

Power chucks UltraGrip™ 3.0 and UltraJet™ 3.0

The Diebold UltraGrip™ 3.0 power chucks already successfully placed on the market are supplemented by UltraJet™ 3.0 power chucks with Coolant-Venturi-Effect for effective cooling and lubrication.



You will find a video about UltraGrip™ 3.0 and UltraJet™ 3.0 power chucks at the following link: <https://youtu.be/8x2ueeOCm40> or via QR code on all mobile devices.

In the Hermle section at the end of the video, you can see how the chips are blown out of the milling area by the jet effect during the high-performance machining of Toolox 33 material.



The jet effect ensures that the chips cannot be overrun by the milling cutter. The tool life increases by up to 300 percent and often even more.

More and more hard, tough or light, yet strong special steels have to be machined. Titan, Inconel and Toolox 33 are used in many industries. In aerospace industry, aviation, medical technology, mold making and many other areas of machining and machine tools. Mold makers and aerospace manufacturers who machine with high chip removal rates and milling in deep pockets have great benefits with the UltraJet™ 3.0 power chucks. Machining in deep pockets is always a hard fight with chip jams, this problem is now solved. Whether you work with coolant, with MQL or only with air, the UltraJet™ 3.0 system always works.

The clamping forces of the UltraJet™ power chucks are identical to UltraGrip™ 3.0 power chucks. With the internal coolant supply through the nozzles at the front of the chuck, this solution is a huge step to higher productivity.



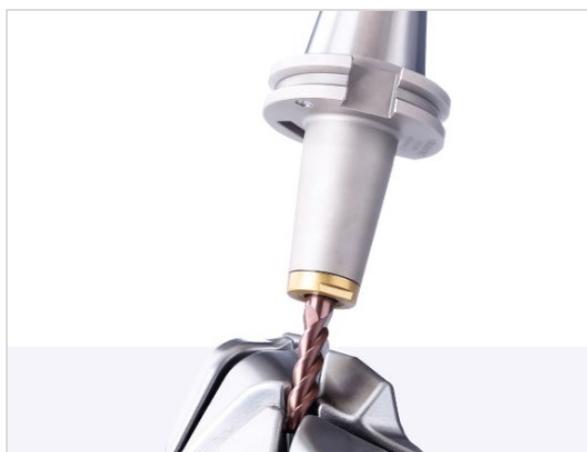
UltraGrip™ 3.0



UltraJet™ 3.0

The principle of the coolant supply was adopted by our patented JetSleeve™ 2.0 system.

JetSleeve™ 2.0 chucks are shrink chucks that are equipped with the same principle of coolant acceleration at the nose of the chuck and have been used successfully in modern machining for several years.



Thanks to the strong KSS or air flow, milling chips are blown out absolutely reliably even from cavities that are difficult to access by the Venturi effect. Higher cutting rates can be achieved and the service life of the milling cutters will increase.

The new UltraJet™ 3.0 power chucks have their greatest advantage for tasks where the previous coolant flushing, even with a lot of pressure and amount of coolant, could not get the chips out of the area of the milling cutter path. In aerospace industry where high chip removal rates are required and geometrically complex structural parts are machined, UltraJet™ power chucks help to increase productivity. For years and years cutting tools have been optimized and improved, spindle performance has increased and machine dynamics improved. A lot of effort was made and a lot was achieved. But with the UltraJet™ 3.0 solution, productivity can be improved significantly with very little money.

Chip jams and destroyed cutters lead to downtime of the machines - and that costs a lot, because machine downtime costs a lot more than broken cutters, not to mention expensive damaged parts.