



ATS Rotoflex™ 4



Machine
Tool
Division

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Description

The Rotoflex™ 4 is a pre-engineered rotary transfer system that delivers unbeatable throughput and flexibility for multi-process machining operations, where production volumes make conventional CNC machining centers impractical. High throughput is achieved by using the first of the machine's four stations for manual or automated load/unload of the workpiece. Multiple machining operations are performed concurrently, at each of the remaining three stations. The work is clamped only once, then transferred through the remaining stations by means of an index table with Hirth-ring coupling lock for uncompromising precision and repeatability.

System Specifications

3-axis Unit Working Area

Operating Envelope:	X: 300 mm, Y: 300 mm, Z: 300 mm
Rapid traverse:	24 m/min
Feed force:	6.0 kN
Accuracy:	0.005 mm
Repeatability:	0.002 mm
Drive:	Digital AC servo motor Pre-loaded ball screws Linear roller bearing guides

Tool Turret

Number of spindles:	6
Indexing accuracy:	± 6 sec.
Repeatability:	± 2 sec.
Location:	Hirth coupling
Indexing time:	1.4 sec. (60°)
Spindle speed:	10,000 RPM max.
Spindle power:	10 kW
Max. torque:	80 Nm**
Drive type:	Digital AC servo motor
Tool holders:	ABS/HSK 50 max.

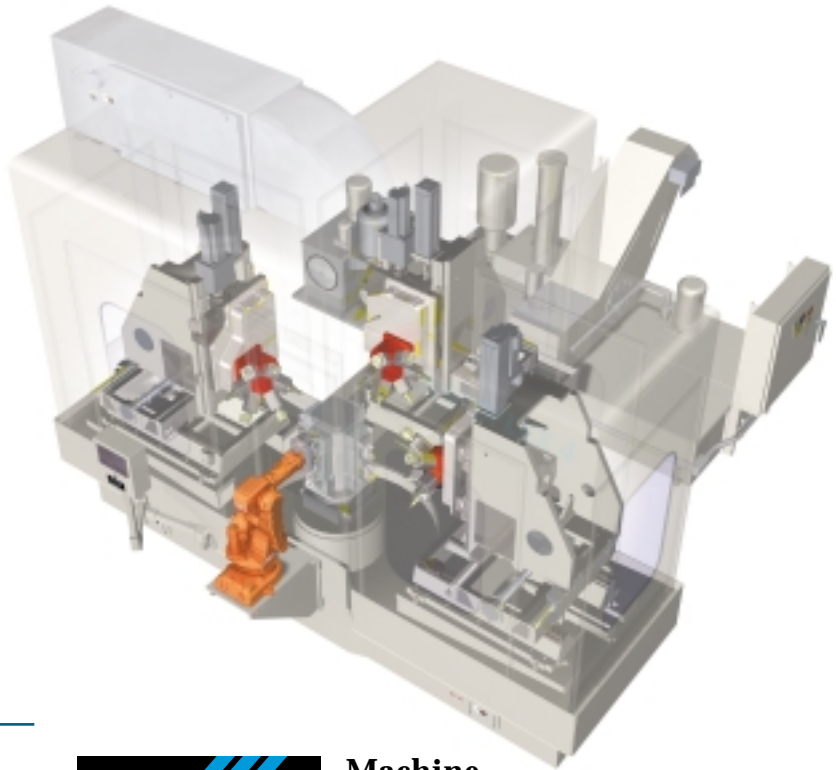
** Alternate options are available

Options

- Motorized servo spindles
- Through spindle coolant, 50 or 100 bar
- Heidenhain linear scale
- Assembly automation integration

Features

- 4-station design (load/unload plus 3 machining stations)
- Heavy-duty, one-piece base
- Fully enclosed steel machine guarding with tempered safety-glass windows
- 3-axis slide unit on each machining station
- High-precision linear roller rails on all slide axes
- Servo-motor & ball-screw driven slides
- Pneumatically counterbalanced vertical axes
- Servo-driven, 6-position turret head on each machining station
- High-precision Hirth-coupling indexer
- Hydraulic power unit with pressure compensated pump, kidney loop and fan-cooled heat exchanger
- Central lubrication system
- Central mist collector
- High-capacity coolant system with drag-chain-style chip conveyor
- Foundry-duty ABB robot with controller and teach pendant



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ISO 9001 Registered QS 9000 - ISO 9002 Registered

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