

Mandelli Sistemi/Spark 1300 Titanium: let's raise the bar on titanium machining

Mandelli's strong point is the machining of tough materials and its machining centers are characterized by toughness, power and accuracy. The same applies to the Spark line that features an innovative architecture based on a fixed rotary table for dynamics not depending on the weight of the workpiece to be machined, a gantry solution on the linear axes for high dynamics, direct drives or double pinion kinematics to annul the reverse backlash on the rotary axes, better ergonomics and maximum flexibility for the integration of multi-process machining, first among all turning operations. The Spark structures are made of steel because it provides

twice the rigidity levels of cast iron whereas the Y axis features more staggered slide-ways to optimize the flexional rigidity as well as a close section at the back to diminish the flexional torsion These characteristics allow the Spark line to have notable performances both in terms of MRR (material removal rate) on tough materials and in tracking complex shapes. Damping devices guarantee the dissipation of vibrations during cutting, to blend the advantages of roller slides (accuracy, rigidity, no stick/ slip phenomena, endurance over time) with the advantages coming from the slide-ways (high damping levels) allowing for an MRR increase by about



15%. No wonder that, after a series of tests, Spark 1300 Titanium has been chosen by the biggest North American

aircraft manufacturer as the machining centers featuring the best dynamic stiffness performances on the market. ①

Repar2/Safety protections for machines: the Made in Italy solution

Carnovali Marco, Managing Director of Repar2, underlines the importance of presenting their range of products on European markets, taking part in IMTS in Chicago with a broad range of protections for lathes, milling machines, drills, slotters, sawing



Today Repar2 exports most of its production in Europe, North America and in all those Countries worldwide that have adopted the EC Machine Directive, relying on a widespread distribution net highly specialized to satisfy customers' requirements all over the world. Nowadays several are the outstanding companies that in North America and in all of their premises in the world have adopted Repar2 safety protections. The main target of Repar2 is the constant improvement of products, to grant its customers a broad choice of standard products, always ready in stock, characterized by easy assembly, user friendliness and utmost comfort for the operator, offering on the market a range with excellent quality/ price ratio. The engineering of protections is carried out on the CAD system to solve any particular need of customers: Repar2 protections, standard or customized, offer in fact a sturdy highquality structure, fully Made in Italy, and they strictly comply with the latest safety regulations of the European Community. Repar2 is compliant with the Machine Directive 2006/42/EC (L. D. n.81/2008). (3