



Pollux
PRÄZISIONSTECHNIK



4 axis

Insert Grinding for indexable tungsten carbide insert

Best opportunity for PRECISE return on invest

Why ALCHIMIST 28 is your next **big** step

Precision-Enhanced

Tailored for indexable tungsten carbide inserts with seamless in-process dressing capabilities, ensuring precision even for Cermet, CBN and PCD.

Sturdy Foundation machine bed

Crafted with an artificial marble and cast iron base for durability and low thermal expansion.

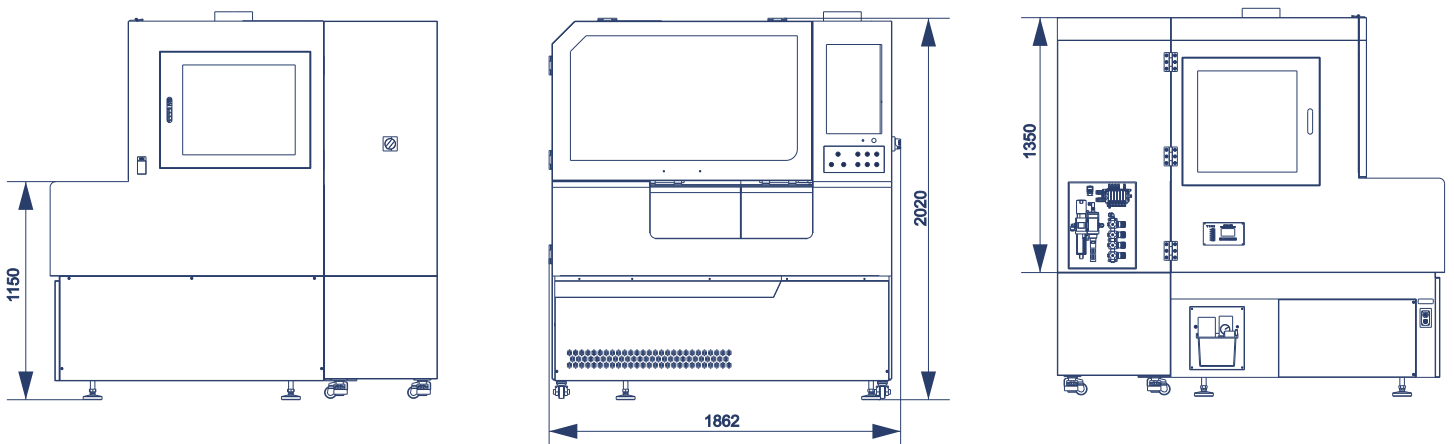
Next-Gen Motor Technology

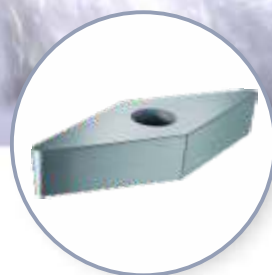
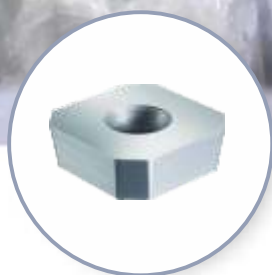
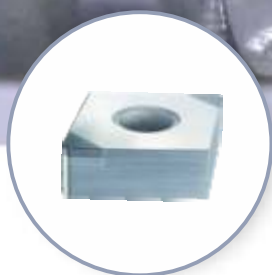
Digital water-cooled AC motor for the Spindle, and a modern digital AC Servomotor for B-axis as well Linear motors for X and Y-Axis.

State-of-the-Art Control Units

Machine control by Germany's renowned Bosch Rexroth.
Robot control expertise from Japan's Nachi.
Stable temperature conditions with a dedicated air/water heat exchanger.

Dimension and Footprint





Join the future of precision grinding

Enhanced Connectivity

Swift data transfer with local Ethernet.
Uninterrupted power supplies guarantee zero data loss during emergencies.

Integrated Robot Systems

A robust tubular frame construction, ensuring maximum stability.
Versatile gripper head capabilities, catering to various operational needs.

Advanced Measuring Systems

Autoset technology for automatic centering, ensuring a perfect grind every time.

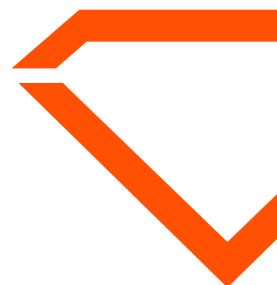
Efficient Cooling & Lubrication

Centralised systems guarantee constant machine performance

Reliable Grinding-Wheel Conditioning

Achieve an always-clear grinding surface during cycles.

Interested in diving deeper into what the Alchemist 28 offers?
We have detailed specs ready for you.



Technical specification

Main Technical Data:

B Axis

Vmax	360(°s-1)
Working feed speed	0~60(°s-1)
Resolution of the measuring system	0.0001(°)
Repeating positioning accuracy	0.002(°)

C Axis

Vmax	90(°s-1)
Working feed speed	0~90(°s-1)
Travel range	-91°/+45°
Resolution of the measuring system	0.0001(°)

X Axis

Vmax	10000(mm min-1)
Working feed speed	0~3600(mm min-1)
Resolution of the measuring system	0.0001(mm)
Repeating positioning accuracy	0.001(mm)
Travel range	120(mm)

Y Axis

Vmax	10000(mm min-1)
Working feed speed	0~3000(mm min-1)
Resolution of the measuring system	0.0001(mm)
Repeating positioning accuracy	0.002(mm)
Travel range	max.200(mm)
Oscillation speed	max.63(mm s-1)
Oscillation frequency	0-2(Hz)
Oscillation arrangement	max.10(mm)

Dimension of the grinding insert

Smallest lc of the insert	3.75(mm)
Biggest lc of the insert	50(mm)

Whole Machine Consumption	25KW
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Main Grinding Spindle

Grinding wheel diameter	350(mm)
Max.spindle speed	3600 (min-1)
Motor power	9KW
Max.grinding wheel speed	65(m s-1)

Dressing Attachment in Process

Dressing wheel diameter	φ150 × H80(mm)
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Workpiece clamping system

Clamping pressure	2000 - 11000N
Clamping range	max.29(mm)

Inscribed circle measurement DX

Measuring range	
(standard/optional)	25(mm)/45(mm)
Measurement resolution	0.0005(mm)

Thickness measurement DT

Measuring range	max.29(mm)
Measurement resolution	0.005(mm)

Machine Box dimension

Machine	2350×2130×2300(mm)
Coolant Cleaning unit (option)	1800×1200×1500(mm)

Auto Fire Extinguisher

Extinguisher material	CO2
Weight of Material	7Kg

Weight of Material	Around 5T
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Contact Us Today!



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