

**Warning, Offer of Sale**

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 **WARNING**

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This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application including consequences of any failure, and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

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**Offer of Sale**

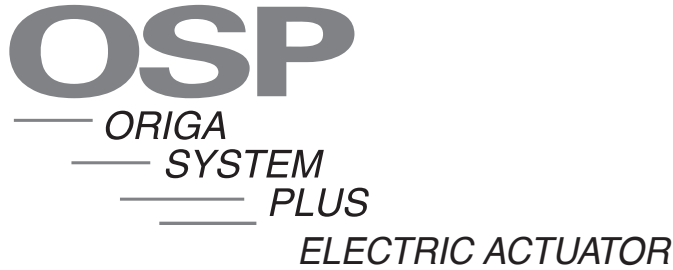
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**Parker Hannifin Corporation**  
Pneumatic Division  
Wadsworth, Ohio  
[www.parker.com/pneumatics](http://www.parker.com/pneumatics)

**Conversion Table**



**2D & 3D  
 CAD Drawings  
 can be downloaded  
 from website  
[www.parkeroriga.com](http://www.parkeroriga.com)**

## ATTENTION!

Contact PARKER-ORIGA for sizing software  
 and/or technical assistance  
 1-877-321-4736  
 Application Sheet on Page 162

All dimensions are in European-Standard.  
 Please convert all in US-Standard.

## Conversion Table

Multiply	By	To Obtain
Millimeters	.03937	Inches
Newtons	.2248	Lbs.(F)
Newton-Meters	8.8512	In-Lbs
Kilograms	2.205	Lbs.
Inches	25.4	Millimeters
Lbs.(F)	4.448	Newtons
In-Lbs	.113	Newtons-Meters
Lbs.	.45359	Kilograms

**Notes**

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**The System Concept**

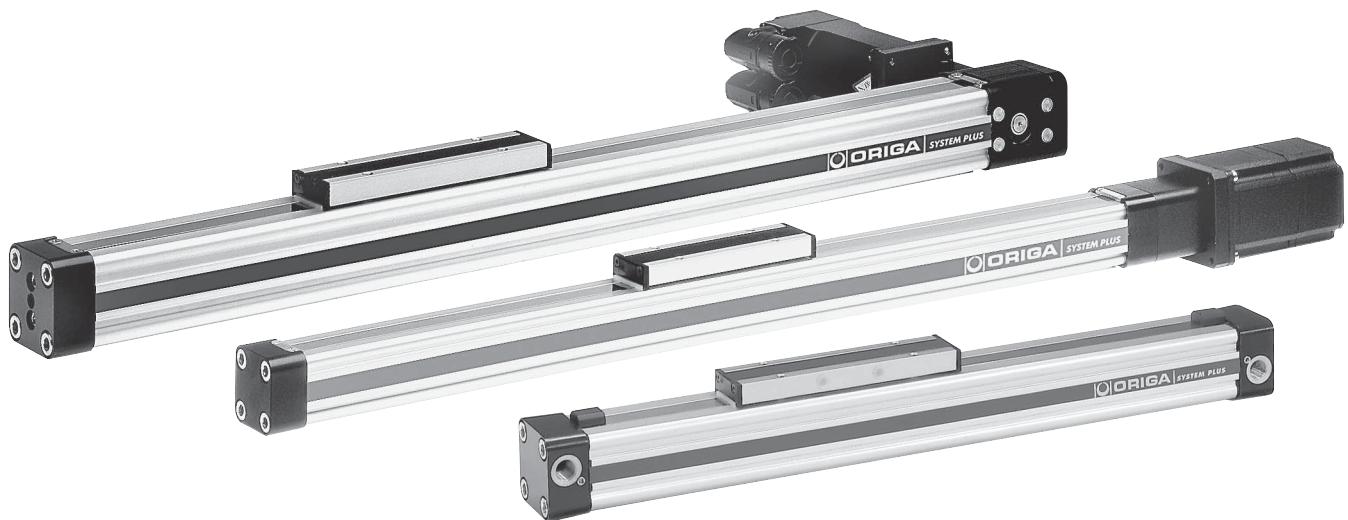
Based on the concept of the rodless pneumatic cylinder, well proven worldwide, Parker-Origa now offers the complete solution for actuator systems. Developed for absolute reliability, high performance, easy handling and optimized design, ORIGA SYSTEM PLUS can master even the most difficult installation requirements.

**ORIGA SYSTEM PLUS**

is a completely modular concept, enabling pneumatic and electric actuators to be combined with guides and control modules for all kinds of applications.

The main system carriers are the actuators themselves, consisting of extruded aluminum profiles with double dovetail slots on three sides,

providing direct mounting for all modular options.

**MODULAR SYSTEM**

- **Electric Belt Actuator**
  - For applications with higher speeds and precise movement and positioning for longer travel.
- **Electric Screw Actuator**
  - For higher actuator power and precise movement and positioning.




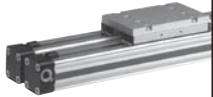
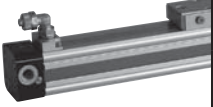


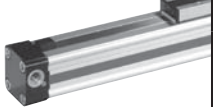


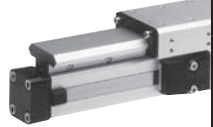

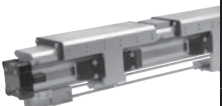


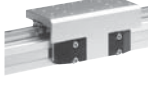
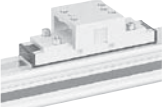
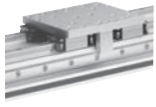


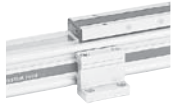

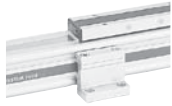

- **Pneumatic Drive**
  - For a wide variety of applications with simple handling, combined with simple control possibilities and a broad power spectrum.
  - Ideal for fast, repetitive movements and simple positioning duties.

**For additional information on rodless pneumatic actuators, please contact factory for OSP-P literature.**

- 18 additional guide variants provide any required precision, performance and load capacity.
- Compact solutions, easy to install and simple to retrofit.
- Valves and control elements can be mounted directly on the pneumatic actuator.
- A wide range of mounting options provides great installation flexibility.

**The System Concept**

**OSP-E Series Electric Linear Drives and Guides  
One Concept – Three Drive Options**

<p><b>Basic Actuator</b> Standard Version</p> <ul style="list-style-type: none"> <li>• Series OSP-P*</li> <li>• Series OSP-E Toothed Belt with internal Plain Bearing Guide Toothed Belt with Integrated Guides Vertical Toothed Belt with Integrated Recirculating Ball Bearing Guide</li> <li>• Series OSP-E Screw (Ball Screw, Trapezoidal Screw)</li> </ul>		<p><b>Inversion Mounting</b></p> <ul style="list-style-type: none"> <li>• Series OSP-P*</li> <li>• Series OSP-E Belt</li> <li>• Series OSP-E Screw</li> </ul>	
<p><b>Air Connection on the End-face or both at One End</b></p> <ul style="list-style-type: none"> <li>• Series OSP-P*</li> </ul>		<p><b>Duplex-Connection</b></p> <ul style="list-style-type: none"> <li>• Series OSP-P*</li> </ul>	
<p><b>Clean Room Cylinder certified to DIN EN ISO 146644-1</b></p> <ul style="list-style-type: none"> <li>• Series OSP-P*</li> <li>• Series OSP-E..SB</li> </ul>		<p><b>Multiplex-Connection</b></p> <ul style="list-style-type: none"> <li>• Series OSP-P*</li> </ul>	
<p><b>Products in ATEX-Version</b> Rodless Cylinders</p> 		<p><b>Linear Guides – SLIDELINE</b></p> <ul style="list-style-type: none"> <li>• Series OSP-P*</li> <li>• Series OSP-E Screw</li> </ul>	
<p><b>Products in ATEX-Version</b> Rodless Cylinders with Plain Bearing SLIDELINE</p> 		<p><b>Linear Guides – POWERSLIDE</b></p> <ul style="list-style-type: none"> <li>• Series OSP-P*</li> <li>• Series OSP-E Belt</li> <li>• Series OSP-E Screw</li> </ul>	
<p><b>Cylinders for Synchronized Counter-rotation of the Cylinders</b></p> <ul style="list-style-type: none"> <li>• Series OSP-P*</li> </ul>		<p><b>Linear Guides – PROLINE</b></p> <ul style="list-style-type: none"> <li>• Series OSP-P</li> <li>• Series OSP-E Belt drive*</li> <li>• Series OSP-E Screw drive*</li> </ul>	
<p><b>Integrated 3/2-Way Valves</b></p> <ul style="list-style-type: none"> <li>• Series OSP-P*</li> </ul>		<p><b>Linear Guides – STARLINE</b></p> <ul style="list-style-type: none"> <li>• Series OSP-P*</li> </ul>	
<p><b>Clevis Mounting</b></p> <ul style="list-style-type: none"> <li>• Series OSP-P*</li> <li>• Series OSP-E Belt</li> <li>• Series OSP-E Screw</li> </ul>		<p><b>Heavy Duty Guides – HD</b></p> <ul style="list-style-type: none"> <li>• Series OSP-P*</li> <li>• Series OSP-E Screw</li> </ul>	
<p><b>End Cap Mounting</b></p> <ul style="list-style-type: none"> <li>• Series OSP-P*</li> <li>• Series OSP-E Belt</li> <li>• Series OSP-E Screw</li> </ul>		<p><b>Brakes</b></p> <ul style="list-style-type: none"> <li>• Active Brakes*</li> <li>• Passive Brakes*</li> </ul>	
<p><b>Mid-Section Support</b></p> <ul style="list-style-type: none"> <li>• Series OSP-P*</li> <li>• Series OSP-E Belt</li> <li>• Series OSP-E Screw</li> </ul>		<p><b>Magnetic Switches</b></p> <ul style="list-style-type: none"> <li>• Series OSP-P*</li> <li>• Series OSP-E Belt</li> <li>• Series OSP-E Screw</li> </ul>	
<p><b>SFI-Plus Displacement Measuring Systems</b></p> <ul style="list-style-type: none"> <li>• Series OSP-P*</li> <li>• Series OSP-E Screw</li> </ul>		<p><b>SFI-Plus Displacement Measuring Systems</b></p> <ul style="list-style-type: none"> <li>• Series OSP-P*</li> <li>• Series OSP-E Screw</li> </ul>	

\* Information on Pneumatic Linear Drives, contact factory for literature

Overview

Drives	OSP-E20 -BHD <sup>1)</sup>	OSP-E25 -BHD <sup>1),2)</sup>	OSP-E32 -BHD <sup>1),2)</sup>	OSP-E50 -BHD <sup>1),2)</sup>	OSP-E20 -BV <sup>3)</sup>	OSP-E25 -BV <sup>3)</sup>	OSP-E25 -B <sup>4)</sup>	OSP-E32 -B <sup>4)</sup>	OSP-E50 -B <sup>4)</sup>	
Effective action force F <sub>A</sub> [N]	450 - 550	550 - 1070	1030 - 1870	1940 - 3120	450 - 650	1050 - 1490	50	100 - 150	300 - 425	
Max. Velocity v [m/s]	3.0	10.0 / 5	10.0 / 5	10.0 / 5	3.0	5.0	2.0	3.0	5.0	
Integrated Magnets	O	O	O	O	-	-	O	O	O	
Free choice of stroke length [mm] **	1 - 5760	1 - 7000	1 - 7000	1 - 7000	1 - 1000	1 - 1500	1 - 3000	1 - 5000	1 - 5000	
Temperature range [°C]	-30 - +80	-30 - +80	-30 - +80	-30 - +80	-30 - +80	-30 - +80	-30 - +80	-30 - +80	-30 - +80	
Tandem Version	O	O	O	O	O	O	O	O	O	
Bi-parting Version	O	O	O	O	-	-	O	O	O	
Stainless steel parts	X	X	X	X	X	X	X	X	X	
Integrated planetary gearbox LPB***	-	O	O	O	-	-	-	-	-	
<b>Self-Guidance</b>										
F [N]	1600	3000 / 986	10000 / 1348	15000 / 3704	1600	3000	160	300	850	
M <sub>x</sub> [Nm]	21	50 / 11	120 / 19	180 / 87	20	50	2	8	16	
M <sub>y</sub> [Nm]	150	500 / 64	1000 / 115	1800 / 365	100	200	12	25	80	
M <sub>z</sub> [Nm]	150	500 / 64	1400 / 115	2500 / 365	100	200	8	16	32	
<b>Slideline</b>										
F [N]	-	-	-	-	-	-	-	-	-	
M <sub>x</sub> [Nm]	-	-	-	-	-	-	-	-	-	
M <sub>y</sub> [Nm]	-	-	-	-	-	-	-	-	-	
M <sub>z</sub> [Nm]	-	-	-	-	-	-	-	-	-	
<b>Proline</b>										
F [N]	-	-	-	-	-	-	986	1348	3582	
M <sub>x</sub> [Nm]	-	-	-	-	-	-	19	33	128	
M <sub>y</sub> [Nm]	-	-	-	-	-	-	44	84	287	
M <sub>z</sub> [Nm]	-	-	-	-	-	-	44	84	287	
<b>Powerslide</b>										
F [N]	-	-	-	-	-	-	910 - 1190	1400 - 2300	3000 - 4000	
M <sub>x</sub> [Nm]	-	-	-	-	-	-	14 - 20	20 - 50	90 - 140	
M <sub>y</sub> [Nm]	-	-	-	-	-	-	63 - 175	70 - 175	250 - 350	
M <sub>z</sub> [Nm]	-	-	-	-	-	-	63 - 175	70 - 175	250 - 350	
<b>HD-Guide (Heavy Duty)</b>										
F [N]	-	-	-	-	-	-	-	-	-	
M <sub>x</sub> [Nm]	-	-	-	-	-	-	-	-	-	
M <sub>y</sub> [Nm]	-	-	-	-	-	-	-	-	-	
M <sub>z</sub> [Nm]	-	-	-	-	-	-	-	-	-	
<b>Accessories</b>										
<b>Multi-Axis System</b>										
Connecting elements	O	O	O	O	O	O	O	O	O	
Connecting shaft	O	O	O	O	O	O	O	O	O	
<b>Special Drives</b>										
Clean Room Cylinders	X	X	X	X	X	X	X	X	X	
<b>Mountings</b>										
Clevis Mounting	X	X	X	X	X	X	O	O	O	
End Cap Mounting / Midsection Support	O	O	O	O	X	X	O	O	O	
Inversion Mounting	X	X	X	X	X	X	O	O	O	
Adapter Profile / T-Nut Profile	O	O	O	O	X	X	O	O	O	
<b>Magnetic switches</b>										
Reed Switches RS (NO, NC)	O	O	O	O	O	O	O	O	O	
Electronic Switches ES (PNP, NPN)	O	O	O	O	O	O	O	O	O	
<b>Measuring systems</b>										
SFI-plus Displacement Measuring System	X	X	X	X	X	X	X	X	X	
<b>Motor package (stepper / servo)</b>										
	O	O	O	O	O	O	O	O	O	
<b>Gearbox</b>										
Planetary gear and angular gear	O	O	O	O	O	O	-	-	-	

= Standard version  
 = Option  
 X = Currently not available  
 \* = other temperature ranges on request  
 \*\* = exc. safety clearance from mechanical end position  
 other stroke lengths on request  
 \*\*\* = ratio i = 3, 5, 10

<sup>1)</sup> = Linear Drive with Toothed Belt and Integrated Recirculating Ball Bearing Guide  
<sup>2)</sup> = Linear Drive with Toothed Belt and Integrated Roller Guide  
<sup>3)</sup> = Vertical Linear Drive with Toothed Belt and Integrated Recirculating Ball Bearing Guide  
<sup>4)</sup> = Linear Drive with Toothed Belt and Internal Plain Bearing Guide  
<sup>5)</sup> = Linear Drive with Ball Screw Drive and Internal Plain Bearing Guide  
<sup>6)</sup> = Linear Drive with Trapezoidal Screw Drive and Internal Plain Bearing Guide  
<sup>7)</sup> = Linear Drive with Ball Screw Drive, Internal Plain Bearing Guide and Piston Rod  
<sup>8)</sup> = Linear Drive with Trapezoidal Screw Drive, Internal Plain Bearing Guide and Piston Rod



### Drive Options

## OSP-E Series Electric Linear Drives and Guides One System – Seven Drive Options

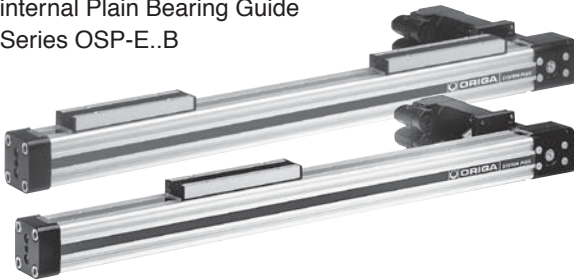
Linear Drive with Toothed Belt and integrated Recirculating Ball Bearing Guide or Roller Guide  
Series OSP-E..BHD



Vertical Linear Drive with Toothed Belt and integrated Recirculating Ball Bearing Guide  
Series OSP-E..BV



Linear Drive with Toothed Belt and internal Plain Bearing Guide  
Series OSP-E..B



Linear Drive with Ball Screw Drive and internal Plain Bearing Guide  
Series OSP-E..SB



Linear Drive with Trapezoidal Screw Drive and internal Plain Bearing Guide  
Series OSP-E..ST






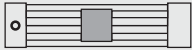
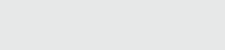

Linear Drive with Ball Screw Drive, internal Plain Bearing Guide and Piston Rod  
Series OSP-E..SBR









Linear Drive with Trapezoidal Screw Drive, internal Plain Bearing Guide and Piston Rod  
Series OSP-E..STR



**Standard Versions**

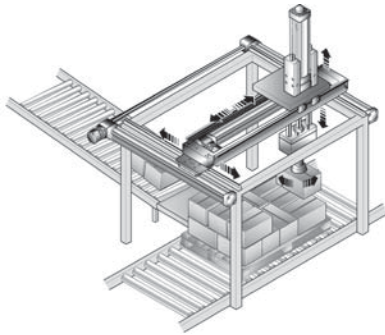
Description	Toothed Belt-Driven – Basic Versions		
	Toothed Belt-Driven with Integrated Guide 	Vertical Linear Drive with Toothed Belt 	Toothed Belt-Driven 
<b>Standard Versions</b>	 – Direction of motion – Position of the drive shaft	 – Position of the drive shaft	 – Position of the drive shaft
<b>Options</b>	– Tandem – Bi-directional – Integrated Planetary Gearbox	– Tandem	– Tandem – Bi-directional – Niro
<b>Mountings</b>			
Clevis Mounting	–	–	O
End Cap Mounting	O	–	O
Mid-Section Support	O	–	O
Inversion Mounting	–	–	O
<b>Accessories</b>			
Magnetic Switches	O	O	O
Motor Mountings	O	O	O
<b>Linear Guides</b>	–	–	O
<b>Multi-Axis Connection System</b>	O	O	O

Description	Screw-Driven – Basic Versions		
	Ball Screw -Driven 	Trapezoidal Screw- Driven 	Screw-Driven with extending Rod – with Trapezoidal Screw – with Ball Screw 
<b>Standard Versions</b>	 – Spindle pitch of the ball screws		
<b>Options</b>	– Clean room version – Displacement Measuring System SFI-plus	– Displacement Measuring System SFI-plus	
<b>Mountings</b>			
Clevis Mounting	O	O	–
End Cap Mounting	O	O	O
Mid-Section Support	O	O	O
Inversion Mounting	O	O	–
<b>Accessories</b>			
Magnetic Switches	O	O	O
Motor Mounting	O	O	O
Flansh Mounting	–	–	O
Trunnion Mounting	–	–	O
Piston Rod Mounting	–	–	O
<b>Linear Guides</b>	O	O	–
<b>Multi-Axis Connection System</b>	O	O	O

**Features**

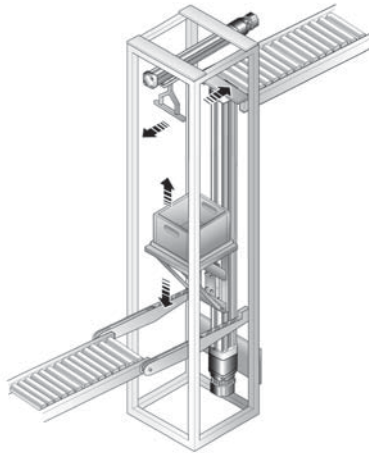
**Auto Handling**

- high speed pick and place movements



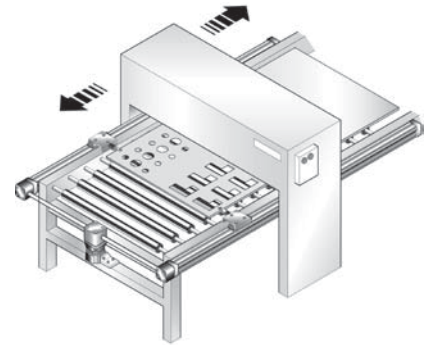
**Material Handling Systems**

- vertical and horizontal transfer movements



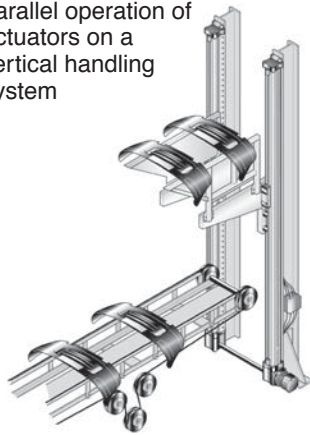
**Punching Machines**

- accurate feeding and positioning



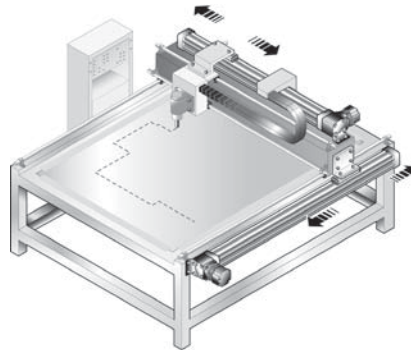
**Mechanical Handling**

- parallel operation of actuators on a vertical handling system



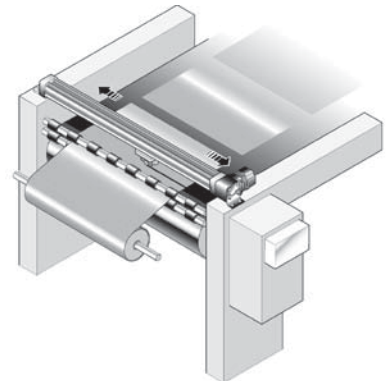
**Profile Cutting Machines**

- intricate profile movements of water jets and lasers



**Slitting Machines**

- high speed traverse applications for the slicing of papers and textiles



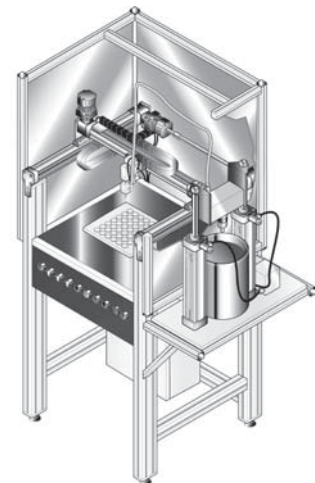
**Spray Coating**

- synchronized high speed bi-parting movements



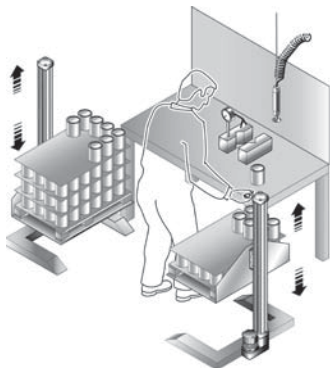
**Automated Filling Machines**

- accurate 3-axis positioning



**Ergonomic Workstations**

- adjustment of working levels



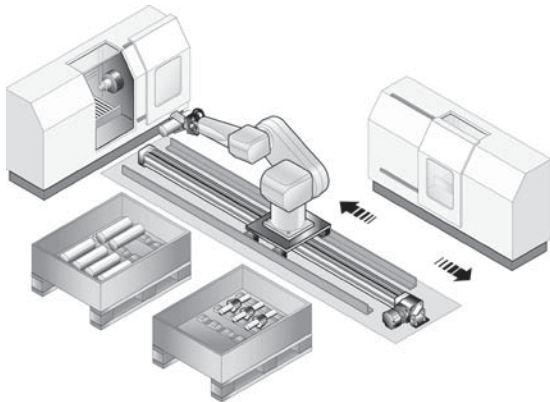
**Automatic Doors and Guards**

- simple bi-parting operation



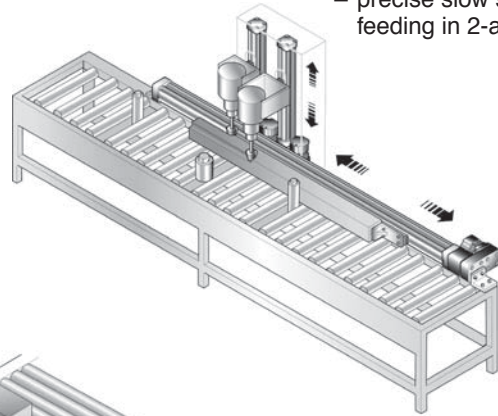
**Robotic Installations**

- traverse of robots between work stations



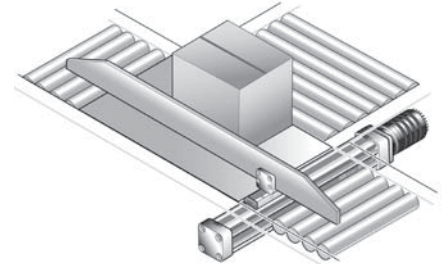
**Milling Machines**

- precise slow speed feeding in 2-axis



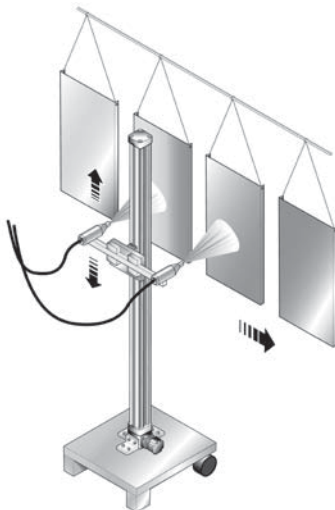
**Conveyor Systems**

- simple cross-transfer actuators



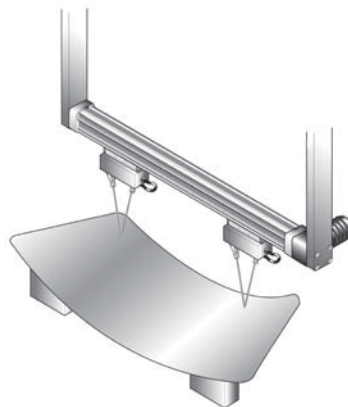
**Spraying Equipment**

- precision reciprocating action



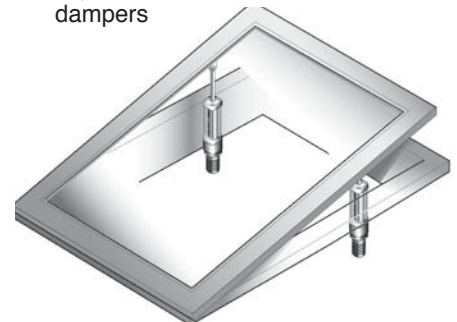
**Measuring Systems**

- optical curvature gauging using synchronised bi-parting actuation



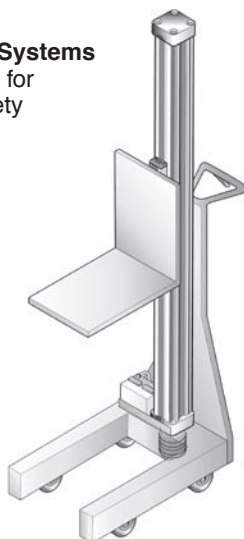
**Ventilation Systems**

- adjustment of air dampers



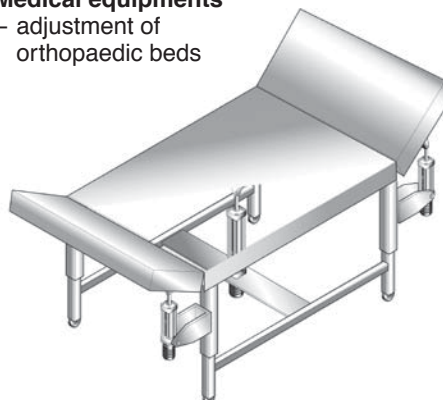
**Mobile Lifting Systems**

- lifting devices for industrial safety



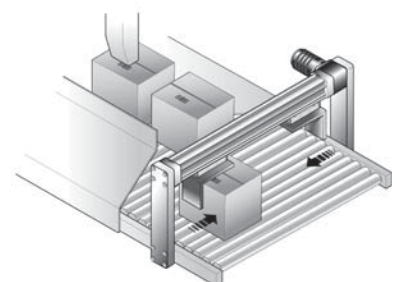
**Medical equipments**

- adjustment of orthopaedic beds



**Conveyor Systems**

- centring of packages on conveyor lines



**Notes**

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