

Evo Combi

Unmatched productivity and flexibility – all in a single clamping



High-precision 4-axis grinding center for the machining of indexable inserts on the periphery and two K-Lands in a single clamping



AGATHON

The Evo Combi concept

Basic machine

- Proven design with good accessibility
- Extended travel ranges and swivel angles for the production of indexable inserts without re-clamping
- Fast, enduring B-axis, optimal for round inserts
- Direct drives with optimized performance for the X, Y and C axes
- Internal and external dressing devices can be combined
- Grinding wheel diameter 400 mm
- Grinding area separated from handling area
- Two pallets in the work area for separation of blank and finished parts

Options (selection)

- Electro-erosion conditioning process (PowerGrind)
- Robust U-axis for in-process cleaning, sharpening and profiling
- 2D force measurement system for normal and tangential forces for the process definition, optimization and control
- Extensive possibilities for Connectivity and Data Management
- Vision system for parts alignment and spot recognition

The outstanding advantages of the Evo Combi

Low cost per workpiece

- Shorter grinding times thanks to very high material removal rates
- Short transfers due to agile handling and internal dressing
- Complete machining without re-clamping
- Standardized, compatible Agathon tools
- Fast product change due to off-line programming and graphic simulation
- Up to 50% cycle time reduction with PowerGrind
- Low-maintenance components

Flexibility (materials, process)

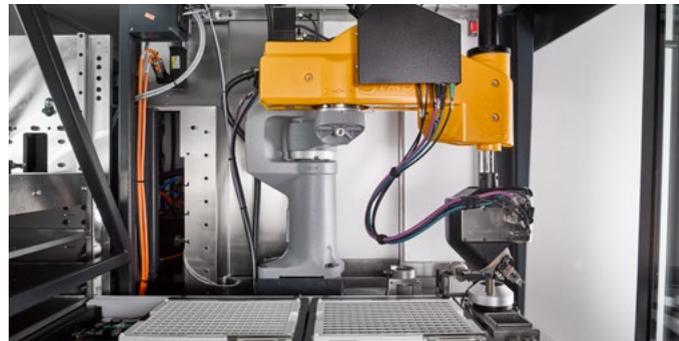
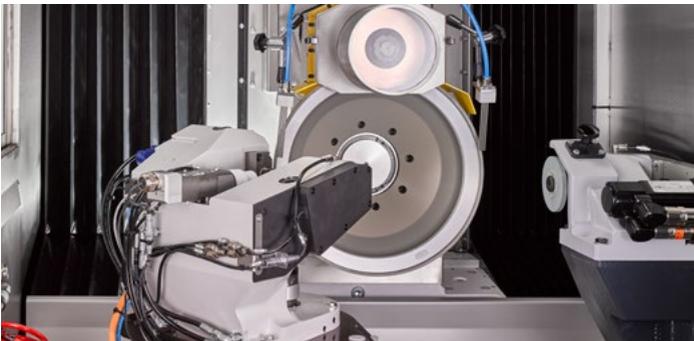
- K-Lands on both sides without re-clamping
- Extended swivel angles and travel ranges for significantly more geometries
- Free combination of various dressing methods
- Largest possible range of applications from IC 3.96 mm to OD 100 mm
- Suited for all common indexable insert materials
- Reduced energy requirements through consistent Eco-design

Maximum utilization

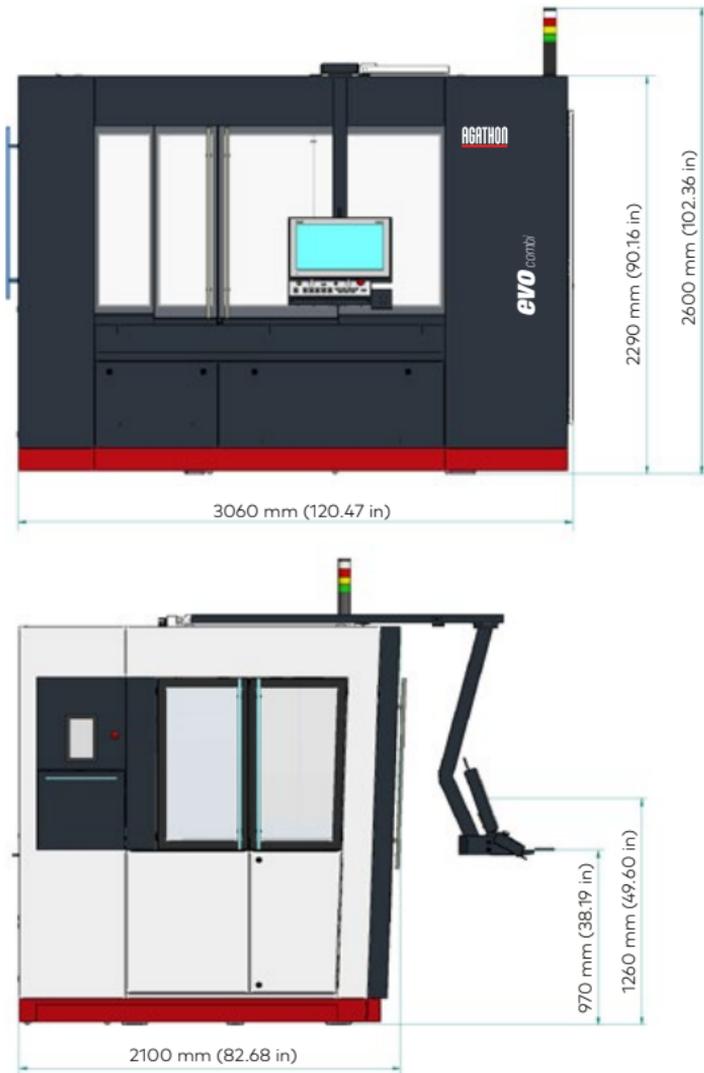
- High autonomy with storage for up to 16 trays
- State-of-the-art, low-maintenance drives
- Short changeover/set-up times
- Designed and manufactured in Switzerland
- Fast, competent and efficient teleservice and on-site field service

Ease of use

- Excellent visibility
- Workpiece spindle head close to machine front for better access
- Consistent Agathon operating philosophy and software
- Unique, domain-specific programming language for indexable inserts
- Simple re-teach
- Proven, perfectly integrated automation
- Comprehensive training program for programming, operation and maintenance



The Evo Combi at a glance



Technical Data Evo Combi

Number of pallets	max. 16
Grinding cup Ø	400 mm
Dimensions (WxDxH)	3.06 m x 2.10 m x 2.29 m (with lamp 2.60 m)
Weight	5800 kg
Swiveling range of C axis	-140° to +140°
OD IC	max. 100 mm (120 mm) min. 3.96 mm
Workpiece - Clamping dist.	28.5 mm
Materials	Carbide, Cermet, Ceramics, CBN, PCD



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