

Flexmill Gear Deburring

OPTIMIZED SOLUTION FOR EDGE BREAKING OF THE GEAR WHEELS AND AXIS

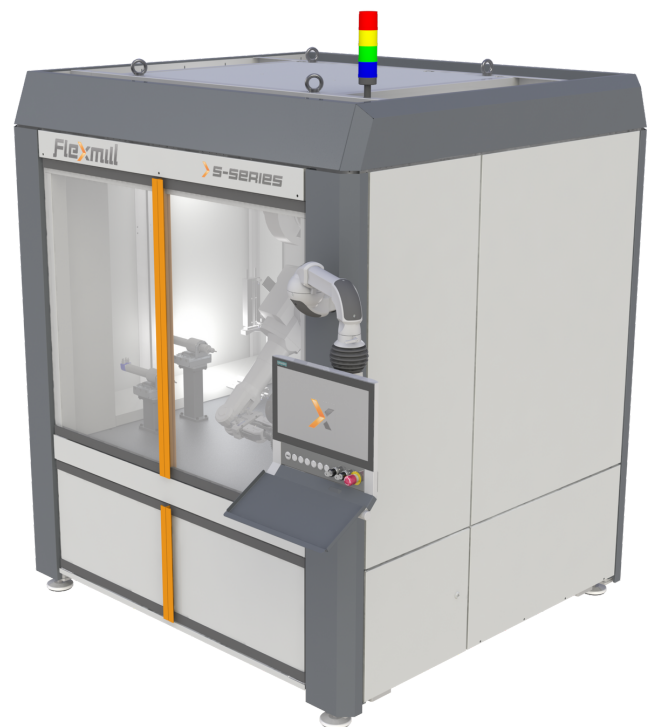
Flexmill's S-series platform for Gear deburring is developed in order to provide intelligent robotic automation in a manner that provides the best performance and added value to the deburring and edge breaking process.

S-series platform can be equipped with number of different electrical spindle motors with automatic tool exchange for wide range of rotary tools allowing extended unmanned production time. Spindle tool stations can be equipped with or without compliance unit.

The tool media storage allows loading and unloading of rotary tools without stopping of finishing process.

Part storage has flexible modular concept that allows different type of workpieces introduction to cell at same time. Each different workpiece holder has a specific insert with RFID tag for automatic part identification.

Robot is equipped with modular workpiece gripping system allowing easy adaption of part specific gripper fingers. Workpiece specific gripper fingers are changed automatically according workpiece model.



FLEXMILL GEAR DEBURRING SOLUTION

- ✓ Based on standard Flexmill S-series platform
- ✓ Up to six rotary spindle tool stations with compliances
- ✓ Automatic tool media exchange system
- ✓ Modular workpiece gripping system
- ✓ Modular workpiece storage system
- ✓ Edge break measurement system
- ✓ Dust extraction system

Benefits

- Complete process cycle with multiple tool stations
- Accurate process control with build in compliance
- Easy and low cost adaption of new products
- Flexible storage solution with RFID identification
- Process and quality control with edge break measurement
- Long unmanned production time
- Easy-to-use graphical user interface

Example gear features for edge break

1. Tooth edge
2. Flange edges
3. Hole edges
4. Groove edges
5. External spline gear
6. External threads
7. Internal spline gear

