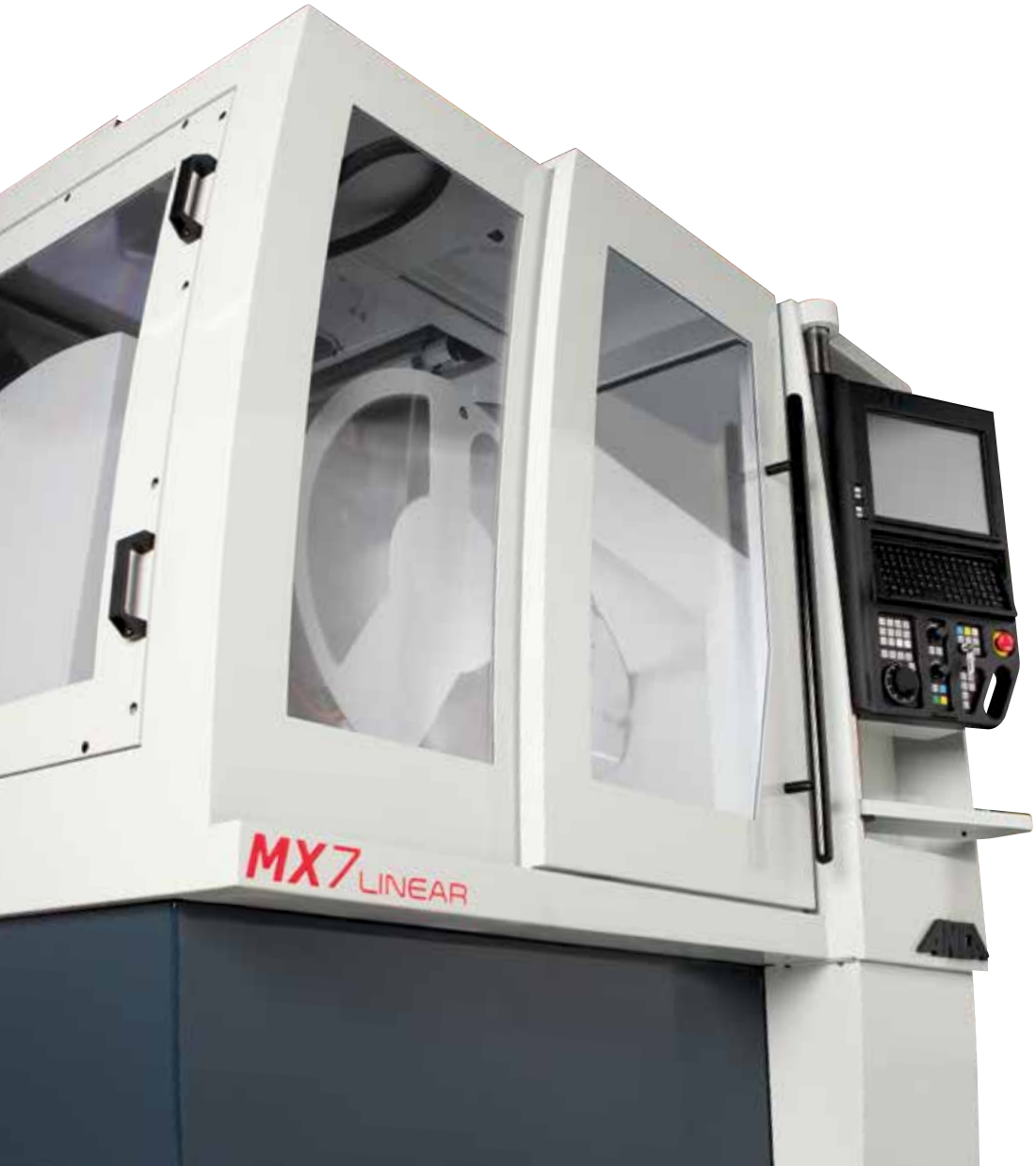
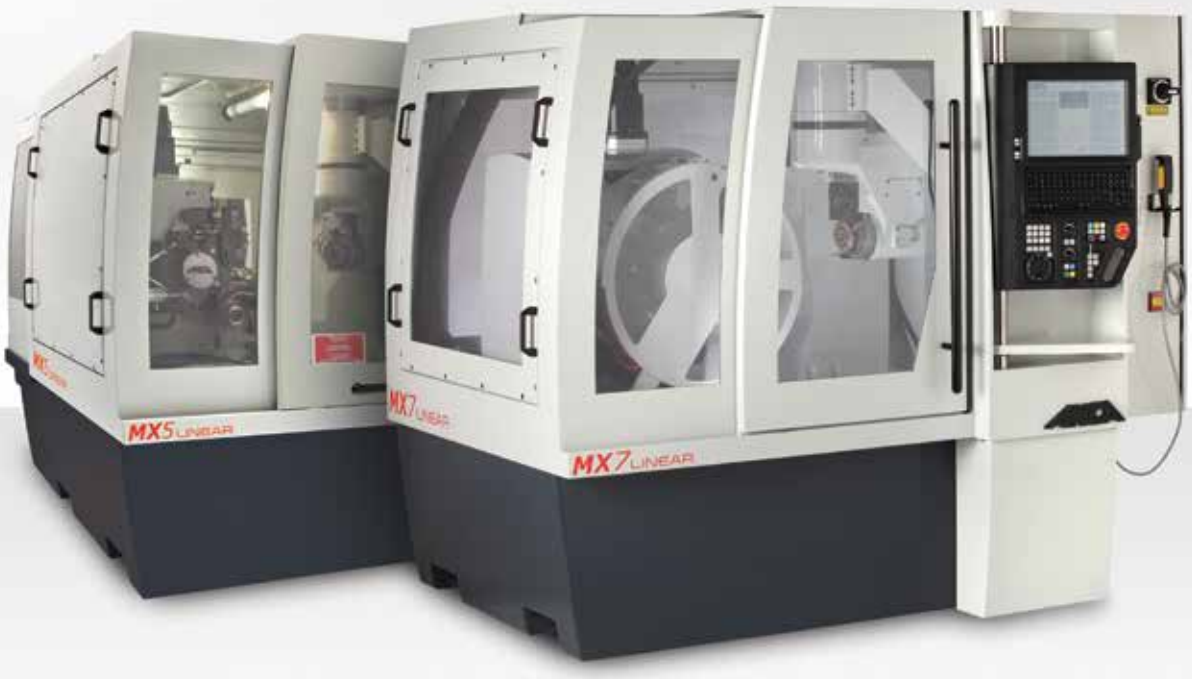
MX LINEAR



ANCA



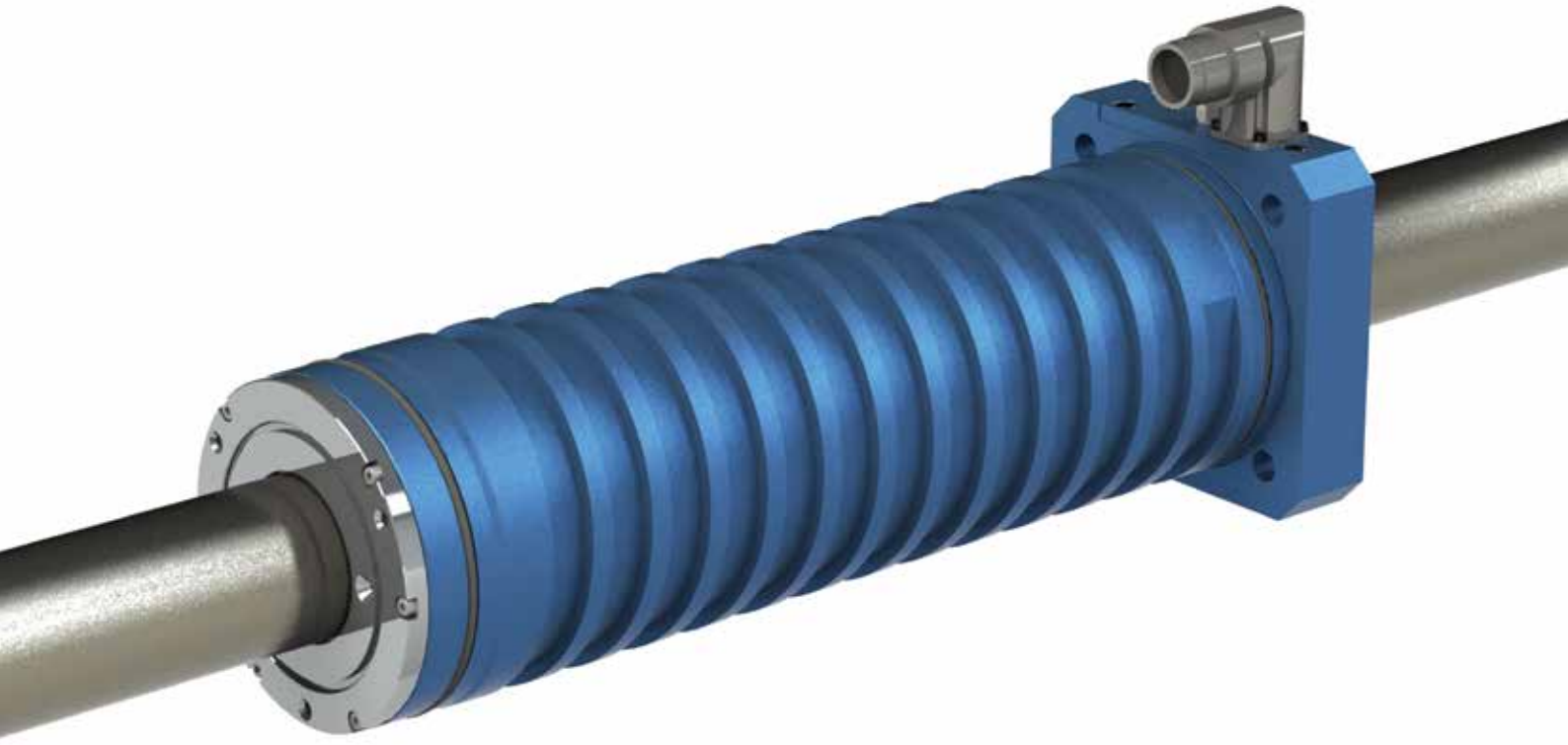
MX LINEAR

A popular tool grinder just got better

The MX Linear tool grinder range is specifically designed to meet the needs of tool production facilities seeking maximum output while remaining flexible to customer requirements. The machines include new technology cylindrical linear motors that enable them to achieve even higher levels of accuracy and performance.

MX machines have been proven in the market place to provide superior performance in today's production environment. MX machines have a rigid design ensuring tool accuracy based around the bi-symmetrical gantry. They now include as standard the latest advances in technology including linear motors and linear scales.

Incorporating ANCA's 40 years of software experience, ANCA's ToolRoom software ensures the MX Linear machines will efficiently handle any manufacturing or regrinding challenge you have.



LinX
Linear Motors

Performance

The MX Linear range uses ANCA LinX Linear Motors for axis motion (X & Y axes). In conjunction with linear scales, a high level of machine precision and performance is able to be achieved, resulting in superior tool accuracy and surface finish. With LinX Linear Motors there is no loss of machine accuracy over time due to wear and it is not affected by temperature variations. The LinX Linear Motor has higher axis speed and acceleration leading to reduced cycle times. It achieves this while maintaining a smoother axis motion.

Unique Cylindrical design

Existing flat bed type of linear motors can have some drawbacks when used with tool grinders. A cylindrical design overcomes these drawbacks which is why ANCA developed this particular design of Linear Motor for their new MX Linear range.

Reliable

The cylindrical LinX Linear Motors experience less wear as there are no contacting parts. They have been specially designed for a lifetime of operation in harsh grinding environments. As the magnetic field is cylindrical there is no additional down force on the rails or machine base.

Rated to IP67

With the unique cylindrical design the LinX Linear Motor is sealed to IP67. This sealing keeps out grinding contamination helping to extend the life of the linear motor.

Does not need a separate chiller unit

The LinX uses less energy than an equivalent flat bed style linear motor and has the same power consumption as a ballscrew system but with more efficiency. The design of the motor also naturally isolates any heating effects from the machine. Because of this reduced heat load the LinX does not need a separate chiller unit and uses the machine's regular coolant system reducing required floor space and power.

MX7 LINEAR

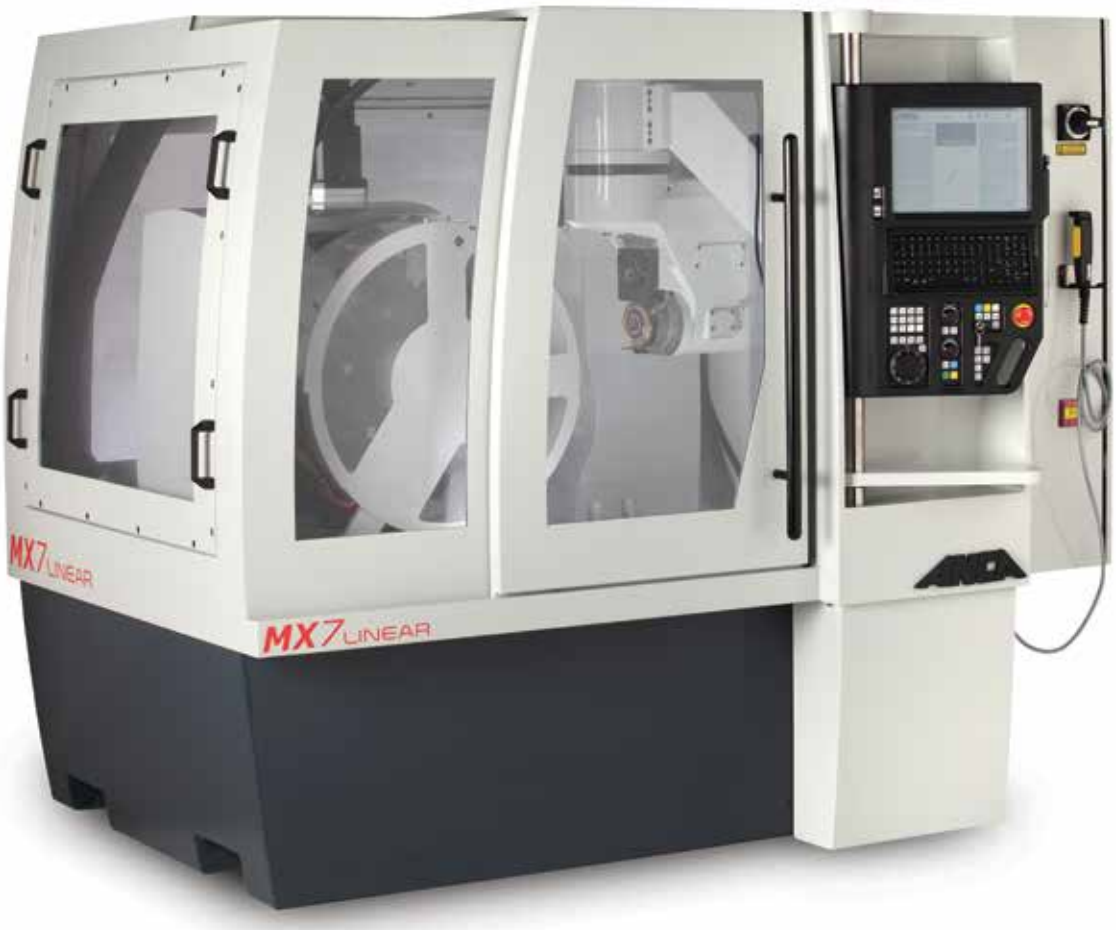
The next generation manufacturing machine

The ANCA MX7 Linear is a powerful, versatile CNC tool grinder designed for production grinding. It is built to meet the demands of high output, high precision manufacturing. The powerful 38 kW (51 HP) permanent magnet spindle provides high torque at lower RPM which is ideal for carbide grinding and a wide range of other applications.

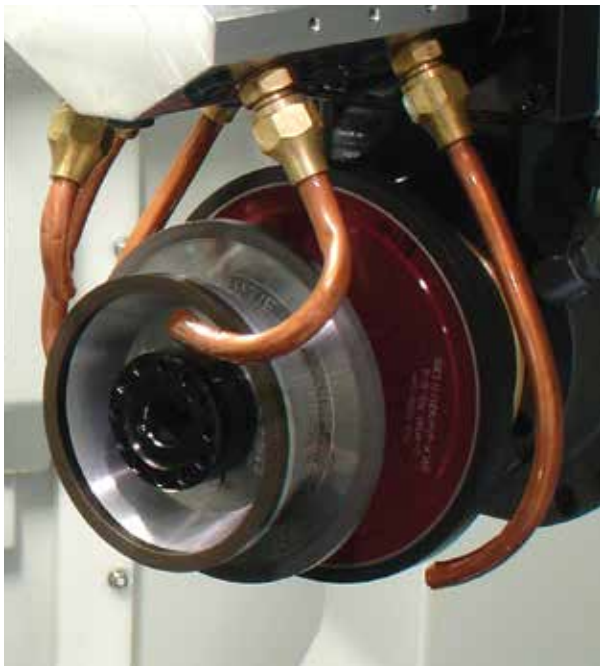
The MX7 Linear is a hard-working, high productivity system with unique features that enable it to handle varied batch sizes with minimum set-up time. The new cylindrical linear motor design increases reliability further and ensures a superior surface finish.

OVERVIEW

- 38 kW (51 HP) peak spindle power
- The MX7 Linear machine is ideal for high volume production for tools up to 25 mm (1") diameter
- Uses ANCA LinX Linear Motors for axis motion (X & Y axis)
- Linear scales as standard
- Standard 6-station wheel changer that stores & changes up to 6 wheel packs
- Automation options include RoboMate or FastLoad-MX Compact Loader
- Includes integrated wheel dresser


MX7 LINEAR
MX7 LINEAR

Power & Flexibility



Permanent Magnet Spindle

Outstanding spindle performance across the entire spindle working range.

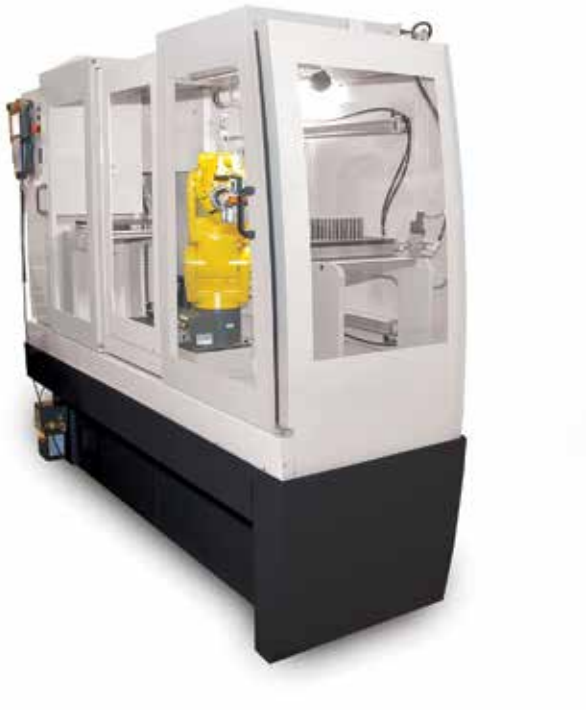
- High torque at lower RPM particularly suited for carbide grinding
- Position controlled axis (Q-axis), ensures accurate and repeatable wheel pack changes
- 10,000 RPM maximum
- Spindle power rating of 20 kW / 27 HP (S1) for MX7 Linear
- Spindle power rating of 14 kW / 19 HP (S1) for MX5 Linear

Wheel Pack Changer

Increases machine productivity and flexibility.

- Approximately 15-second wheel change time
- MX7 Linear has 6 HSK wheel packs
- MX5 Linear has 2 HSK wheel packs
- Coolant manifolds are also changed
- MX5 Linear wheel packs
  2 x 203mm (8") max
- MX7 Linear wheel packs
  3 x 203mm (8") max
  6 x 152mm (6") max

Automation



RoboMate Loader

(MX5 Linear/MX7 Linear option)

ANCA's RoboMate robot loader is a versatile and flexible automation solution that is equally efficient on a range of ANCA CNC tool and cutter grinders. Using the accuracy and reliability of the Fanuc robot, RoboMate takes the tool directly from the pallet to the collet in a single grip.

- Proven Fanuc reliability
- Designed with high levels of safety and ergonomics
- Available with 2 pallets (standard) or 4 pallets (optional)
- Cost-effective, efficient and fast
- Includes high capacity pallets

The RoboMate can load tool diameters from Ø3 mm (1/8") to Ø32 mm (1 1/4")

- Maximum tool length 350 mm (14")
- The size of the loader is:

L 2379 mm x W 722 mm x H 1865 mm

L 94" x W 28" x H 73"

FastLoad Compact Loader

(MX5 Linear/MX7 Linear option)

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-MX is designed for the MX range of machines.

- Uses existing machine axes for pallet movement & tool loading
- Capable of loading round shank tools
- No increase in footprint over the machine base
- No need to change gripper fingers between batches
- Diameter range 2 - 20 mm (1/16" - 3/4")
- Maximum tool length 150 mm (6")
- Load time of approximately 24 seconds