

# news LETTER

## april 2018

### GrindTec 2018 Looking Back

*How quickly time can fly by. For the 11th time, the leading trade fair for grinding technology, GrindTec, has closed its doors once again.*

The fair is getting bigger, more attractive, and more famous with each year it is held. The stream of visitors in the exhibition halls and at our own booth in Hall 3 was impressive. We were able to welcome a large number of visitors from home and abroad. Thank you for visiting us!

The experts were able to see all the machines from the current range, and, in the case of the **norma**NGC750, even a **world premiere**. Highlights from the SCHNEEBERGER innovation portfolio were exhibited on display stands.

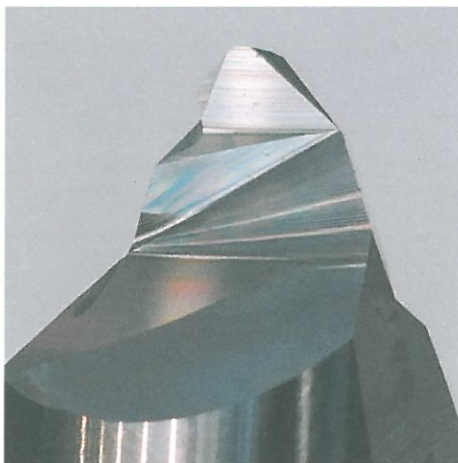


**the world of excellent grinding**

### Qg1 CAD CAM Grinding

The powerful **Qg1 CAD CAM** grinding software, which was used on all machines and several demo tables, could also be seen and experienced. The demo on the large touch screen was also a real 'crowd puller', which the visitors could try for themselves, winning them over directly with the efficiency and simple operability of the software.

As previously reported, the grinding programs in this software are based on a 3D model of the tool, the **geoMOD**. This makes the software both mathematically and visually unique and produces the best grinding results.



No matter whether it's STEP, DXF, GDX, or ISO, **Qg1** is open for all standards

The high grinding quality offered by **Qg1** was demonstrated using the new **STEP** interface as an example. The Matterhorn, a famous Swiss mountain in the shape of a pyramid, was imported into the software as a 3D .step model, and the shape was ground in solid carbide on the Norma NGC.



## CAD CAM grinding

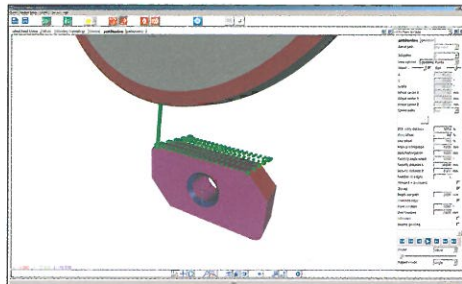
Other **STEP** grinding models like camshafts, injection moulds and inserts were also very well received by the audience.

Of course, the software offers even more highlights:

Using the **TOOGLE** search engine, any tool or grinding wheel can be found quickly in the extensive database. And thanks to the **NTTE** function, the finished tool is just a few clicks away. This was shown with examples of milling cutters and drills at the fair.

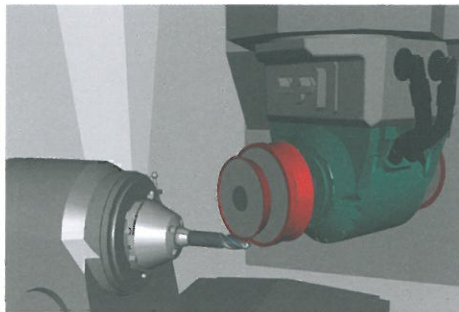
With the new **machine simulation**, which includes grinding time calculation and collision control, we inspired numerous customers.

The authenticity of the new insert module, where the inserts including the blank, tooth profile, and grinding path are also represented in 3D, was very well received by our visitors.



An insert can also be imported as a STEP model

3D machine simulation



Of course, the large **variety of applications and innovations** with numerous examples of step drills, band saw cutters, radius and ball inserts, reamers, wood-working tools, non-circular grinding, and much more were displayed.



Software demo on the large touch screen

## Production grinding

### siriusNGS

The ideal machine for grinding **inserts and other precision parts**. Thanks to linear and torque motors combined with an optimum kinematic concept and loading robot, this machine is highly productive around the clock during unmanned operation, and it grinds a wide variety of production parts. With a **diameter of up to 300 mm**, the grinding wheels guarantee sufficient service life. A **7-fold wheel loader** also ensures the necessary flexibility.



No one's too small to show interest

## Machine peripheral equipment

Not only clamping, automation, and handling, but also other peripheral devices are developed and manufactured in-house by SCHNEEBERGER. These include, for example, VAS cartridge filter systems. These are available with **180 l to 900 l capacity** large tanks. The latter can supply up to 2 machines with cooling lubricant at the same time.

The **F2D cartridge filter module** is designed for use as a volume-independent auxiliary filter in combination with a belt filter or a centrifuge. This ensures a continuous, independent circuit for cleaning carbide and HSS out of grinding oil or emulsion. The contaminated cooling medium is pumped by the circulation pump

through the two filter towers, which feature two filter cartridges each. The cartridge filters achieve a filter fineness degree of  $5 \mu\text{m}$  and are therefore ideally suited for both solid carbide and HSS.

The **VAS 800 filter system** is also available with an optional band filter. The cartridge filters are completed with a permanent magnetic separator and paper tape. Optimal filtration is therefore achieved with both HSS and carbide machining. Supplemented with the corresponding cooling radiator in two performance levels, the customer receives a very compact and innovative filter system that is also supplied directly with power from the machine. No separate power supply is necessary!



900 I VAS cartridge filter



Supplied filter model F2D



# A worldwide innovation: *norma*NGC 750

## A compact machine with an amazingly large stroke



**Shown for the first time at the exhibition!**

This machine has sufficient room for big jobs. **750 mm X-stroke!**

The **T-slot table measures 1250 mm** and provides plenty of space for the accompanying CNC steady rest or the hydraulic tailstock.

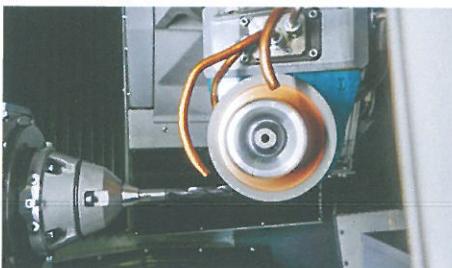
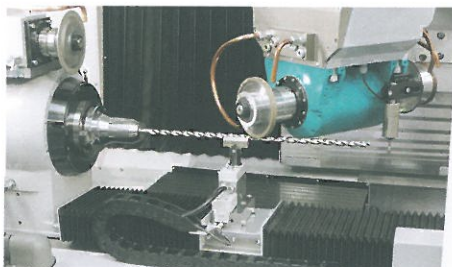
The **7-wheel AWL** grinding wheel changer and integrated MIL 1 pallet loader provide the machine a high level of autonomy.

In spite of the additional table length versus the standard machine, the new one remains compact.

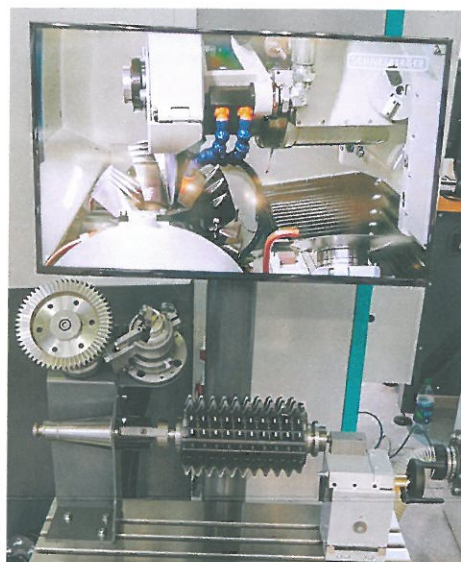
**True greatness comes from within!**

Drill grinding with CNC steady rest on the **normaNGC 750**

Shank and gear cutting tools on the **normaNGC**



Naturally, its famous older sister, the **normaNGC** with standard table length, was also present at our booth. In addition to the Matterhorn mentioned above, shank tools were ground in loader operation. Another strength of this machine, grinding gear cutting tools, was also particularly discussed. Hob, shaper, and bevel gear cutters were provided an extra display along with corresponding information material for the visitors.



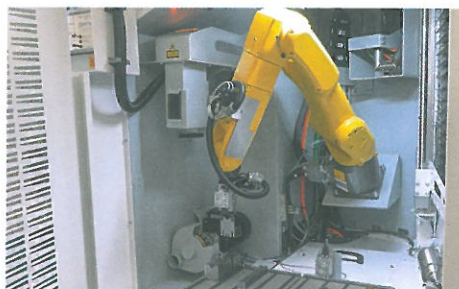
## Automation meets automation

**Komax, based in Central Switzerland, specialises in solutions for automated wire processing and is a global leader in this field.**

In addition to machines for stripping cables, this also includes automatic crimping machines, cable handling machines, measuring and testing routines, and automatic wire harness production.

Special knives (blades) are used in these machines for stripping and cutting cables, and these have already been ground fully automatically on a SCHNEEBERGER for years.

Komax currently produces **several ten-thousands blades** in various sizes and designs. To expand its capacity, Komax has selected a **geminiNGM** with robot and post-processing, because SCHNEEBERGER is also a leader in integrated automation.



Blowing, brushing, lasering, turning

While the blade is being sharpened in the machine, the next piece is removed from the pallet and given a **laser marking**. Once the blade has been ground, it is blown off in the **blow-off station** and **de-burred** with a brush. Since the blades are sharp, they are turned and laid down with the ground side facing downwards.

This all takes place automatically while the following piece is being ground. This saves various production steps, and the special thing about this is that it all hap-

pens inside a very small space. The loading space of the **geminiNGM** designed to be very compact, which means that the machine does not require any additional floor space and still offers full variety and functionality.



Komax Kappa 350 blade

Further refinements of SCHNEEBERGER automation solutions include the new and compact **stack loaders for up to 10 pallets**, ultrasonic cleaning, magnetic and vacuum grippers, specific turning stations, optical position detection of the workpieces and the associated clamping systems.



## *gemini*NGM High-end tool grinding machine

**Expandable** for the production of tools and other production parts.

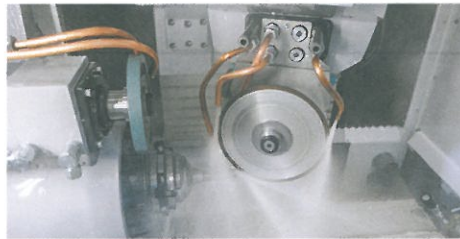
Workpiece loaders, grinding wheel pack changers, in-process measurement, dressing machines, CNC tailstock and steady rest combined with customer-specific mechanical concepts, individual clamping systems, and adapted processes ensure **full production autonomy**.



The structural strength and thermal stability of the machine guarantee the best grinding results.

Thanks to the double grinding spindle featuring a selection of **10, 24 or 32 kW**, sufficient grinding power is available to perform any production task. If required, various **high-frequency spindles** are also available.

## Impressions



## 2018 trade fair calendar

Metalloobrabotka	14.05 - 18.05.2018	Moscow	Russia
Intertool	15.05 - 18.05.2018	Vienna	Austria
BIEMH	28.05 - 01.06.2018	Bilbao	Spain
IWF	22.08 - 25.08.2018	Atlanta	USA
IMTS	10.09 - 15.09.2018	Chicago	USA
AMB	18.09 - 22.09.2018	Stuttgart	Germany
Maktek	02.10 - 07.10.2018	Istanbul	Turkey
BIMU	09.10 - 13.10.2018	Milan	Italy

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