The Economical CNC Grinding Machine

ANCA®
The affordable tool grinding package

The ANCA FastGrind is an entry level CNC tool grinder and a popular machine in the ANCA range.

This machine offers all of the benefits that ANCA customers have enjoyed for many years at an extremely affordable price. The FastGrind is a versatile and flexible machine and is suited to a wide variety of industries and applications. It is popular with regrinders and provides opportunities for companies to reduce costs by bringing regrinding in-house. It is also ideally suited to companies looking for reduced risk in making the transition into CNC grinding technology.

The FastGrind has all of the essential elements the industry demands for cost-effective tool grinding, including:

- Quick and easy set-up
- Superior tool accuracy
- High quality surface finish
- Flexibility to grind a large variety of tool types
- Machine reliability and accuracy

Direct-drive technology

The double-ended wheel spindle is based on a direct-drive, bi-directional motor design capable of 10,000 rpm.

With a HSK40F taper, constant power of 3.7 kW (5.0 HP) and peak power of 8.0 kW (10.0 HP), it offers enough power for any resharpening task. There are no belts, pulleys or gears, resulting in superior surface finish on the ground tool and higher machine reliability.

All linear and rotary machine axes, including workhead, use direct-drive technology giving greater positional accuracy.
Flexibility and speed

The FastGrind is both small and compact, yet has a large working envelope making it suitable for a wide range of tool types, geometries and shapes.

The FastGrind also has both the flexibility and speed to tackle a wide range of different high-precision cutting and drilling tools in one set-up. For resharpening, the standard probe system digitises the features and geometry of the tool, ensuring accurate and precise grinding.

FastGrind at a glance

- Double ended HSK wheel spindle
- User friendly and highly advanced software
- The very latest in CNC grinding technology
- ANCA’s proven accuracy and reliability
- Resharpening machine with manufacturing capabilities
- Unbeatable price/performance relationship
- Polymer ANCAcrete base
- MPG feed
- Direct-drive technology
Workholding and tool support

The standard FastGrind is configured for use with manual workholding systems. A pneumatic headstock actuator option is available that enables automated workholding solutions to be used and is a mandatory option when used with the FastLoad automated loading system. Other tool support hardware such as steady rest and tailstock are also available.

FastLoad Compact Loader

The FastLoad is a unique loading system that is fully contained within the machine canopy. It is designed to be a low-cost solution for customers seeking automation and is perfect for low-volume production runs. The FastLoad can be installed on the FastGrind and GX7 machines.

- Does not increase machine footprint
- Provides low cost automation
- No need to change gripper fingers between batches
- Optimised for highest volume of diameters & lengths
- Designed for collet loading with Nikken KM20 collets that enable different diameter tools in one batch

<table>
<thead>
<tr>
<th>Technical Data</th>
<th>Length or Time</th>
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<tbody>
<tr>
<td>Diameter Range</td>
<td>3mm (⅛”) - 20mm (¾”)</td>
</tr>
<tr>
<td>Length Range</td>
<td>30mm (1 ¼”) - 150mm (6”)</td>
</tr>
<tr>
<td>Maximum Tool Head Diameter</td>
<td>25mm (1”)</td>
</tr>
<tr>
<td>Approximate Cycle Time</td>
<td>20 seconds</td>
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<table>
<thead>
<tr>
<th>Tool Pallets</th>
<th>Pallet Capacity Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tool Diameter</td>
<td></td>
</tr>
<tr>
<td>3mm (⅛”)</td>
<td>x245</td>
</tr>
<tr>
<td>6mm (¼”)</td>
<td>x156</td>
</tr>
<tr>
<td>20mm (¾”)</td>
<td>x36</td>
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### iView

iView is a measuring system that is able to measure the ground tool while it is still in the work-holding on the machine. The image of the ground tool as taken by the iView camera is compared with an ideal overlay shape generated by the software. The tool size can then be compensated automatically based on the overlay.

- Eliminates the need to remove a tool from the grinder in order to check the dimensions
- Reduces errors caused by relocating and manually compensating
- 300x and 100x magnification options
- Provides measuring accuracy to 2 microns
- Includes the capability to be transferred to other ANCA machines

### CIMulator3D

CIMulator3D simulates the programmed tool path exactly as it would be ground on the machine. New tool programs can be verified for size, shape, machine clearance and even cycle time estimates. CIMulator3D maintains continuous work flow through the machine by reducing development time and trial grinding.

### Software

A wide range of applications based on the renowned ANCA iGrind platform is available within the ANCA ToolRoom software suite.

The iGrind interface is user friendly, offering a high degree of flexibility and operational efficiency. ToolRoom supports the grinding of drills, end mills, profile tools, burrs, routers and many other special applications.
ANCA global support

ANCA’s FastGrind is the CNC tool and cutter grinder chosen by resharpening shops where high precision tools and reliability are paramount.

It is designed to meet the demands of a competitive industry, and is supported by ANCA’s world-wide team of technical specialists. Confidence that ANCA is the right choice goes beyond the machine. The ANCA team will be your partner with application and machine support from training right through to maintenance.

**Aftermarket Services**

- Comprehensive global network of service centres
- Preventative maintenance
- Service contracts/maintenance agreements
- Replacement parts
- Technical queries & application support
- Training
- Software & hardware upgrade programs
**CNC-Data**
ANCA 5DX, Core 2 Duo, min. 3GB RAM, 15” Screen

**Mechanical axes**
**Position feedback resolution**
- X, Y & Z-axis: 0.0001 mm (0.0000039”)
- C & A-axis: 0.0001 deg

**Programming resolution**
- X, Y & Z-axis: 0.001 mm (0.000039”)
- C & A-axis: 0.001 deg

**Travel**
- X-axis: 435 mm (17.1”)
- Y-axis: 457 mm (18”)
- Z-axis: 275 mm (10.8”)
- C-axis: 320 deg
- A-axis: 360 deg

**Software axes (patented)**
- B, V, U, W

**Work piece**
- Maximum tool diam.: Ø220 mm (8.66”)
- Maximum tool weight: 20 kg (44 lbs)

**Drive system**
ANCA Digital (SERCOS standard) / Linear axes direct-drive
ballscrew / Rotary axes direct drive

**Machine data**
**Grinding spindle**
- Bi-directional direct drive
- 3.7kW/5HP (S1)
- 8kW/10HP (peak)
- 10,000 RPM
- HSK40F taper

**Grinding wheel**
- Max Ø202mm (8”)

**Wheel bore**
- Ø31.75 mm (1 ¼”), 32mm and 20mm

**Two wheel packs**
- Max 4 wheels each

**Other data**
**Electrical power**
- 15KVA (including coolant system)

**Probe system**
- Renishaw

**Coolant system**
- External

**Machine base**
- ANCAcrete (Polymer concrete)

**Colour**
- RAL 7035 / RAL 5014

**Weight**
- Approximately 4500 kg

**Floor plan**
- Width: 2075 mm (82”)
- Depth: 1450 mm (57”)
- Height: 1990 mm (78”)

ANCA reserves the right to alter or amend specifications without prior notice
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