Sumitomo RSX cuts milling costs by 44%

It was a timely release in the UK by Sumitomo Electric Hardmetal of its Wave Radius Mill RSX series, developed specifically for machining exotic alloys, which enabled the machining operation of Special Machined Products (SMP) to reduce its consumable milling costs on a long-standing contract by 44% in the first stage machining qualification operation on Inconel 718 forged blanks.

Mark Easter, general manager of the family-owned, Sheffield-based Special Steel Group (SSG) company, says: "Not only have we slashed consumable costs with the new face mill cutters and inserts, we have also improved machining conditions with added predictability, better swarf control and been able to increase machining parameters. We have also reduced the average number of passes from 60, over the six faces of the raw forged material, to just 45, and even reduced cycle times by up to 15%."

The RSX series of cutter bodies have a high rake angle and feature a new development to enable precise positioning of the button insert in the cutter body. By having a durable, thickened support behind the insert with an R-shaped pocket feature, swarf control is said to be improved. This special location of the insert combines a series of formed tangs that confirm a precise and stable mounting position with the insert locked against a conical clamping face.

Also aiding the performance of the Sumitomo face mill cutter and insert combination is the latest ACM100 grade with Super ZX, a nano-technology PVD coating which has a hardness some 40% greater than conventional inserts, says Sumitomo. And, as proven at SMP, machining can be carried out at least 1.5 times more efficiently.

For further information
www.sumitomotool.com

World's smallest digital boring tools

Industrial Tooling Corporation (ITC) has now extended its line-up of precision hole-making technology with the introduction into the UK of digital boring tools from Big Kaiser. Compared with analogue heads, the new digital boring tools can improve efficiency and are also typically 20% quicker to set, says the company.

Specially built to run on small machines, the EWD 2-32 features a concentric insert holder and a range of accessories for tool set-up within a diameter range of 2 to 32 mm. The EWD 2-32 has a tool body diameter of 50 mm, whereas the EWD41 has a tool body diameter of 38 mm, making it the world's smallest digital precision boring head with an integrated digital display, claims Big Kaiser. The EWD 41 provides laterally-loaded cutting for a range of diameters from 41 to 53 mm.

To ensure compatibility with customers' existing equipment, all insert holders and boring bars from the Big Kaiser range of analogue tools can be used with the new digital versions. The complete range of digital boring tools covers diameters from 2 to 3000 mm. All digital boring heads belong to the modular Big Kaiser system,

which means they can be plugged into any shank with a standard CK connection. The tools have a battery life of more than 5000 diameter adjustment cycles.

"Digital is the future and digital boring delivers precision and consistency, saving time and money by reducing operator errors," says Peter Elmer, CEO of Kaiser Precision Tooling. "With the compatibility offered by Big Kaiser, it's simple for customers to get these benefits by replacing their existing analogue heads with new digital models."

For further information
www.itc-ltd.co.uk