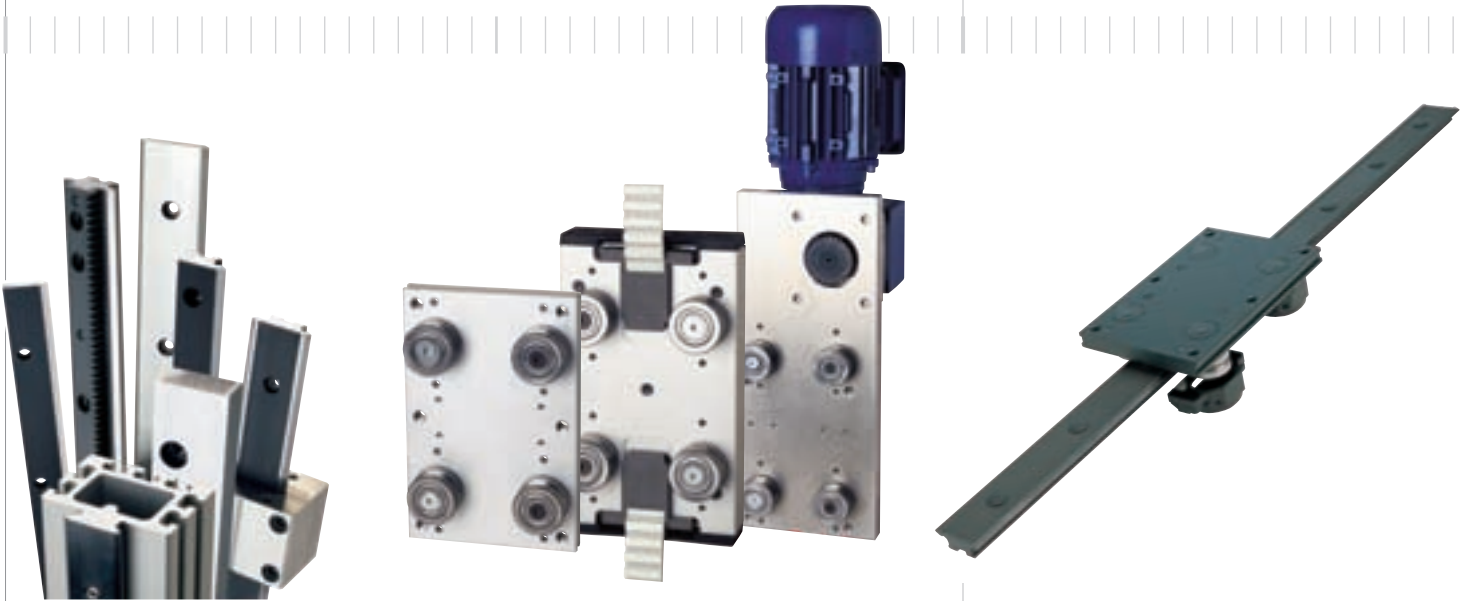
Mini Rail – Miniature Linear Guides

Shaft – Precision Steel and Aluminium Shaft

ASK – Ball Bushing Units

LBG – Linear Ball Guides

SH – Shock Absorbers



A comprehensive linear solution designed to serve the majority of automation applications, GV3 follows the lead set by the renowned Hepco Generation II and CM systems. The best features from these products are incorporated into a huge range with many new sizes, types, precision grades and options. The result – an optimum linear solution that can be specified to suit both application and budget.

- Twin, Double Row and Slimline Bearings to suit your application
- Flat Tracks and Track Rollers for mounting compliance, saving costly alignment time
- All slides and Flat Tracks available in 3 grades of precision
- Unground areas have an attractive black finish to inhibit corrosion
- Tamper Proof Carriages are accurately set then locked into position
- Integrated rack drive and belt drive reduce design time

Mix and match between sizes, types and precision grades gives the most suitable combination for every application.



For the customer who wants a simple, ready to mount assembled unit Simple Select can be specified in seconds.

Four useful sizes of spacer slides complete with carriages, all assembled ready for installation and despatched from our factory in 24 hours or less. Simple specifying procedure offers quick assessment of life for a given load, and full size end views are included in the brochure for comparison.

- Select standard range of four popular sizes
- For ease of specifying slides come in standard, easy to use lengths
- One carriage length fits all slides for each section
- Low installation time, simply bolt slide down
- Fitted cap seals for 'Fit and Forget' extra low maintenance
- Utilises double row bearing for extra long life
- Solid steel hardened vee edge slide offers extremely low wear characteristics
- Despatched in 24 hours or less

HDS2

Heavy Duty Slide System



HepcoMotion® has updated the highly successful Heavy Duty Slide System, retaining the best features from the previous system, and incorporating them in a greatly expanded range under the name of HDS2. Many new components have been added including larger bearings with increased load capacity, two sizes of construction beam, additional single edge V slides and flat tracks, as well as a range of drive options. All this, with an option for stainless steel or corrosion resistant components as standard, enables the HDS2 range to offer a solution for most customer's high load applications.

- Precision ground, commercial and stainless steel systems available
- Ten Bearing options 64mm – 150mm diameter
- System capacity up to 68kN
- Spur or helical rack options
- Slides and Flat Tracks in one piece up to 4 meters
- Unique V Bearing wiping action – works well in harsh environments
- V Bearing & Track Roller Cap Wipers
- Beams and components ideal for gantry use

HDCB

Heavy Duty Compact Beam



The Heavy Duty Compact Beam is a highly versatile unit having the facility to mount slides on to all 4 corners. This makes it particularly suitable for use as a telescopic Z axis in gantry applications or in areas where system height is restricted. Slides mounted can either be from our Heavy Duty single edge range or GV3 single edge NLE section. There is a choice of bearings, 64mm and 95mm dia for the Heavy Duty slides and 54mm dia for the GV3 single edge option. HDCB is available with assembled carriages complete with lubrication and ready to mount to your machine.

- Compact high strength aluminium beam section
- Beam T-slots compatible with our MCS section for easy mounting
- Option for rack and pinion drive
- Beam available in one piece up to 6m
- Cap wipers provide positive lubrication and protection for vee bearings
- Unit can be used as a stand alone member if need be

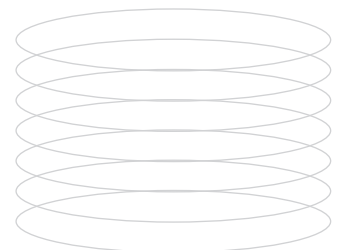
SL2

Stainless Steel Based Slide System



HepcoMotion's SL2 Stainless Steel Based Slide System offers an extensive range of stainless steel slides and bearings, together with specially treated aluminium components. Whether your application requires very high precision under clean room conditions with no lubrication, or excellent corrosion resistance in washdown and harsh environments, SL2 is the ideal linear choice, offering long service life with virtually zero maintenance.

- Hardened and precision ground slideways for maximum reliability
- Quality stainless steel bearings with cap seals for long system life
- Aluminium components are coated to U.S. Dept of Agriculture approved standards
- Dirt Traps removed by plastic plugs in all counterbores
- Supplied as a complete assembly or in component form



DualVee®

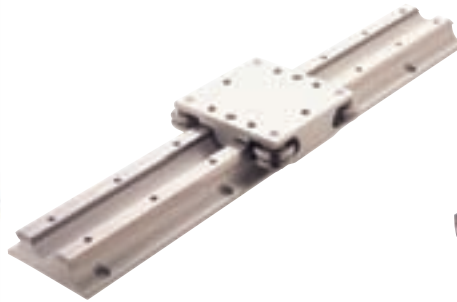
Single Edge
Slide System

LoPro®

Aluminium Based
Slide System

UtiliTrak®

Lightweight
U Channel Guideway



A highly effective system for lower cost and accuracy builds up from a single edge track and matching wheels. DualVee® components are available in a range of sizes to suit most applications with new high temperature and vacuum/clean-room options available to complement existing stainless steel components.

- Track lengths up to 6m with unlimited lengths achievable by butting
- Available drilled or un-drilled to minimise additional engineering
- Tracks available with optional black finish to inhibit corrosion
- Ex-stock availability

An extension of the DualVee®/UtiliTrak® concept, LoPro® is a rugged and robust wide based track system. Available ready to mount with pre-drilled fixing holes and suitable for a range of drive options.

- Low system height with higher load capacity
- Stainless steel and wheel cover options for the most aggressive environments

The UtiliTrak® linear guide is designed for applications where low cost, easy installation and minimal maintenance requirements are the primary design objectives. Constructed with DualVee® Motion Technology, UtiliTrak® offers high reliability, easy installation and low maintenance in a sleek, compact design.

Designed primarily for transport type applications, UtiliTrak® is intended for use where load capacity, stiffness, and positional accuracy are less demanding than machine tool grade applications. UtiliTrak® offers a low cost alternative to square rail recirculating element technologies, which often require a significant amount of surface preparation, adding significantly to the total installed cost.

- Antifriction operation
- Low noise
- Smooth running
- High speed capacity
- Unlimited travel lengths
- High load capacity
- Impervious to contamination

HTS

Telescopic Ball Bearing Slides



A high quality, low cost range of recirculating ball bearing telescopic slides to handle loads up to 280kg.

Range includes a unique super slim series where space is at a premium for light duty loads through to heavy duty types for larger drawers for access to heavy components.

Assembled drawers can have full over travel for total and easy access to the drawer components and can be easily removed through a simple disconnect lever, if required.

Units can also be supplied with a lock out feature to prevent accidental closure of the drawer.

- Rigid member recirculating ball bearing slide structure maintains smooth motion over complete travel
- High static capacity from rigid structure with minimal deflection
- Quality cold rolled steel members with mounting holes/slots ready for quick installation
- All slides supplied bright electro zinc plated or stainless steel where stated
- Customised slides are available to special order

MHD

Max Heavy Duty

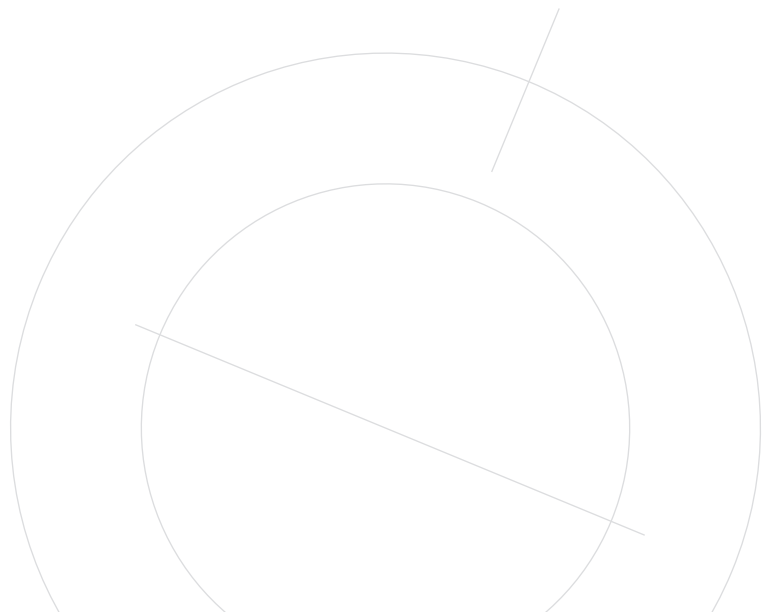


MHD has been specifically designed to transport robots and heavy automation equipment along a linear track to perform assembly operations in the automotive and heavy mechanical handling industries.

Suitable for high speed operation up to 6 m/s MHD has a block capacity of 5 tonnes which will lend itself to many applications where high offset loads are seen in heavy automation applications where durability and long life is required.

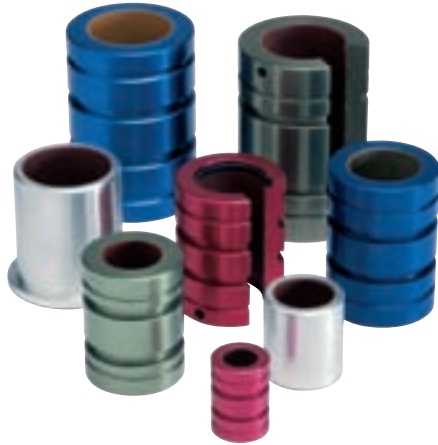
The track incorporates a rack drive allowing high driving forces to be applied to cover the wide range of load and speed requirements the system has to operate under. Blocks are low maintenance with a high capacity taper roller bearing in the most heaviest loaded direction.

- Nominal track size 100mm x 40mm with or without spur or helical gear drive
- Hardened and ground tracks in easy to manage 1.4m lengths, long lengths simply provided by butting
- Mod 5 Spur or Mod 4 helical gear option
- Blocks incorporate 3 rollers for guidance, top roller under most load is high capacity taper roller bearing
- Ductile cast iron block for maximum rigidity, incorporates hardened steel end scrapers
- Hardened pinion comes complete with locking bush



Pacific

Simplicity™
Linear/Rotary Bearings



Pacific Simplicity™ bearings were developed in response to requests from major U.S ball bushing users – they wanted a maintenance-free bearing that simply would not fail.

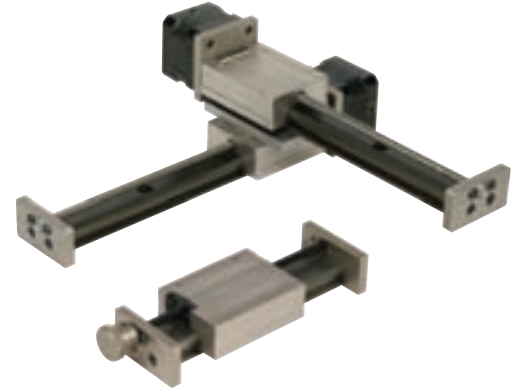
Dirt, vibration, shock loading and water washdowns were causing premature failure, often within days. The resulting Simplicity™ design features a Frelon® self-lubricating liner material securely bonded into the housing, giving the ability to operate in all types of environment – even under seawater!

The Pacific range is interchangeable with many existing ball bushings, being available in Metric, Japanese Metric and Imperial sizes. A wide variety of bearing housings are offered, including flange mountings and Pacific's patented self-aligning pillow blocks. Shafts used can be either standard hardened/ ground or soft 300 series stainless if the application requires – a truly versatile bearing.

- Self lubricating
- Linear and rotary motion from a single bearing
- Load capacity 20x greater than equivalent size ball bushing, life expectancy 270x greater
- Almost universal chemical resistance
- Will not catastrophically fail
- Unaffected by dirt and contamination
- Excellent shock and vibration absorption
- Temperature range -240°C to +260°C

Mini Rail

Miniature Linear Guides



Based on Pacific Bearing company's proven Simplicity™ technology Mini Rail miniature linear guides provide an interchangeable alternative to recirculating guideways in 5 useful sizes. The self lubricating design requires no sealing and will work in extreme temperature conditions and in environments which would bring early failure to recirculating guides. Available in 3 grades Mini Rail is the cost effective solution where reliability is paramount.

- Corrosion resistant across entire range
- Self lubricating
- Interchangeable with miniature profile rails sizes 7 – 20mm
- Quiet and smooth operation
- Dampens vibration
- Will not fail catastrophically
- Tolerates shock loads
- Can work in high or low temperature conditions

Shaft

Precision Steel
and Aluminium Shaft



The ideal complement to HepcoMotions' range of ASK and Pacific bearings is our range of precision steel or aluminium shafts. The shaft you specify is vital to the performance of your linear system, using the wrong component can seriously impair the efficiency/longevity of the entire system.

When specifying Pacific or ASK bearings, we want you to optimise their phenomenal performance by providing a range of hard or soft shafts, with various machining options available.

- Support rails available ready to mount for high dimensional accuracy and rigidity
- If weight is a consideration tubular or aluminium options are available to suit almost any requirement
- Precision hard and ground steel shafts h6 tolerance or class L, surface finished to 0.2 – 0.4µm for maximum bearing life
- Metric sizes from 5 – 150mm, 3/16 – 4" Imperial
- For exceptional performance, in corrosive environments, 300 series stainless steel or hardcoat anodized aluminium

ASK

Ball Bushing Units



The benefits of ball bushings are well known. This range of ball bushings combines competitive prices with uncompromised quality whether in standard sizes or long series for increased rigidity. Bushings with housings and machined datum faces provide reduced engineering solutions. Flanged housings solve offset load problem, which cause increased design and assembly time.

- Increased loads reduce the number of units required
- Pre-machined datum plates reduce engineering
- Provision for connection to central lubrication system
- Ease of integration

LBG

Linear Ball Guides

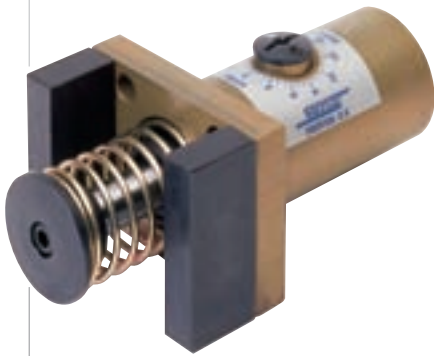


A comprehensive range of Linear Ball Guides covering the more popular sizes and types interchangeable with the Industry standard. High quality, good accuracy with exceptional rigidity Linear Ball Guides from HepcoMotion are designed around a four row angular contact ball track concept which provides a high load capacity in a compact space envelope, reduced differential slip together with good system compliance. A stock range is available which will suit most automation requirements, however, a whole combination of preloads and grades can be supplied to suit individual applications.

- Built-in felt wiper to aid lubrication
- Optional oil tank feature to increase maintenance intervals and to prolong system life
- Smooth recirculating system – cuts down on noise
- Steel protective cover – reduces debris traps
- Range of grades and preloads to suit all applications
- Integral all round block sealing for added protection
- Stainless Steel Miniature Series available

SH

Shock Absorbers



The ideal complement to HepcoMotion's linear guidance systems, SH Shock Absorbers will eliminate all damaging impact forces created by moving loads and objects. Since energy is dissipated at a uniform rate, moving objects are brought to rest far faster than with other damping methods. In addition to excellent performance where shock absorption is required as if the norm, SH units are a cost-effective machine protection method in case of control system failure.

- Extended machine life
- Higher operating speeds mean greater production throughput
- Reduced stress in associated parts
- Reduced noise
- Reduced design and fabrication costs
- Full threaded and fixed flange types available, together with all mounting accessories required



Circular & Continuous Motion

An innovative range of products all designed to save time when undertaking simple or complex assembly operations.

Continuous Motion products will replace the need for a number of linear movements where assembly operations specifically are being carried out. The incorporation of one drive providing the motion for multiple carriages enables rapid movement between assembly stations and will not only reduce system design costs but will enable the whole assembly process to be carried out quicker.

Complete systems are available with the drive and machine base as in the DTS product or as a Ring and Track System with assembled carriages, the drive then being incorporated within the machine design.

Circular motion products provide low friction rotational movement for a multitude of tasks, the products are especially useful where space is at a premium.

DTS – Driven Track System

PRT – Ring Slides and Track System

HDRT – Heavy Duty Ring & Track

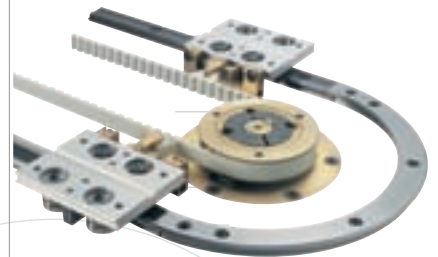
DTS

Driven Track System



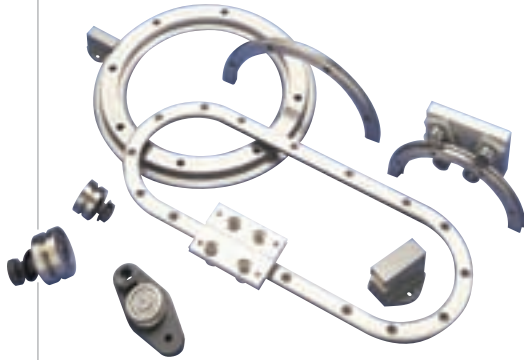
Using the HepcoMotion PRT Ring Slides and Track System as its basis, DTS is a complete unit ready to be incorporated into a continuous positioning or dedicated assembly machine. Carriages are propelled around an oval or rectangular circuit with virtually unlimited straight length, driven by pulleys and a timing belt. The provision of all transmission and mounting components as a complete integrated package means huge savings are made in both design and build time.

- Ingenious 'trip latch' mechanism disengages drive if carriage is impeded
- Carriage locking system for accurately repeatable location
- Mounts directly to HepcoMotion MCS Machine Construction System
- Two basic sizes with direct load capacity up to 400kg per carriage



PRT

Ring Slides and Track System



Two products in one catalogue designed to solve circular motion problems – Ring Slides for circular or part circular movement and Track Systems for combined linear and circular motion applications. These products are unique in the combination of accuracy, capacity and design flexibility they provide.

- All slides with hardened 'V' running surfaces, available ground or unground in a range of sizes
- Ring Slides with gear-cut option for ease of driving
- Track Systems allow continuous movement of carriages over unlimited lengths
- Low friction, play-free movement
- Ring slides allow services to be routed through centre
- Commercial unground version available on request
- Stainless Steel options available

HDRT

Heavy Duty Ring & Track



The Heavy Duty Ring and Track is a development from the successful PRT product and offers the user a larger range of single edge rings with higher load capacities from 512mm up to 1656mm dia. In addition there is one size of track system using a double edge ring segment, linked to our Heavy Duty linear slides, to provide a product capable of performing in the most arduous application. Rings can be provided with Mod 4 gears complete with pinions and easy to mount vee bearings, either 64, 95 or 120mm diameter. Lubrication for the ring is provided by ring or bearing lubricators. The track system is provided complete with fixed or bogie carriages and carriages can be assembled and removed after the track has been assembled for ease of maintenance if need be.

- High load capacity bearings and tracks can support loads up to 60kN
- Rings provided with Mod 4 gear drive option complete with pinion
- Bearings are fully adjustable allowing easy installation
- Low maintenance assured by use of ring or bearing vee lubricators
- Ring and Track system supplied with mounting spacer for ease of installation
- Stainless steel options for corrosive resistant applications

Machine Construction & Automation Elements

By putting together any number of Hepco standard products we can offer complete System solutions for multi motion applications or simple single axis operations.

Typical systems will provide XY and Z lifting motion and will be supplied with the necessary mechanical components to enable total machine structure to be achieved.

Our range of gantries with standard leg arrangements will enable heavy or light loads to be positioned at high or slow speed.

MCS – Aluminium Frame and Machine Construction System

HGS – Gantry Solutions

HSS – System Solutions

MFS – Machine Fencing System

MCS

Aluminium Frame and Machine Construction System



A comprehensive system of profiles together with an enhanced range of fixing elements including brackets, flexi connectors and accessories to enable complete frames to be constructed by the customer from components or supplied flat packed for simple reassembly. In addition we will ship completed frames to your requirements designed on our in-house 3D drawing package. Reduced material costs, improved flexibility and assembly time savings are available with the use of aluminium profiles over steel for constructing machine frames and machine fencing requirements can be fulfilled using elements from our Machine Fencing System.

- Wide range of profile sections with T-slots or plain sides
- Custom designed 3D frame design and build service
- Supplied in component form, flat packed for reassembly or completed frame
- Profiles allow the fixing of linear systems
- Fencing system available for machine protection
- Range is constantly being developed with new components being added



HGS

Gantry Solutions

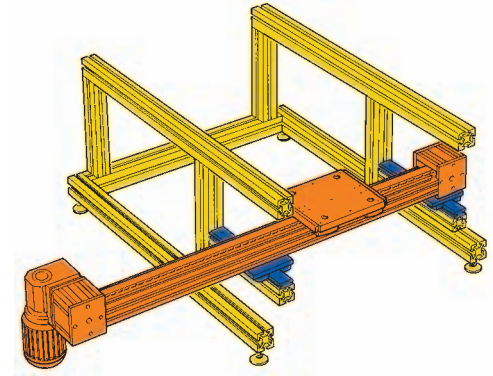


HepcoMotion Gantry solutions utilises elements from 4 products HDS2, HDLS, HDFS and HDCB to provide a range of gantries for light to heavy payloads. There are options for X and Z axis applications, the choice depending upon load, speed, accuracy of position and environmental conditions. Drive options include belt, ballscrew or rack and pinion with the added benefit of a telescopic solution using the Heavy Duty Compact Beam for height restricted Z axis applications. We will provide the necessary support legs, we offer 3 basic types in 200mm square steel section complete with mounting feet. The package can include fitting of motors, cable chains, limit switches etc.

- Wide range of driven packages from belt, ballscrew, rack and pinion
- Lubrication provided for slide and vee bearings, rack/pinion drive etc
- High capacity units with low maintenance features
- Lengths up to 20m are not uncommon
- Gantry leg format to suit application and space requirements
- Lifting payload range up to 1000kg

HSS

System Solutions



HepcoMotion System Solutions offers the user reduced design and assembly time by taking any of our products and putting them together as a complete machine solution. In addition to the actual mechanical guidance elements System Solutions includes all the necessary fixing plates, machine framework etc supplied either completely assembled or in kit form ready for reassembly on site. We have many standard design solutions to suit a variety of applications from pick and place, assembly and cutting applications to manual assembly operations. Common products used are GV3, DLS, PRT, HDS2, MCS but any product in our range can be put together to construct a machine solution. We will submit a 3D design of our solution clearly outlining our scope of supply.

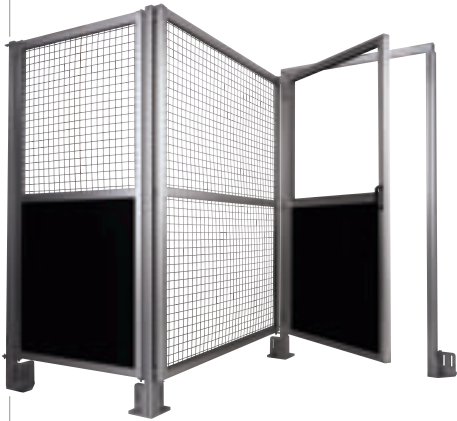
- Complete package solution saving on design and assembly time
- Proven elements used in the machine construction
- Provided in kit form or totally assembled
- We will design solutions providing 3D drawings
- Long life and trouble free operation assured

MFS

Machine Fencing System

Driven Options (Belt, Screw and Pneumatic)

For the Customer who requires a standalone unit either belt, screw or pneumatically operated, this range covers all applications from low load to high load, fast or slow speed.



HepcoMotion's Machine Fencing System is fully compatible with our existing MCS aluminium profile system and provides economical protective barriers for use around machine installations, gantries, robot systems or stocking areas.

This maintenance free system is simple to construct and provides a low cost alternative to steel fence frameworks.

- Hepco's design service ensures accurate specification prior to ordering
- Suitable for small or large fencing requirements
- Standard slot profile sections accept a wide range of wire mesh or panel options
- Mounting brackets allow panels to be fixed in position at a wide range of angles not just 90°
- Universal foundation blocks accept 45 and 45/90 vertical posts
- Panels simply secured to vertical posts with two bolts
- Wire mesh available in 3mm and 4mm options, self coloured or black powder coated. Non standard options available on request
- Polycarbonate or sheet panels up to 8mm can be fitted in to the slot profile sections
- Unique spring retaining clip ensures mesh or sheet panels do not vibrate within the slot profiles
- Fast delivery

Ballscrew drives are used where precision positioning is required, the belt driven products can operate at speeds of up to 8m/s, fast enough to satisfy even the most demanding application. Corrosive resistant versions are also available enabling food applications to be satisfied.

Driven products can generally be used with our range of MCS aluminium profiles offering a complete machine solution, or independently within a machine construction.

AC motors, Servo or Stepper motor solutions can be provided in order to offer a complete package.

Select also from this range for specific products for lifting applications, typically large platforms or mechanical handling installations.

PDU2 – Profile Driven Unit

DAPDU2 – Double Acting Profile Driven Unit

DLS – Linear Transmission and Positioning System

HDLS – Heavy Duty Driven System

HDCS – Heavy Duty Compact Screw

HPS – Powerslide-2 Guided Rodless Cylinder

PSD120 – Profile Screw Driven Unit

SBD – Sealed Belt Drive

BSP – Ballscrew Premier

PDU2

Profile Driven Unit

DAPDU2

Double Acting
Profile Driven Unit

DLS

Linear Transmission
and Positioning System



PDU2 belt driven units provide exceptional performance at a competitive price which is unmatched by similar size of belt products.

In fact, a size comparison is the only comparison that can be made with other products as PDU2 offers revolutionary Herculane® wheel technology which provides a superior combination of load capacity, speed and low friction characteristics.

Designed to meet the needs of the lower precision, low cost application PDU2 has such a long life most units will out perform the life of the machine they are fitted to.

- Herculane® low friction wheel technology for good load capacity and extended life
- Compact ready to mount units in lengths of up to 6m
- Product lends itself for easy fitting of stepper or other motors
- SmartDrive Taranis Stepper Motor control/drive package for simple or multi-axis applications
- If required, belt can be released and reset in seconds from the end of the unit
- Beam is available with T-slots or plain. Corrosive resistant version available

A unique simple solution for applications to close doors or where two components need to be brought together underneath the unit for assembly purposes. The Double Acting Profile Driven Unit uses the same low maintenance Herculane® wheels as incorporated in the standard PDU2 product so low maintenance is assured. It is usual to fit two carriages per side for most door applications. Carriages are linked with a toothed belt and move symmetrically with simple belt adjustment effected from the end of the unit. Loads are designed to be hung from the unit making it particularly suitable for door opening and closing applications where space is at a premium.

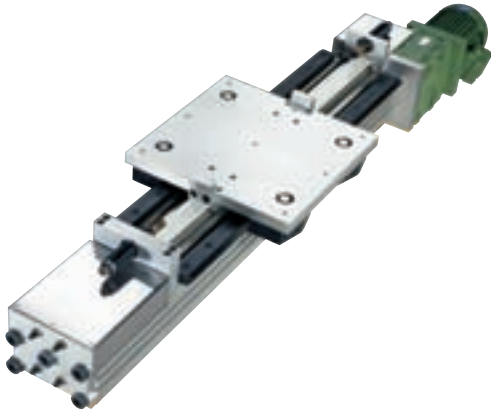
- Beam lengths up to 6m
- Multi carriage arrangements possible for wider door applications
- Simple belt adjustment from end of unit
- Flat or angled carriage plate for easy mounting
- High strength beam with T-slots to suit MCS profiles
- Internal buffers for end of stroke protection

HepcoMotion's complete off the shelf mechanical package will save hours in design and specifying time. The system comprises belt-driven linear modules, an AC motor/inverter package, and a range of compact planetary gearboxes for use with Servo motors. Options include a cantilever axis with lightweight beam, plus couplings and connecting shafts for units used in parallel.

- Systems in any length to 8m as standard, and even longer on application
- Hardened and precision ground slideway
- Double row cap sealed bearings for long system life and low maintenance
- Polyurethane steel-reinforced belt for minimum stretch and high speed capability
- Quiet, trouble free operation from proven 'V' bearing technology
- T-nut slots on beam and end boxes allow simple attachment of clamps and switches
- Removable carriage for secondary machining
- AC Motor and controller for simple positioning to suit most applications
- Planetary gearbox directly coupled for compact assembly

HDLS

Heavy Duty
Driven System



Automation of high loads in the most aggressive environments is the purpose of the HDLS. Based around the rigid Heavy Duty aluminium beam and benefiting from the zero maintenance vee-guide linear slides, proven in the harshest environments, HDLS is a ready to fit solution to your bespoke needs.

- Heavy Duty beam supporting loads up to 4 tonnes
- Driven systems allowing speeds up to 6m/sec
- Linear technologies with zero maintenance
- Optional AC Geared motor driving forces in excess of 5kN
- Steel reinforced timing belt allows forces of up to 10kN
- Systems designed to meet your needs

HDCS

Heavy Duty
Compact Screw



The Heavy Duty Compact Screw unit uses the same high strength aluminium beam as used in the HDCB. The curved section of the beam allows the fitting of the ballscrew with the minimum of space and the general low height of the product gives an overall impression of compactness. This unit can be used as a stand alone X axis or as a Z axis with the beam the moving element, the fixing of grippers to the end is very easily accommodated. The slides fitted are the Heavy Duty single edge type with either 64mm or 95mm dia bearings depending upon capacity requirements. Slide lubrication is provided by low maintenance cap wipers with a relubrication point provided for the ballscrew. Fitted ballscrew is 25mm dia either 5mm or 10mm pitch and the whole unit can be provided with a bellows cover if necessary.

- Compact high strength aluminium beam section
- Lengths up to 2740mm as standard
- Play free ballscrew assembly allows accurate positioning
- Beam T-slots compatible with MCS section for ease of mounting
- High capacity 64mm or 95mm dia vee bearings provides good rigidity under load
- Low maintenance cap wipers for prolonged performance
- Ballscrew relubrication point
- Optional bellows cover
- Easy fitting of limit switches

HPS

Powerslide-2 Guided Rodless Cylinder

PSD120

Profile Screw Driven Unit



This popular 'reduced engineering' package combines HepcoMotion's proven slide technology with an extensive range of high quality pneumatic rodless cylinders. The result is a high load carrying, lightweight prime mover supplied ready to mount. Easily installed, HPS Powerslide-2 is available in 10 size combinations with the option of corrosion resistant components.

- Self supporting structure for simple installation
- Performs well in harsh environments
- Can take loads in any direction
- Cap sealed bearings for long life and low maintenance
- Proximity switches for end or mid stroke sensing
- Connection brackets for mounting to MCS or other frame building Systems

The PSD120 linear drive unit can be used as a single or multi axis unit and is particularly useful in Z axis applications. The linear technology is the same as used in our PDU2 belt driven product with the Herculane® wheels providing a smooth low maintenance solution. The ballscrew drive and linear guide is housed in a strong aluminium beam protected by a cover strip which runs the entire length of the product. This cost effective package is available in a number of standard lengths from 400mm to 1500mm and in a range of pitches. Connection of motors is simple utilising a tubular flange and coupling which will suit most common motor faces. Multi axis solutions can in turn be constructed utilising a standard range of fixing plates.

- Herculane® low friction wheel technology for good load capacity and extended life
- Compact ready to mount units in standard lengths 400mm in 100mm intervals to 1500mm
- High strength aluminium compact beam with T-slots to match MCS profiles for ease of mounting
- Ballscrew relubrication at end of unit for easy access
- Stainless steel protection cover to prevent ingress of dirt
- Easy fitting of most type of motors
- XYZ multi axis solutions can be simply constructed



Sealed Belt driven units, offered in standard and clean room configurations come in two sizes and provide a higher level of performance in terms of load capacity and life than other comparable sized systems.

At the heart of the units are HepcoMotion high capacity LBG recirculating ball guides providing improved moment load capacity and longer life in high duty cycle applications.

- Two sizes, compact in construction SBD20-80 and SBD30-100, 80 and 100 relate to the width of the beam
- Linear guide and belt are housed in a high strength aluminium beam fitted with a flush metal cover strip, beam lengths up to 6m as standard longer units can be constructed by joining
- Metal cover strip runs the entire length of the beam and prevents the ingress of dirt and debris into the system
- SBD is offered in a standard version and a clean room compatible version
- Drive End box is available with either an output shaft or a bored drive pulley where greater mounting compactness is required
- The mounting carriage plate is removable for customising and incorporates an integral switch cam which can be mounted for left or right hand switching
- Clean room versions are certified by the Fraunhofer Inst for clean room compatibility
- Uses LBG Caged and Silent type re-circulating linear ball guides



Ballscrew Premier offers an increased range of screw diameters and pitches to suit a wide variety of applications.

Standard DIN nuts are available with rolled screws 16Ø to 50Ø on very competitive lead times as part of our RAPID DESPATCH PROGRAMME.

All single nuts are offered either play free or with controlled backlash. The same range is also available with a higher precision ground screw.

To further complement the range there are high lead and miniature screws, the smallest miniature screw being 6mm diameter.

All options can be supplied with ends machined to suit a standard range of fixed and supported end bearing housings or alternatively ends can be machined to customer's requirements.

- Popular size rolled screws available on short lead times
- Rolled or ground screws for lower cost commercial or precision applications
- Standard range of DIN single nuts
- Range of high lead pitches for higher specification application
- Miniature screw diameters 6Ø and 14Ø available in rolled or ground
- Ends machined to suit standard range of housings or to specific drawing



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Wood Processing
Machine Tool Change
Nuclear Engineering
Stone Cutting
Bottle Filling
Automatic Door Gear
Windows and Shutters
Offshore Oil Industry

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Lifting and Handling
CD Production
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Robot Spray Equipment
Welding and Profile Cutting
Food Wrapping and Processing
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Glass Production
Medical Equipment
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