

GrindTec 2014: OTEC scored a hit



GrindTec 2014 was a fair of superlatives. This trade fair in Augsburg has grown into the most important international platform for grinding technologies. With 520 exhibitors - mainly from Europe and Asia - and over 15,000 visitors from over 50 countries, numbers were up once again. For OTEC, as a global player acknowledged for its cutting edge technology, this world-leading industry fair was once again a great success. The numerous visitors to our stand (some 30 % more contacts than previously) were able to witness the company's tremendous innovative strength first hand.

A special attraction was the SF 3 stream finishing unit with pulse drive system, specially developed for integrating into production lines, as were the SF 1/30, a compact little "bench top machine", and the DF-5 Tools drag finishing unit, which drew a great deal of attention by virtue of its new design. As was once again borne out in numerous discussions, there is a rapidly increasing demand among major players, for example in the automotive industry, for solutions which incorporate include fully automatic systems. OTEC anticipated this trend at an early stage and was equally quick to adapt.

Precision finish demands

Here you will find a video about the innovative new SF 3 with pulse drive

DF-5 Tools: Also suitable for heavy workpieces



The DF-5 Tools drag finishing unit now has a brand new look. Of course, it is not only a matter of appearance. The welded, very rigid steel frame gives the machine an extremely compact chassis which enables larger and heavier workpieces (up to about 15 kg) to be finished in it. This once again opens up new opportunities for using the drag finishing process for the edge rounding, deburring, smoothing and polishing of tools.

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Proudly presenting: Our electrical engineering department

The seven members of staff in this department are responsible for developing and implementing the technology used for controlling and regulating our semi-automatic and fully automatic machines. The end result of their work is the control cabinet of each machine which forms the heart of the process control system and is therefore the most important electrical and electronic component of the entire unit. This is the result of a complex R & D process that begins with the conceptual design of complex circuitry, followed by de-



termining and ordering the individual components needed for the concept to be implemented. Then the software for the program control system is developed alongside the physical design of the control cabinet,

This is the normal process involved in developing and implementing the process control system. But we at OTEC are proud that we are able to carry out all these tasks in house and that we have the relevant staff on hand. Their knowledge and expertise make a valuable contribution to the sophisticated technology of our machines and systems, making it possible for us to offer the option of full automation for an even greater range of applications up to and including complete integration into the production line. This flexibility enables us to respond in detail to individual customer requirements.

From left to right: Patrick Stümpfig, Michael Fritz , Uli Renninger, Ralf Bauer, Jörg Albrecht, Klaus Kalmund, Oliver Bischoff

See us at the trade fairs in Stuttgart and Pforzheim

In June there will be three major trade fairs taking place in our region, and of course OTEC will be there.

From June 3 – 5, Stanztec will be held at the Congress Center Pforzheim, hosting about 140 exhibitors from the Baden-Württemberg technology region. This trade fair for the segments tool making, stamping and associated peripherals reflects the regional supplier profile and has long since gained international recognition. Also from June 3 – 5, Medtec will be held in Stuttgart. This is the leading international exhibition for European medical device manufacturers. Some 900 exhibitors from Germany and abroad will be present, offering a broad spectrum of technical innovations.

And also in Stuttgart: From June 24 – 26, Parts2clean, the leading international trade fair for industrial parts and surface cleaning will for the first time be staged alongside O&S, the flagship trade fair for surface treatments and coatings. This cooperation promises to deliver valuable synergies for both exhibitors and visitors. We at OTEC look forward to welcoming you to our stand at each of these fairs.



Further trade fairs can be found here

New: Tableting tools polished to perfection - in a fully automatic

With the first fully automatic SF 4 stream finishing machine for polishing tableting tools, OTEC has designed a new machine which enables customers to fully polish tools without the need for manual rechucking. These tools are used for pressing high-quality tablets, which can be a very demanding task depending on the composition of the ingredients and the shape of the tablets. A very smooth contact surface is essential in order to reduce friction and thereby resistance, which in many cases enables the press to be operated much more efficiently. Furthermore, this reduces the tendency of tablets to adhere to the tools, which in turn gives a smoother tableting process. The end result is a considerable cost saving for pharmaceutical companies.

The process

As soon as circumferential grinding is complete, the tools are loaded into the robot cell on pallets. The SF machine handles the loading and unloading automatically. In order to fully finish the workpiece, it is rotated once by the robot during the process. The initial roughness is Ra 0.20 and the target roughness is less than Ra 0.05. The actual finishing time is a mere 2 x 4 minutes, giving a total of 8 minutes in all. Since 4 parts can be processed at the same time, the surface finishing time for a single workpiece amounts to about 2.5 minutes.



The new SF 1/30

Another new development from OTEC which enables processes to be adapted even more closely to individual customer requirements. The SF 1/30 stream finishing unit is a compact, fully automatic bench top unit for deburring and polishing parts of up to 10 mm in diameter and 50 mm in length, e.g. dental burs, fuel injector plungers, bone screws and many other kinds of small workpieces. With a speed of up to 40,000 rpm, it produces the desired surface finishes to a high degree of precision in very short process cycles. Measuring 1.30 m wide, 1.60 m high and 80 cm deep, it is the ideal solution for a whole range of applications which call for leading edge technology combined with low capital investment and low operating costs.

The SF 1/30 was first shown at the GrindTec fair in March.



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OTEC Präzisionsfinish GmbH | Dieselstraße 8-12 | 75334 Straubenhardt-Feldrennach | Germany Managing Directors: Dipl.-Ing. (FH) Helmut Gegenheimer, Dipl.-Betriebswirt (BA) Soran Jota Commercial Register 504529 Mannheim | VAT ID. DE812635504 Phone: + 49 (0) 70 82 / 49 11 20 | Fax:+ 49 (0) 70 82 / 49 11 29 | e-mail: info(at)otec.de