

VÖLKE

THREADING SOLUTIONS

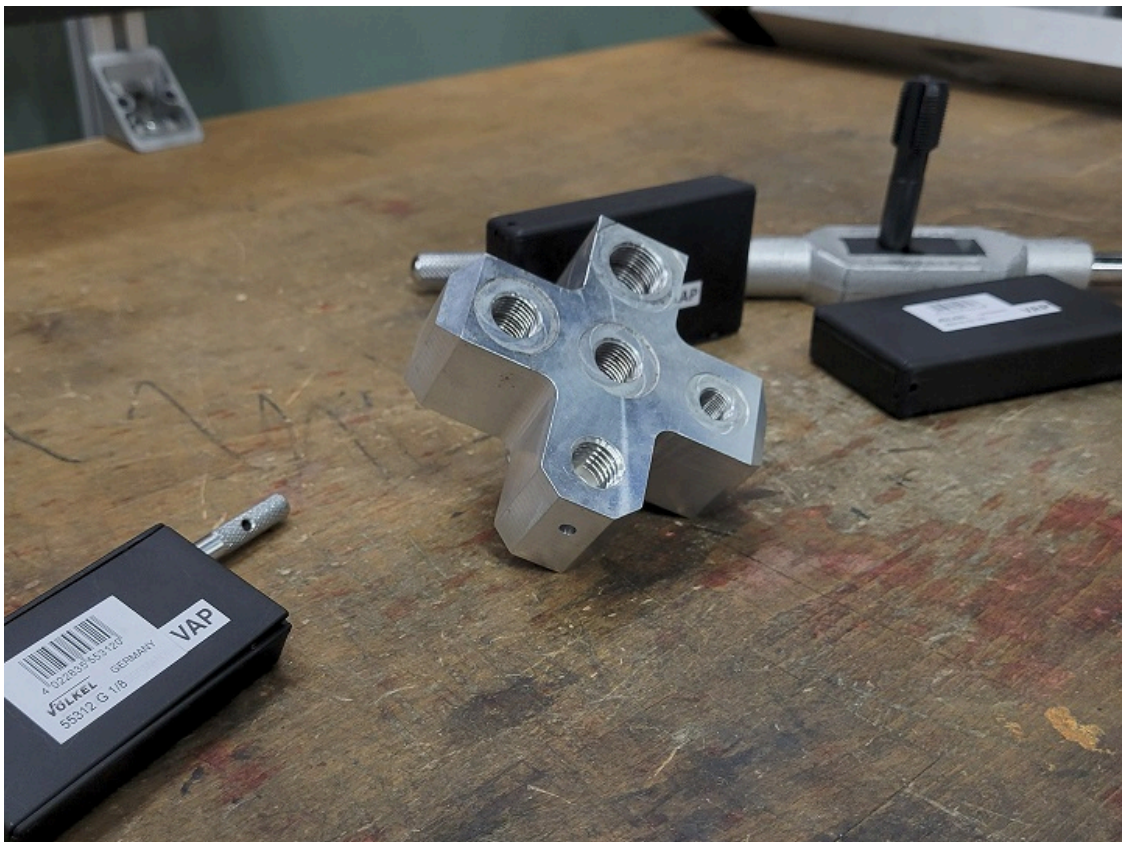
Hello,

after the Easter holidays, we are back to work with full energy, just like you.

Whether in aerospace applications, when choosing the right lubricant, or when machining demanding materials: thread cutting and machining processes often reach their limits in practice. This is exactly where well-designed tools and clean processes make the difference.

In this newsletter, we take a look at three concrete examples where precision, experience and the right decisions make all the difference.

Thread Cutting in Rocket Engineering: Precision for the Distribution Block



With missions like Artemis 2, space technology is once again in the spotlight, highlighting the high technical demands in this field.

Similar requirements can also be found in student projects such as HyEnD (Hybrid Engine Development), where teams develop their own rocket engines. These do not fly to the moon, but still into space and must also function reliably under extreme conditions.

At the center is a critical component: the distribution block. It distributes media within the system, is exposed to high loads and therefore requires maximum thread quality and process reliability.

This clearly shows that thread cutting is a crucial manufacturing step. Errors at this stage directly affect the functionality and safety of the entire system. Together with the students, we exchanged ideas, developed an individual solution and provided the appropriate tools.

👉 [Learn more](#)

The Perfect Lubricant for Thread Cutting



Clean threads depend not only on the right tool. A decisive factor that is often underestimated is the right lubricant. During thread cutting, high friction and temperatures occur, which without proper lubrication can quickly lead to increased wear, poor thread quality or even tool breakage.

The right cutting oil reduces friction, improves chip evacuation and ensures significantly higher process reliability. At the same time, tool life is extended and thread quality remains consistently high. Choosing the right lubricant

depending on the material and application is essential, as different materials require different solutions.

The clear recommendation: Anyone who wants reproducible results and clean threads cannot ignore the importance of the right lubricant.

👉 [Learn more](#)

Solid Carbide Drills: When Their Use Really Pays Off



Solid carbide drills show their strengths exactly where conventional HSS or HSSE drills reach their limits. This applies especially to demanding materials such as hardened steels, stainless steels, titanium or nickel-based alloys and composite materials. In these applications, they ensure stable processes and significantly better results.

A key advantage is productivity: compared to HSS tools, cutting speeds can often be two to four times higher, which makes a noticeable difference, especially in series production. In addition, they offer high dimensional accuracy, minimal runout and excellent hole quality. Even at high temperatures, such as in dry machining or minimum quantity lubrication, the cutting edges remain stable.

With LÖHER, suitable solutions are available in the field of drills that are specifically designed for these demanding applications.

However, correct application is essential: solid carbide drills are not universal tools. Under unstable conditions, such as handheld drilling or poorly aligned machines, the brittle carbide structure can be damaged quickly. The clear

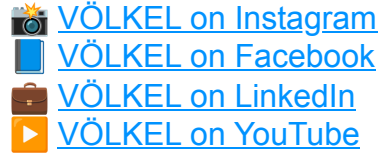
recommendation is therefore: solid carbide drills are the right choice wherever precision, process reliability and productivity are required – provided that the conditions are suitable.

 [Contact us now](#)

More information about cobit and LÖHER can also be found on [LinkedIn](#).

We hope you enjoyed this selection of topics in our newsletter.

On our social media channels, we regularly share further insights, applications and updates from the world of VÖLKEL:



See you next time
Your VÖLKEL Team

Imprint

VÖLKEL GmbH
Morsbachtalstr. 20, 42855 Remscheid, Germany

Executive Board: Daniel Völkel, Peter Völkel, Sarah Joa-Völkel
Headquarter: Remscheid
Registered at Wuppertal, HRB 11462

Tel. +49 2191 490112
Fax +49 2191 490125
E-Mail info@voelkel.com
www.voelkel.com



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