

# TOOL MACHINING

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Grinding



Eroding



Laser



Measuring



Software



Customer Care

 **WALTER**

 **EWAG**

# SYSTEM AND SOLUTION PROVIDER FOR TOOL MACHINING

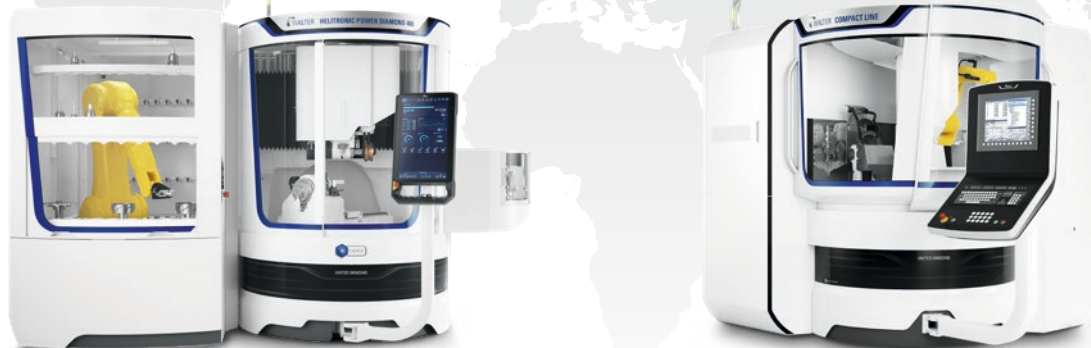
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WALTER has produced tool grinding machines since 1953. Today, our product range is supplemented by tool eroding machines and fully automated CNC measuring machines in the HELICHECK series for contactless complete measurement of tools and production parts.

Walter Maschinenbau GmbH is part of the UNITED GRINDING Group. Together with EWAG, we consider ourselves to be a supplier of systems and solutions for the complete machining of tools and can offer a wide range of products, including grinding, rotary eroding, laser machining, measurement and software.

Our customer focus and our global sales and service network of company owned locations and employees has been appreciated by our customers for decades.

## **Creating Tool Performance**



## CREATING TOOL PERFORMANCE

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We have expert knowledge in the areas of grinding, rotary eroding, laser machining, measurement, software and Customer Care.

Our range of services is the basis for innovative machining solutions for practically all tool types and materials typical for the market with a high degree of added value in terms of quality, precision, durability and productivity.

## OUR STRENGTHS

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- Grinding of rotation symmetrical tools and production components even with highly complex geometries of 0.1 mm and up in diameter
- Grinding of indexable inserts
- Rotary eroding of rotationally symmetrical tools
- Laser machining, the new process for efficient manufacturing of tools
- Fully automatic, optical measurement of tools and production components
- Worldwide presence through our sales and service network

## C.O.R.E. – CUSTOMER ORIENTED REVOLUTION

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**C.O.R.E. helps us make your production fit for the digital future.**

It's based on a new operating system, C.O.R.E. OS, that equips the machine with intelligence. Thanks to the uniform C.O.R.E. software architecture, exchanging data between UNITED GRINDING machines is easy. The integrated umati API can be used to communicate with third-party systems as well. It also offers access to UNITED GRINDING Digital Solutions™ products directly on the machine. C.O.R.E. not only establishes the technical foundation for this and other IoT and data applications, it also forms the basis of revolutionary yet uniform operation.



C.O.R.E.®



## GRINDING

Grinding of rotation symmetrical tools and workpieces as well as indexable inserts



CNC grinding machines for complete machining of rotation symmetrical tools and workpieces with complex geometries as well as indexable inserts in one clamping position. Machining is economical from batches of 1 to mass-production in non-labour intensive multi-shift operation.



## ERODING

Eroding and grinding of rotation symmetrical tools



CNC machines for eroding and grinding of rotation symmetrical tools made of super-hard materials in one clamping.



Machines	Use   Materials	Tool dimensions <sup>1)</sup> max. length <sup>2)</sup> / diameter
1 HELITRONIC G 200	P R HSS TC C/C	235 mm / Ø1 – 125 mm
HELITRONIC MINI PLUS	P R HSS TC C/C CBN	255 mm / Ø1 – 100 mm
2 HELITRONIC RAPTOR	P R HSS TC C/C CBN	280 mm / Ø3 – 320 mm
HELITRONIC POWER 400	P R HSS TC C/C CBN	520 mm / Ø3 – 315 mm
3 HELITRONIC VISION 400 L	P R HSS TC C/C CBN	420 mm / Ø3 – 315 mm
4 HELITRONIC MICRO	P HSS TC C/C CBN R HSS TC C/C CBN	220 mm / Ø0.1 – 12.7 mm 220 mm / Ø3 – 12.7 mm

Machines	Use   Materials	Indexable insert <sup>1)</sup> Inscribed circle/ circumscribed circle
COMPACT LINE	P R HSS TC C/C CBN PCD	Ø3 mm / Ø50 mm



Machines	Use   Materials	Tool dimensions <sup>1)</sup> max. length <sup>2)</sup> / diameter
HELITRONIC DIAMOND EVOLUTION	P R HSS TC C/C CBN PCD	185/255 mm / Ø1 – 165 mm
1 HELITRONIC RAPTOR DIAMOND	P R HSS TC C/C CBN PCD	270 mm / Ø3 – 400 mm
2 HELITRONIC POWER DIAMOND 400	P R HSS TC C/C CBN PCD	520 mm / Ø3 – 380 mm
3 HELITRONIC VISION DIAMOND 400 L	P R HSS TC C/C CBN PCD	420 mm / Ø3 – 315 mm



## LASER

Laser machining of indexable inserts and/or rotation symmetrical tools



The use of laser technology is a quantum leap in tool machining. With modern short and ultra-short pulse laser technology, tools can be produced with extremely high surface quality and thus greater durability.



## MEASURING

Contactless measurement of tools, workpieces and grinding wheels



Contactless complete measurement of rotation symmetrical tools, workpieces and grinding wheels with 3 or 5 CCD cameras sets new standards in quality assurance.



Machines	Use   Materials	Tool dimensions <sup>1)</sup> max. length <sup>2)</sup> / diameter
1 LASER LINE ULTRA	P R TC C/C CBN PCD CVD-D MCD/ND	250 mm / Ø 0.1 – 200 mm
2 LASER LINE PRECISION	P R CBN PCD CVD-D MCD/ND	250 mm / Ø 0.1 – 200 mm

Machines	Use   Materials	Indexable insert <sup>1)</sup> Inscribed circle/ circumscribed circle
1 LASER LINE ULTRA	P R TC C/C CBN PCD CVD-D MCD/ND	Ø 3 mm / Ø 50 mm
2 LASER LINE PRECISION	P R CBN PCD CVD-D MCD/ND	Ø 3 mm / Ø 50 mm



Machines	Use	E <sub>LUX</sub> /MPE-value	Tool dimensions <sup>1)</sup> max. length <sup>2)</sup> / diameter
1 HELICHECK ADVANCED	M	(1.8 + L/300) µm	420 mm / Ø 1 – 320 mm
2 HELICHECK PRO	M	(1.2 resp. 1.4 + L/300) µm	300 mm / Ø 1 – 200 mm
HELICHECK PRO LONG	M	(1.2 resp. 1.4 + L/300) µm	730 mm / Ø 1 – 200 mm
HELICHECK PLUS	M	(1.2 resp. 1.4 + L/300) µm	300 mm / Ø 0.1 – 200 mm
HELICHECK PLUS LONG	M	(1.2 resp. 1.4 + L/300) µm	730 mm / Ø 0.1 – 200 mm
3 HELICHECK NANO	M	(1.2 resp. 1.4 + L/300) µm	120 mm / Ø 0.1 – 16 mm
4 HELICHECK 3D	M	(1.8 + L/300) µm	420 mm / Ø 3 – 80 mm



## SOFTWARE

The intelligence of tool machining and measuring for production and regrinding



The grinding software HELITRONIC TOOL STUDIO and ProGrind are based on decades of experience and market-proven tool grinding expertise.

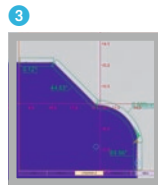
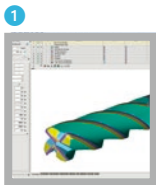


## CUSTOMER CARE

Our concentrated competence for you and your machines.



From “Start up” through “Prevention” to “Retrofit”, our customers enjoy tailor made services for their particular machine configuration. Around the world, our customers can use helplines, which can generally solve a problem using remote service.



With its wizard technology, **1 HELITRONIC TOOL STUDIO** guarantees optimal tool machining. In a very short amount of time, grinding programs for very complex tool geometries can be programmed. HELITRONIC TOOL STUDIO – What you see is what you grind.

**2 ProGrind** is tailor-made for flexible use. Thanks to input masks with 3D graphics, it is possible to create individual grinding programs quickly and easily. Via 3D simulation, the grinding program can be analysed at any time and corrected as necessary.

The variety of **3 measurement technology software** matches the HELICHECK CNC measuring machines perfectly and offers innovative and user-friendly functions.

The true potential of a high-tech machine is proven by its availability throughout its entire life cycle. In addition to quality, our services also play an important role, for example:

- Start up
- Qualification
- Prevention
- Service
- Digital Solutions
- Material
- Rebuild
- Retrofit



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