**Stable process and improved surface finish
thanks to vibration-damped boring bars**

Efficient turning with exchangeable head boring bars from CERATIZIT

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**Quality and efficiency in the machining process are measured using an extremely wide range of parameters. Naturally, surface quality and process security are among them. The new vibration-damped boring bars by Team Cutting Tools from the CERATIZIT Group ensure that these criteria are met. These boring bars reliably reduce vibrations and, together with the flexibility of the brand-new exchangeable head system, guarantee top quality at a low price.**

Uncontrolled vibrations have resulted in the demise of many an expensive workpiece and reduced efficiency for the machine operator. But long tool overhangs are often essential during turning, counterboring or threading so what is the answer? "Depending on the material to be machined, these conditions inevitably lead to vibrations that are eventually transferred to the workpiece, with catastrophic effects on the surface quality," explains Christoph Retter, Product Manager at Team Cutting Tools from the CERATIZIT Group. "And, these are not the only limitations for an efficient machining process – accelerated wear through to tool breakage is also a factor. At CERATIZIT we are counteracting this with a new addition to our range, the combination of vibration-damped boring bars and a flexible exchangeable head system."

**Quiet, drill!**

Up until now, machine operators have usually reduced vibrations by decreasing process parameters such as cutting depth, cutting speed or feed. "With regards to the highest possible efficiency, this is only a temporary workaround as the cycle time often decides whether an order is profitable or not. The CERATIZIT solution is a newly developed exchangeable head system, which can be used with base holders, but also with special boring bars. These effectively minimise irksome vibrations thanks to the damping system in the tool body," explains Christoph Retter.

The result is, that instead of having to reduce the cutting values, even higher parameters are possible. Machining processes with long tool overhangs can be completed far more quickly with vibration-damped boring bars than with those that are not damped. The damped tools improve the surface quality in particular and extend tool lives, whilst at the same time the tool and the machine spindle are under considerably less strain. "This provides for greater sustainability, as all of the components used last significantly longer. Together with the cost savings achieved from extended tool life, the machine operator can now complete even tricky tasks with an increased sense of calm," says Christoph Retter. Thanks to vibration damping, applications are possible that would not be under normal conditions with minimum cutting parameters.

**Variable system for a wealth of options**

The basis for optimised machining with the vibration-damped boring bars is the newly developed modular exchangeable head system from CERATIZIT. With a selection of eight different exchangeable heads, it is extremely variable, flexible and versatile, which will save on purchase and warehousing costs. Due to the clever positioning of the coolant nozzle, the exchangeable head system also benefits from highly efficient cooling and improved chip clearance.

Standard versions of the base holders are available from CERATIZIT in 200, 218 and 283 mm lengths and diameters of 25, 32 and 40 mm. "The vibration-damped versions come in 150, 185 and 225 mm lengths," says Christoph Retter. Their strengths include process security, reduced costs per component, optimum chip clearance and improved surfaces – and the full benefits can be seen irrespective of the materials to be machined.

**Boring bars: quality not available off the shelf**

"These components are without a doubt a highlight from the brand-new exchangeable head system product range for turning. The vibration-damped boring bars bring a sense of peace and calm during machining for both the tool and user, and the best part is that the costs are manageable and machine operators won't need to reach for a stress ball!" summarises Christoph Retter with a wink.

The vibration-damped boring bars and modular exchangeable head system from CERATIZIT will be available from stock as of 23rd November 2020.

More information can be found at <https://cuttingtools.ceratizit.com/gb/en/boring-bar>.

**Attachments:**

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Image 1

The basis for optimised machining with the vibration-damped boring bars is the newly developed modular exchangeable head system from CERATIZIT. With a selection of eight different exchangeable heads, it is extremely variable, flexible and versatile. Image: CERATZIT



Image 2

Stable processes and highly improved surface finishes at a low price thanks to vibration-damped boring bars. Image: CERATIZIT

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CERATIZIT – with passion and a pioneering spirit for hard materials

For over 95 years, CERATIZIT has been a pioneer in developing exceptional hard material solutions for machining and wear protection. The private company, with registered offices in Mamer, Luxembourg, develops and produces highly specialised cutting tools, indexable inserts, rods made from hard materials and wear parts. The CERATIZIT Group is the global market leader in various application segments and successfully develops new carbide, cermet and ceramic grades, such as for wood and stone working.

With more than 7,000 employees at more than 25 production facilities and a sales network with over 50 branches, CERATIZIT is a global player in the carbide industry. The company's international network includes subsidiary Stadler Metalle and joint venture CB-CERATIZIT.

The technology leader is continually investing in research and development and holds more than 1,000 patents. Innovative hard material solutions from CERATIZIT are used in various sectors, including mechanical engineering and toolmaking, in the automotive and aerospace industries and in the oil, gas and medical industries.