

# FlexGrinder M 1750

## A COMPLETE BELT GRINDING PROCESS PACKAGE

A medium-size AC servo powered belt grinder for automated production needs.

Flexmill tools are designed and manufactured for the most demanding applications and environments. A compact and robust chassis with easy to access belt change. The modular design allows selection of contact wheel types to each application for optimum reachability and belt size. The AC servo motor provides reliable and constant grinding belt speed over a large torque area. The motor is equipped with a resolver sensor for closed loop speed control. The grinding force can be adjusted easily from robot program. Belt tension force is controlled and monitored against the belt brakes. Recommended for robots with handling capacities >50 kg and IP67, if wet processes are used.



### Benefits

- Accurate belt speed control
- PLC controlled grinding force
- Belt tension with pneumatic cylinders
- Belt brake monitoring
- Rotary compliance as standard feature
- Cutting fluid nozzles included

### Processes

- Grinding
- Linishing
- Polishing

### Performance values

- Belt speed max. 30 m/s
- Grinding force max. 290 N
- Tool flexibility ±8 mm from center line

## MAIN FEATURES

Easy and fast setup. Long unmanned operating times. Total process control.

- ✓ Belts can be chosen according to application
- ✓ Robot can be equipped with multiple tools for optimized results
- ✓ Automatic belt change enables long unmanned cycle times (patent pending)
- ✓ Easy and modern digital robot interface with fieldbus
- ✓ Safety relays in control cabinet for robot safety circuit connection
- ✓ Adapter flanges for robot 6th axis available on request
- ✓ Belt grinder tool can also be used on fixed position, while robot handles work pieces



### Technical data

- Motor: 3,2 kW / 4000 rpm
- Tool size: 850 mm / 220 mm / 340 mm
- Belt grinder weight: 34 kg
- Belt length: 1750 mm
- Belt width: 30 mm
- Contact wheel type: serrated D100 Shore A85
- Customer specific: Profinet, EtherNet/IP, DeviceNet, CANopen or Profibus
- Power: 3x400V VAC 32 A

### Process package content

- Belt grinder
- Tool changer with: tool side flange and robot side flange equipped with energy and signal modules
- Robot 6th axis specific adapter flange
- Tool control cabinet
- Cable assembly
- Belt changer unit
- Storage rack elements for tool change unit

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