

Press Information

KYOCERA showcases a multitude of new innovations at EMO 2017

The Japanese advanced ceramics specialist KYOCERA will introduce a variety of new cutting tool solutions at this year's EMO trade fair in Hannover, Germany.

Kyoto/London – August 18th, 2017. Among the new innovations, new grades for super heat-resistant alloys, PR005S and PR015S for turning are now available. A newly developed substrate improves toughness of the inserts and prevents notch-wear, realizing stable machining. Kyocera's original PVD coating technology "MEGACOAT Hard" was adopted for these grades, featuring high hardness and excellent heat resistance.



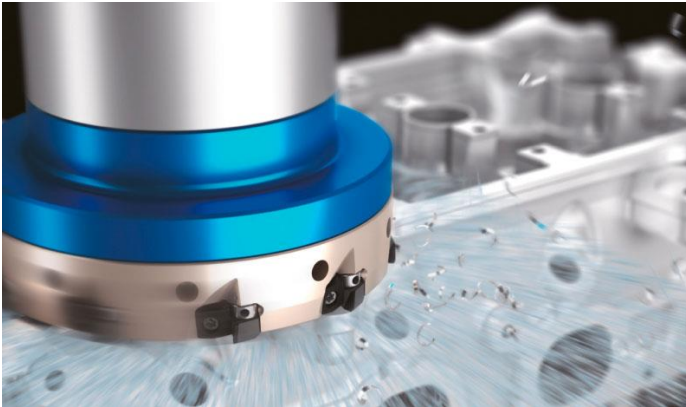
PR005S_PR015S_large

New chipbreakers for super heat-resistant alloys – SQ and SX chipbreakers for turning

These new chipbreakers are specially designed for roughing applications and semi-finishing of super heat-resistant alloy. Conventional tools lead to short or unstable tool life which results in low productivity and frequent set-up time. High thrust force by popular geometries (R, S types) for roughing generate vibration and have limited application range. Thus it is difficult to secure machining rigidity for turbine parts, for example. The semi-finishing SQ chipbreaker and rough machining SX chipbreaker can solve such problems. The SX chipbreaker has a special nose shape (handed type). A unique axial face design reduces cutting edge temperature which leads to tool life improvement. A negative lead angle of 60° prevents burrs and secures enough cutting depth. The SX chipbreaker reduces radial force which prevents chattering and improves productivity. Therefore, the SX chipbreaker maintains high performance even in high-speed machining. The SQ chipbreaker improves tool life and productivity in semi-finishing operation. A

special axial face design decreases cutting edge temperature. The angled cutting edge is effective in reducing burrs and notching.

Other innovative products include the new MFAH milling cutter for aluminium machining with a hybrid body design and PCD inserts. It performs with less burring, low resistance and high efficiency. Furthermore, a range of 3D-printed cutting tool and toolholder solutions will be presented including chip-free PCD reamers for cylinder head water connection holes and vibration damping toolholders. Also on display is the latest multi-flute PCD reamer for valve body spool bore machining. With up to 8 cutting edges this innovation allows for exceptionally fast reaming of high-quality bores in cast aluminum parts.



MFAH milling cutter (large)

New MagicDrill DRV (indexable drill) and MagicDrill DRA (drill bit)

The newly developed line of indexable modular drills, Magic Drill DRV, to be used mainly for hole drilling in the machine tool business, will also be presented. It is ideally suited for the automotive, aerospace and medical device industries, since it combines a chemical vapor deposition (CVD) coated insert on the outer edge and a physical vapor deposition (PVD) coated insert on the inner edge. The MagicDrill DRA is a highly efficient drill with an easily replaceable drill bit, which achieves superb drilling accuracy at a low cutting force. In addition to the lineup of 3D, 5D and 8D, a 1.5D version is now available.

New face mill cutter – MFPN66

The MFPN66 is a highly efficient face mill cutter with an approach angle of 66°. The double-sided pentagonal inserts offer 10 cutting edges per insert. It is specially developed for smaller cutting depths and diameters. The main force and feeding force is equal to 45° type cutters but radial force is 40% lower.



MFPN66 large

High-tech grade for milling application – CERMET TN620M

This is designed for milling applications and achieves excellent fracture resistance with a surface-hardened layer using gradient composition technology. With super micro-grain cermet, TN620M allows stable machining and long tool life with excellent surface finish. The grade is available for the MFPN45, MFPN66, and MFWN face milling cutter series.

Full line-up of MFH high feed cutter series

Kyocera's successful high feed cutter series combines several geometries, grades and toolholders with line-up ranges from 8 mm to 160 mm, which enable a variety of applications. The low cutting force design ensures high efficiency and stable high feed machining in a wide range of cutting parameters. A line-up expansion is now being offered such as for the new MFH Micro screw-on type starting from diameters of 8 mm to 16 mm, MFH Mini shell mill types from 40 mm to 50 mm with up to 8 teeth.

KYOCERA SGS Precision Tools, Inc.

Kyocera will show a wide range of round tools with an updated line-up from recently acquired Kyocera SGS Precision Tools especially for aerospace and difficult to cut material applications.



For more information on KYOCERA: www.kyocera.co.uk

About KYOCERA

Headquartered in Kyoto, Japan, KYOCERA Corporation is one of the world's leading manufacturers of fine ceramic components for the technology industry. The strategically important divisions in the KYOCERA Group, which is comprised of 231 subsidiaries (as of March 31, 2017), are information and communications technologies, products which increase quality of life, and environmentally friendly products. The technology group is also one of the oldest producers of solar energy systems worldwide, with more than 40 years of experience in the industry.

The company is ranked #522 on Forbes magazine's 2017 "Global 2000" listing of the world's largest publicly traded companies. With a global workforce of over 70,000 employees, KYOCERA posted net sales of approximately €11.86 billion in fiscal year 2016/2017. The products marketed by the company in Europe include printers, digital copying systems, microelectronic components, and fine ceramic products. The KYOCERA Group has two independent companies in the United Kingdom: KYOCERA Fineceramics Ltd. and KYOCERA Document Solutions.

The company also takes an active interest in cultural affairs. The Kyoto Prize, a prominent international award, is presented each year by the Inamori Foundation — established by KYOCERA founder Dr. Kazuo Inamori — to individuals and groups worldwide who have contributed significantly to the scientific, cultural, and spiritual betterment of humankind (converted at approximately €400,000 per prize category).

Contact

KYOCERA Fineceramics GmbH
Daniela Faust
Manager Corporate Communications
Hammfelddamm 6
41460 Neuss
Germany
Tel.: +49 (0)2131/16 37 – 188
Fax: +49 (0)2131/16 37 – 150
Mobil: +49 (0)175/727 57 06
daniela.faust@kyocera.de
www.Kyocera.de