

## **ANCA Celebrates 50 Years of Innovation at GrindingHub**

- **Anniversary display with new machines and technologies**
- **Major new release of ANCA's milestone software ToolRoom for an average 20% performance increase**
- **Automation for everyone: AIMS Connect opens opportunities for networking machines and systems**

PRESS  
INFORMATION

**Weinheim, Germany - March 20, 2024** - ANCA, a global leader in CNC grinding machines and technologies celebrates its 50<sup>th</sup> anniversary, displaying its latest innovations at GrindingHub. As a mainstay in the precision tool industry, ANCA will showcase its commitment to excellence through new products, cutting-edge technologies, and exciting events in hall 7, stand A70. The anniversary showcase addresses manufacturers' needs for highest quality and lowest cost tools, plus freeing operators from repetitive and non value-add tasks to make room for progress and creativity.

Pat Boland, ANCA co-founder, remarked, "For 50 years ANCA has been on a journey to change the shape of the cutting tools industry. To celebrate our 50<sup>th</sup> anniversary, we look forward to meeting with our customers and partners at GrindingHub. As innovation has motivated us throughout our history, new products and developments will be at the centre of our celebrations. ANCA's future is exciting, we are focused on continuing to invent and deliver groundbreaking technology to help take cutting tool production into areas not thought possible."

Edmund Boland, ANCA CNC Machines General Manager, added, "GrindingHub is a major European event in this milestone year, so it's thrilling to showcase our latest products and technologies for high performance cutting tools produced with optimised efficiency and cost in Stuttgart. Building on ANCA's heritage in producing industry-leading software, the latest release of our signature ToolRoom software, RN35, takes cycle time optimisation even further, elevating productivity – it's the future of tool production."

"ToolRoom and AIMS really pave the way for highly productive, autonomous production. Our investment in AIMS for connected and automated processes is our commitment to solving key challenges such as labour shortages and consistent production processes with smart, future-ready solutions. Our ULTRA technology has made a splash in the market, and now enables micro tool production, regrinding and small batch production with the MicroX and FX7 ULTRA," added Edmund.

### **ToolRoom and AIMS: continuing to lead in software and automation**

ANCA started with a mini computer and teletype installed at co-founder Pat Boland's home, followed by a CNC and then the design and manufacture of machine tools with co-founder Pat McCluskey. Throughout the years, ANCA has brought significant advantages to the industry with pioneering innovations like the first touch probe, soft axes and 3D simulation.

Naturally, software and automation are key highlights of ANCA's anniversary innovation portfolio. The latest version of ANCA's ToolRoom software, RN35, offers:

- Average performance increase of up to 20% with advanced features and functions, optimising feedrate, improving cycle time and surface finish, and extending wheel life.
- New developments including the integration of material removal rate calculations allowing manufacturers to automatically set parameters for constant removal rates, plus air-time reduction.
- Statistical Process Control (SPC) software for statistical analysis and evaluation of manufactured part characteristics streamlines manufacturing processes.
- Profile fluting further enhancing the popular flute from solid feature of the proprietary ANCA software.

Experts will present these and other upgrades to GrindingHub visitors, plus further exciting news in CIM3D simulation software.

ANCA's AIMS (ANCA Integrated Manufacturing System) is the smart manufacturing solution for cutting tool production, enabling manufacturers to connect, automate, and create like never before. The modular system comprises hardware and software components for automated, closed loop manufacturing. AIMS Server controls production processes and AutoComp, the intelligent compensation module maintains part quality automatically, while the new AIMS Connect function covers job management.

With AIMS Connect's debut at GrindingHub, visitors can experience firsthand the power of digital production control and modular automation, now available for existing installations. The system has proven in the field that it empowers manufacturers to explore new opportunities, products, and features while maximizing productivity and quality.

### **Machines and technology for highest quality and lowest cost tools**

ANCA's GCX machine and gear tool technology is set to redefine the production of skiving cutters with a turnkey solution package. To address the complexity of gear tools manufacturing, this offering includes features for the design of gear cutting tools, manufacturing and integrated tool measurement, as well as providing the skiving machine setup parameters.

Tradeshow visitors will witness live how this configuration enables short setup times, simulation and monitoring, plus quality enhancing features like the ANCA Motor Temperature Control (MTC) or integrated balancing (iBalance) for unparalleled longtime grinding profile accuracy within +/- 0.0015mm. This turnkey package facilitates easy entry into the gear tools sector while ensuring top-quality results.

### **ULTRA Technology: the platform for talent and micro tool enabler**

Revolutionary ULTRA technology combines nanometre control, servo-controlled algorithms, and mechanical stiffness upgrades to achieve unprecedented accuracy. The FX7 ULTRA and MicroX ULTRA demonstrate ANCA's commitment to precision, enabling continuous batch production down to 0.03mm and setting new standards in tool manufacturing.

The MicroX ULTRA premiered at EMO 2023 and will be released to the market at GrindingHub, giving micro tool manufacturers all the advantages of the ULTRA technology and ANCA's Machine Intelligence in a machine tailored to this application. As the only micro tool grinder with nanometre control,

optimised mechanical layout and axes travel, integrated tool measurement and progressive automation, the six axes grinder is the ideal solution for volume production of tools down to 0.03mm.

The FX7 ULTRA, introduced to the market in 2023, will play a special role at GrindingHub. It is the focus of the “Grinder of the Year” competition, in which talented young grinding experts demonstrate their skills. The five applicants who make it through the theoretical test to the final will be trained on the software and machine at ANCA’s Weinheim branch before competing for the title at GrindingHub.

On May 15 and 16, each finalist will program a specified tool in ANCA’s ToolRoom software and then grind it on the FX7 ULTRA. The results of the integrated measuring with ANCA’s LaserULTRA and the verdict of the jury will then determine the Grinder of the Year winner for 2024.

### **Customer-centric solutions enable enhancements**

The new EPX-SF stream finishing machine will be released to the market at GrindingHub. ANCA’s advanced edge preparation and surface finishing solution addresses productivity targets, delivers superior IP cutting tool performance and succeeds in precision-critical industries – in a design that’s ready to be integrated in automated tool manufacturing systems. With 11-axis automation, and smart recipe fine-tuning, the machine is engineered by tool experts to optimise media utilisation while providing precise edge control. The machine has the capability to reduce edge roughness to under 100 nm and refine edge radii to mere microns with controllable K-factor, achieving nano-smooth surfaces and micron-honed edges in record time.

The EPX-SF’s cyclic mode with pulse rotation serves as a potent defense against surface burrs and edge imperfections. With adjustable positive and negative angles, the EPX-SF spindle traverses the optimal cutting path, optimizing potential chip flow and reducing the surface roughness of the cutting workpiece. Within ANCA’s automation ecosystem, the EPX-SF seamlessly integrates into production lines, operating autonomously with robotic assistance round the clock for tool loading/unloading.

The CPX blank preparation machine is a prime example of how to include the voice of the customer in product development. Tool manufacturers around the world were asked and given their ideal solution for blanks with high material removal rates, application flexibility, and integrated quality control. With features like statistical process control and top surface finishes below 0.2Ra, manufacturers can achieve high productivity at minimal cost with the CPX Linear. Some further application capability will be released exclusively as a premiere at GrindingHub.

ANCA invites visitors to join them at hall 7, stand A70, to experience firsthand the future of tool manufacturing.



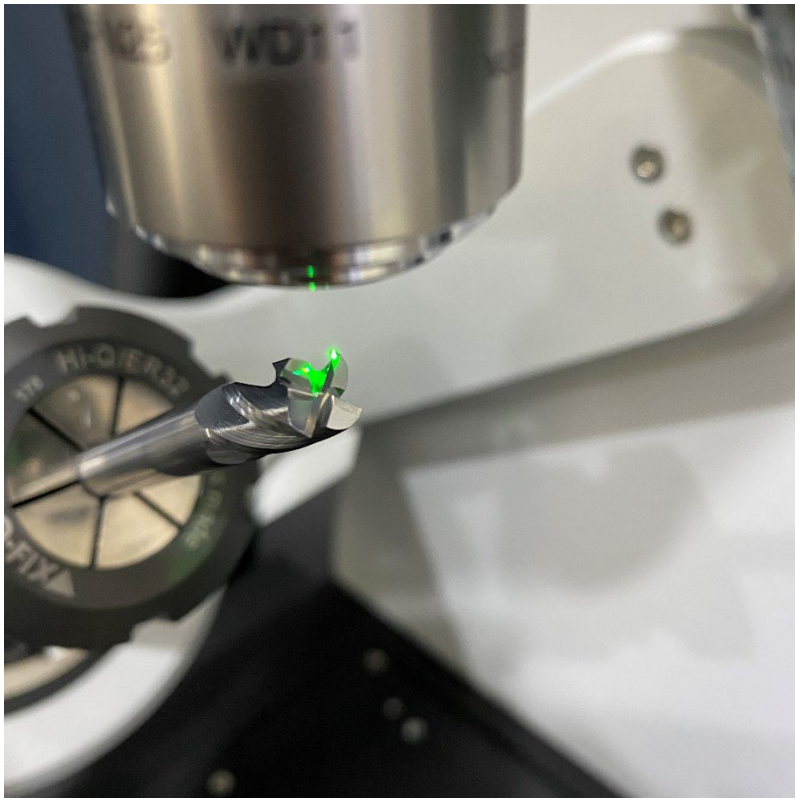
Pat McCluskey and Pat Boland with their original mini computer in 1974



...with the premiere machine MicroX ULTRA for micro tools.



MicroX ULTRA



Laser measuring on EPX-SF



LaserULTRA measuring on FX7 ULTRA

### **About ANCA**

ANCA is a market leading manufacturer of CNC grinding machines. It was founded in 1974 in Melbourne, Australia where the company still has its global headquarters. ANCA Europe has technology centres in Weinheim, Germany and Coventry, UK with expert teams covering service and sales, applications, customer training, operations, engineering, finance and administration.

ANCA CNC grinders are used for manufacturing precision cutting tools and components across a diverse range of competitive industries including cutting tool manufacturers, power generation, woodworking, automotive, aerospace, electronics and medical.

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