INFOCUS

New ideas. New solutions



For **your success.** Max. Q – **The next level.**



Milling innovation and AVANTEC's latest solution: **The broaching tool**



LIEBLINGSWERKZEUG For max. Q with powerful smoothness



LIEBLINGSWERKZEUG For fine cutting and severing

4-cutting edge tangential indexable insert Cutting length up to 1.5 x D Extremely stable tool core Large insert seat contact surface Optimum cutting force absorption Double-cutting edge indexable insert Widths of cut from 2.5 mm Excellent cutting force distribution Fine tooth pitch High feed rates

SHELL END MILL **CW90** The CW 90 is the beefiest among our porcupine cutters for hobbing and corner milling, it even masters face milling jobs. Its core is extremely stable; the cutting force absorption into the tool body is optimal. The indexable inserts' large carbide volume provides better heat dissipation. Its Q-performance is outstanding. SLOT MILLING CUTTER **GN18** $\label{eq:Q} \begin{array}{l} \textbf{Q} = \textbf{27,5 ccm/min} \\ \textbf{Tool-} \varnothing \ 125 \ \text{mm} \\ \textbf{Material} \ \textbf{C45} \\ \textbf{V}_{f} = 550 \ \text{mm/min} \\ \textbf{a}_{p} = 2,5 \ \text{mm} \ \big| \ \textbf{a}_{e} = 20 \ \text{mm} \end{array}$

The new GN18 is a standard milling cutter. It slits and severs. It has double-cutting edge indexable inserts that are interlocked. This makes the GN18 extraordinarily reliable. And fast. Moreover, it boasts a compact design. To accommodate more teeth. They deliver... more Q.

... since **maximum Q** is the **ultimate goal.**

Some manufacturers have to increase their productivity levels time and time again by maximizing their metal removal rate. There are many others who are in the market looking for longer and longer tool life. This is not always compatible with the more Q objective. Or is it? No matter what your current or future manufacturing needs are – with new ideas and innovative solutions, we offer tool performances that simply set benchmarks.

Double-cutting edge indexable insert Best cutting and gliding characteristics High cutting data even at low machine performance levels Highly stable cutting edge support Polished precision indexable inserts Internal cooling

LIEBLINGSWERKZEUG For process reliable broaching



 $\begin{array}{l} Q = 1,5 \text{ ccm/min} \\ \text{Tool-} \emptyset \ 52 \text{ mm} \\ \text{Material} \ 1.2312 \ (1200 \text{ N/mm}^2) \\ \text{V}_{f} = 5000 \text{ mm/min} \\ a_{p} = 0,05 \text{ mm} \mid a_{e} = 6 \text{ mm} \end{array}$



To recap the story: When broaching the keyways for our tool bodies, our production team kept running into unexpected problems. This caused vexation in the team. This vexation remained. Then we designed a specific tool. No more vexation. Instead, we have a stable and reliable broaching process. We are pleased. Our new broaching tool has been cleared for distribution. We call it BR20.



It's all about **Q**

First comes the solution. Then our tool. And then your success.

AVANTEC Zerspantechnik GmbH Wilhelmstraße 123 | 75428 Illingen | Deutschland T +49 7042 8222-0 | info@avantec.de | avantec.de

Italy AVANTEC Italy S.r.l. Via Gramsci 157 | 24069 Trescore Balneario T +39 035 4258369 | avantec-italy@avantec.de

USA AVANTEC USA, LLC 50 South Chestnut Street | Boyertown, PA 19512 T +1 610 473 2872 | avantec-usa@avantec.de

Austria AVANTEC Austria GmbH Knoppen 93 | 8984 Bad Mitterndorf T +43 3624 27915 | avantec-austria@avantec.de

China AVANTEC (Shanghai) Trading Co., Ltd. Room 753A, Tower 3, German Centre No. 88 Keyuan Rd. | Pudong 201203 Shanghai T +86 21 68782268 | avantec-china@avantec.de



Indexable Inserts | Broaching Tools | Shell End Mills | Face Milling Cutters | Side Milling Cutters Slot Milling Cutters | Copy Milling Cutters | Shoulder Milling Cutters | Shank End Mills T-Slot Milling Cutters | Circular Milling Cutters | Avant Easy Change Program

