



# **M-SERIES**

## Trusted solution for surface finishing of medium sized components

The M-series system is a powerful and productive solution for surface finishing of mid-size work pieces, such as turbinecomponents and marine propellers, machined blocks or casted components.

The grinding robot stands in a fully closed housing with integrated tool cabinet and workpiece positioner.

The process toolkits can be selected from a wide

The process parameters and the robot tool path programs are stored in a cell controller PC and can be easily accessed by the operator, who always has 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 systems is compatible with the most of the offline-programming and CAM systems.

## Benefits

 Healthier and safer working environment, increasing employee wellbeing, working efficiency and reducing sick leave days

modular range based on application needs.

- 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 special foundations
- 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 life-time













### **Features**

- A medium size 6-axis industrial robot with fully closed compact housing
- 1- or 2-external axis for work piece positioning
- Work piece length up to 1500 mm / max weight 500 kg
- Both dry & wet processes available, based on application needs
- 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
- Process video monitoring and recording system can be added





## **Processes**

- Linishing Grinding Deburring Sanding Polishing Cutting Milling
- Dot peen marking
   Laser marking

## **Applications**





















Industries







blades

Vanes

**Blisks** 

Casings Propellers Machined deburring

Weld blocks grinding chamfering & deburring

Aerospace Process & Defence industry

Marine

Energy

+ Automotive / General industry and Foundry