



NEWS

TOOLMAKING:

ONE PROCESS FITS ALL?

WHY CUSTOM PROCESSES FOR EDGE ROUNDING ON CARBIDE TOOLS ARE VITAL

Edge rounding (honing) on carbide tools is an established process that extends tool life and improves PVD coating adhesion. Rounding and smoothing the cutting edges minimises the risk of microbreakage and significantly increases their mechanical stability. That's the objective. Clear and simple.

But it's the process that makes the difference, not the automation

Would you wear your favourite wool jumper all-year-round, everywhere you go, just because it's there? We thought not. But that's exactly how many companies approach cutting edge rounding. The most convenient solution is seldom the best if you want optimum results. The one-process-fits-all approach has the same effect on your tools as wearing said jumper in midsummer would have on you!

A universal process for drilling tools, milling tools, reamers and so on – ideally for every tool dimension – would obviously be wonderful. But experience shows it's just not that simple. Professional, high-quality edge rounding depends on a host of factors including application area, material and geometry, to name a few. Using the same process for every tool would work now and again, but not very often.

Quality is dictated by the process – automation is just an added bonus

You need to consider each tool individually: what will it be used for and under what production conditions? Every tool has its specifics. The only guarantee of reliability, repeatability, cost-effectiveness and above all, quality, is a custom-developed process. If you can automate it as well, then great – you've got *non-stop* quality!

NEWS

The OTEC SF Series – ideal for custom and automated processes

The OTEC SF-1-ILS stream finishing machine is a flexible automated processing solution that you can quickly and reliably tailor to each tool.



- Automatic retooling for different diameters
- Short process time – high output
- Sealing air prevents granulate from clogging cooling holes
- Heavy, homogenous rounding attainable
- Generous immersion depth for uniform processing
- Wide choice of abrasives

Custom sample processing

Put us to the test: send us some samples and let our experts at the OTEC Finishing Center specify your custom process: <https://www.otec.de/en/service/sample-processing/>

Read more on professional edge rounding:

<https://www.otec.de/en/news/otec-news/2017/tool-preparation-sf-1-ils/>

The company

OTEC GmbH Präzisionsfinish provides precision technology for achieving perfect surfaces. OTEC machines are used for smoothing, precision edge-rounding, polishing and deburring a wide variety of workpieces, with the aim of improving surface quality. OTEC has a global presence supported by international business partners. OTEC's comprehensive, market-leading technical expertise in developing the perfect interplay of machine and abrasive benefits a wide range of industries including tooling, medical devices, jewellery, and automotive and aerospace.

Contact details

OTEC Präzisionsfinish GmbH | Heinrich-Hertz-Strasse 24 | 75334 Straubenhardt-Conweiler
Tel. + 49 (0) 70 82 - 49 11 20 | Fax + 49 (0) 70 82 - 49 11 29 | info@otec.de | www.otec.de