

L-SERIES

The powerful & productive solution

The L-series system is a powerful and productive solution for surface finishing of larger work pieces, such as turbine components and marine propellers or cast components. The grinding robot stands in a fully closed housing with an integrated tool cabinet and workpiece positioner.

The process toolkits can be selected from a wide modular range based on application needs.

The process parameters and robot tool path programs are stored in a cell controller PC, easily accessed by the operator with full control over the process flow. The unmanned running time can be increased gradually, by adding more tool racks and automating the material flow around the system. The system is compatible with most offline-programming and CAM systems.

Benefits

- Healthier and safer working environment, increased employee satisfaction, work efficiency and reduced sick leave days
- Increased quality, integrity, and consistency
- Cutting fluids can be used for sensitive materials
- Increased total tool-on-contact time
- Uniform surface quality, minimizing scrapped parts and process waste
- Compact design saves floor space and the system does not require a special foundation
- Material flow can be automated to increase daily unmanned running time
- Increased yearly production capacity up to 8760 hours
- Mirka process support and service during the whole robot lifetime







Features

- A large 6-axis industrial robot with fully closed compact housing
- 1- or 2-external axis for work piece positioning
- Work piece length up to 2000 mm / max weight 500 kg or rotary part up to 2400 mm diam. / max weight 5,000 kg or more.
- Both dry & wet processes available, based on application needs
- Tool-to-part working method (Integr. tool center point calibration)
- Belt tools, spindle tools and random orbital sanders available
- Automatic, patented, tool media change systems for belts, discs, brushes, files, stones, milling cutters etc.
- Force control and compliance devices integrated to the tool kits as default
- Easy to set up and operate via user-friendly graphical UI
- Mechanical probes and/or optical sensors used for part programs offsets
- New programs can be generated with several, commercially available CAM/Offline systems
- Tool racks accessible from the operator side while robot is working
- Delivered with CE-marking
- Laser marking and verification integration available
- Process video monitoring and recording system







Patented L-series Belt Grinder The probing tool checks & (30 x 3500mm) / large surfaces corrects the toolpaths precisely

Processes

- Linishing
 Grinding and deburring
 Sanding and polishing
 Cutting and milling
- Dot peen marking
 Laser marking
 Marking verification

Applications





















Typical industry segments





Aerospace Process & Defence industry

Maritime

Vanes

Blisks

Large

Propeller casings finishing

Weld

Deburring grinding of hydraulic chamfering blocks & deburring