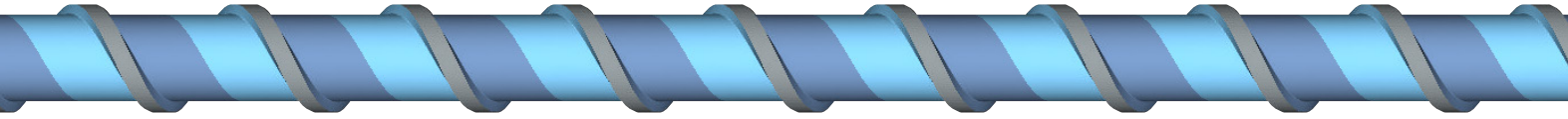


THINK



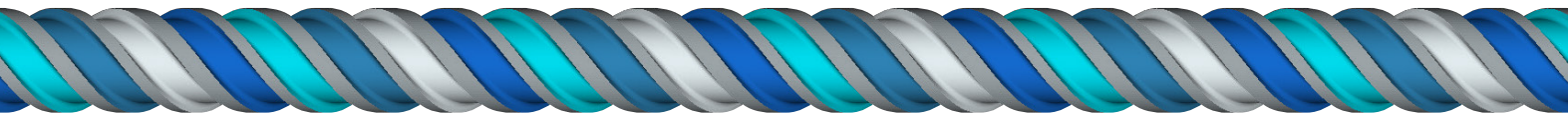
BIG!

High-end precision grinding in XL format.



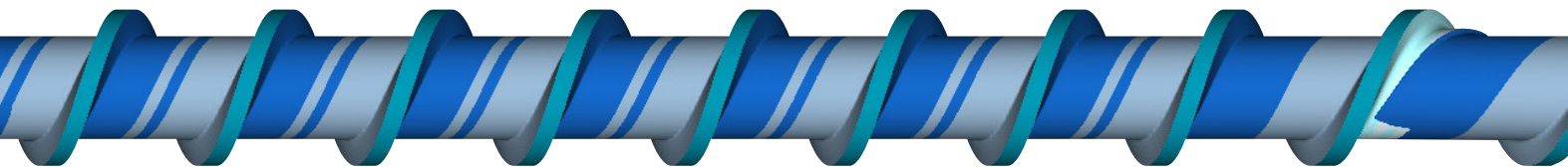
Process reliability and precision
for the really big tasks.

Large parts made from one piece can now be machined with high precision in just one setup. For this demanding grinding task, there is an XL grinding center that has been able to transfer the legendary Haas precision to a maximum dimension. The Multigrind® CB XL opens up completely new fields of application for our customers, precisely tailored to their complex grinding tasks. Won't work, doesn't exist.



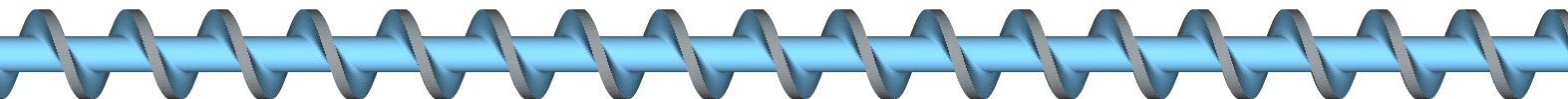
The spaceship for your project
and your future mission.

Hobs today, racks tomorrow, and extruder screws or gear cutting tools the day after tomorrow. The Multigrind® CB XL is not only suitable for large tools, but also for machining long, slim parts for the aerospace industry, such as landing gear parts, turbine components or ball screw drives. Maximum precision, repeatable results and more flexibility in series production from batch size 1. What are your plans?

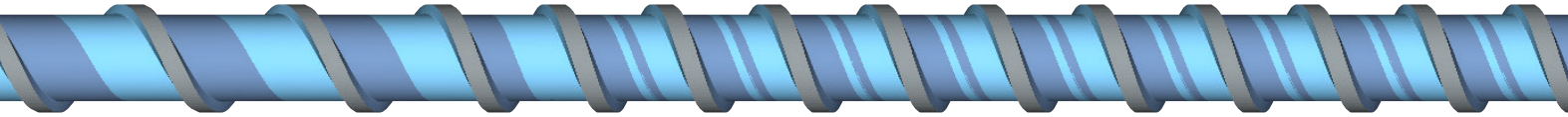


XL or XXL, this Multigrind®
grows with your requirements.

The new high-tech grinding center processes workpieces in 2 length variants: 1,400 mm and 3,200 mm. With different tool magazines and table extensions, we adapt the Multigrind® CB XL modularly to your requirements. The machining of large components is made possible by the long travels of the axes: Z 500mm; Y 410/850mm; C -250/+70 degrees.



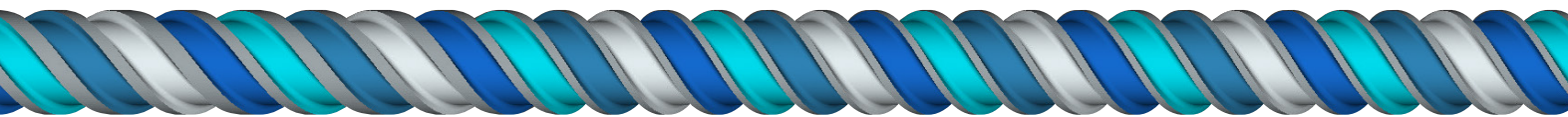
Complete machining in only one single clamping.



Extruder screw with variable pitch: 3,200 mm
Visualization: Multigrind® Styx

Complete machining means complete machining,
full stop.

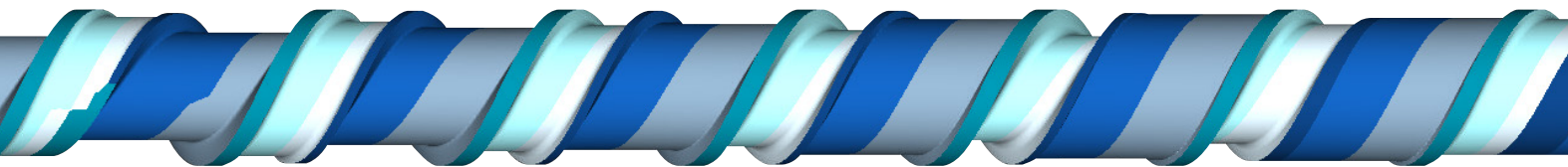
With the high drive power of 58 kW at a maximum speed of 9,000 revolutions per minute (HSK 80 E interface), components can be ground very quickly and without preparatory work. But we do more than just grinding: our direct-drive grinding and dressing spindles are water-cooled and are also suitable for milling and drilling. Everything ready to go in one single clamping.



Extruder screw with variable pitch: 1,800 mm
Visualization: Multigrind® Styx

If precision makes the difference,
it's a Multigrind® CB XL.

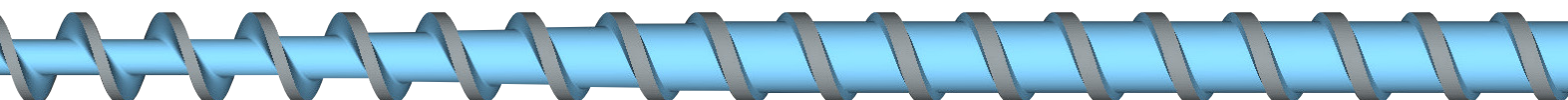
Enormous forces act in our longest 5-axis grinding machine. Controlling these forces were the major challenge during the design phase. The highly accurate grinding quality in this dimension is unique and a real competitive advantage. The end result is that the Multigrind® CB XL achieves a degree/angle accuracy of a few micrometers over a grinding length of 3,200 millimeters. That's top-notch.



Barrier screw: 2,800 mm
Visualization: Multigrind® Styx

Welcome to the era
of digital pre-grinding.

The Multigrind® Styx visualization software shows what is. Each pixel is calculated individually and displayed with maximum accuracy even before the machine starts. Grinding processes can be completely mapped in advance. Without surfaces, without limits. Without wasting time, material, and nerves. You can see your workpiece data down to the smallest detail, even for highly complex structures. Machine operators become workpiece improvers.



3-zone screw: 1,400 mm
Visualization: Multigrind® Styx

Think Giga!



Multigrind® CB XL 3200

Made from one cast.

Maximum rigidity thanks to cast mineral body.

Anyone grinding in these dimensions needs a high-tech grinding center with maximum stability and rigidity. The machine bed is made of a mineral casting and aligned μ -exactly on up to 40 adjustable leveling elements. The machine concept of the Multigrind® CB XL is always located exactly in the center of the machine, even with thermal growth. All axes are symmetrically aligned, reducing unwanted transitions and vibrations to an absolute minimum. A highly dynamic masterpiece.

Multigrind® CB XL



5-axis kinematics from A to Z.

Our axes are designed for limitless high-end precision grinding. The grinding axis moves in Y-direction, orthogonal to the table/X-axis, and in Z-direction the rotatable grinding spindle/C-axis approaches the clamped workpiece. The workpiece is held in the chuck of the A-axis. This is mounted on the table slide and moves over the entire length of the table. The X-axis, equipped with a direct drive, allows independent traverse and positioning of all units installed on the axis. Steady rests and tailstocks provide solid support. Sounds complex, and it is.



No compromises.

Better in the big picture and better in the details. Our in-house produced grinding and dressing spindles significantly influence the performance and accuracy of the Multigrind® CB XL towards high-end precision grinding. The dressing units are mounted on the machine table and multiple dressing cycles make it easier for the operator to produce profile wheels. And with μ -accuracy. Ergo, even better dimensional accuracy and surface quality.



Yes we robot!

We automate your individual production requirements.

The Multigrind® CB XL can be used as a high-end grinding machine or as a stand-alone production unit with lights out, depending on the grinding task. The standard magazine has 15 tools; if that is not enough, you can opt for the shelf magazine with gripper and space for up to 63 grinding wheels with diameters of up to 300 millimeters. Workpieces are loaded by robot handling or via a loading gantry and with a second A-axis, even in alternating operations. Here at Adelbert Haas, we fulfill all customer wishes; there is enough space available.

