EN

// HIGH PERFORMANCE DRILLS

Solid carbide High Performance Tools

Müller
Präzisionswerkzeuge GmbH

HISTORY

By founding the tool grinding shop K. – H. Müller GbR on April 1st, 1981, Karl-Heinz and Siglinde Müller laid the foundation for an internationally acting company. Back then, tools for woodworking were grinded in their private garage by them and three employees. Already in 1983, they moved production into the first production plant on the current site.

Only two years later, grinding was extended to tools for metal processing. In the following years, another production plant was built. In 1991, the first CNC grinding machine was bought. In 2000, K. – H. Müller Präzisionswerkzeuge GmbH was founded to be operative successor of K. – H. Müller GbR after having received DIN ISO 9000 certification and expanding the production site once more.

In 2006, K. – H. Müller GmbH machined 300,000 cutting tools for the first time in its history after having significantly expanded sales. At this time, the company already owned 14 CNC machines and 20 manually operated machines.

In 2007, K. – H. Müller Präzisionswerkzeuge GmbH was sold to the investment company Frowein & Co. Beteiligungs AG.

In 2011, K. – H. Müller Präzisionswerkzeuge GmbH extended its product range to PVD coating. Employing 60 employees and 2,600 m² of production site already, K. – H. Müller Präzisionswerkzeuge GmbH invested two million euros in a new manufacturing cell for high performance new tools.

By opening a second production site in 72468 Meßstetten, Germany in April, 2013 and employing 90 people now, Müller extended its sales region to the south of Germany as well as neighboring countries.

Our philosophy:

'WE PRODUCE BEST QUALITY TOOLS AND GUARANTEE SHORT DELIVERY TIMES!'

To meet the expectations of our customers regarding perfection and reliability, we continuously work on improving our products' and service qualities.

The yardstick of our performance is our customers' satisfaction.

OUR HIGH PERFORMANCE DRILLS

THE RIGHT TOOL FOR EVERY PURPOSE!

The continuous optimizing- and rationalizing process in mass production requires more and more efficient tools.

So we developed our MaxFeed, MaxFeedPlus, AluPlus and InoxPlus.

This high performance tools stand out due to their double feed rates and reduced feed force.

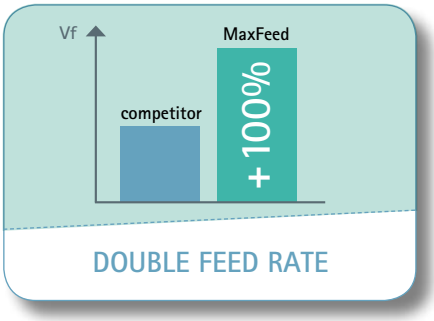
NEW
MaxFeed FOR CAST IRON

Müller plan to highlight the new MaxFeed drill point as an ideal tool for cast iron machining. As a result of its specially designed cutting edge with the corner chamfers, the geometry is claimed to have a positive effect on stability and chip removal. A further advantage is seen in the avoidance of any flaking of material thanks to the gentle drill hole exit. As the German manufacturers add, the tried-and-tested facet ground in connection with an innovative point thinning exhibits outstanding qualities as regards centering properties and accurate straightness of drilling. As a result, the feed force has reportedly been reduced by much as 30% compared to similar drill geometries. This, in turn, is said to facilitate a double feed speed and therefore shorter processing times.

These features coupled with the special MC0700 coating also enable a particularly long tool life. The silicium-containing coating is described as highly temperature-resistant as well as highly wear-resistant due to the integrated silicium atoms.

The coating adhesion has been enormously strengthened by an optimized interface coating between substrate and base layer and consequently perfectly protecting the highly stressed guiding and corner chamfers.

The MaxFeed drill point is also available as special tool and compatible with various step geometries.



NEW
MaxFeedPlus FOR BLIND HOLES IN CAST IRON

MaxFeedPlus is the most recent innovation of Müller. Due to the constant weight reduction in automotive engineering, material is conserved increasingly. Especially for drilling blind holes in cast iron, there is hardly any room for the long cutting point of cast drills which makes it almost impossible to use this kind of tools.

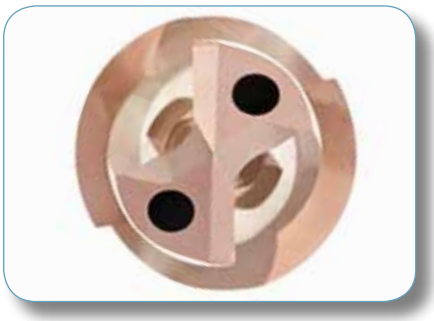
MaxFeedPlus' specially developed geometries for drilling blind holes allows for extremely high speed rates even for short cuts. Instead of the four phase design from our MaxFeed, special corner radius with an innovative cutting edge preparation is used. Therefore, all drillings on cast housings may be conducted efficiently.

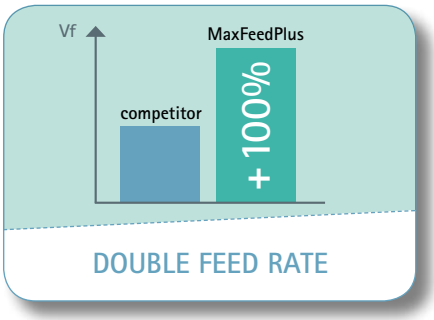
Here too, the tried-and-tested point geometry together with the innovative point thinning is used. In addition, the main cutting edge has been stabilized by newly developed adjustment which improves and extends tool life.

Feed force is up to 30 % less than similar drill geometries. In connection with our special MC0700 coating, extraordinarily long tool life of the MaxFeedPlus is secured.

The silicium-containing coating is described as highly temperature-resistant as well as highly wear-resistant due to the integrated silicium atoms. The coating adhesion has been enormously strengthened by an optimized interface coating between substrate and base layer and consequently perfectly protecting the highly stressed guiding chamfers and corner radius.

The MaxFeedPlus drill point is also available as special tool and compatible with various step geometries.



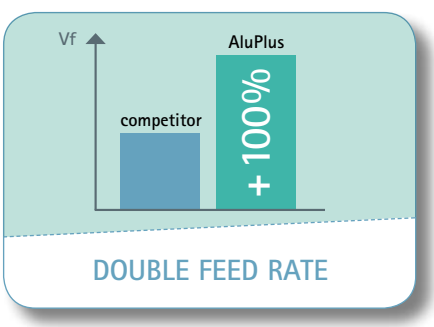


NEW
AluPlus FOR HIGH EFFICIENT ALUMINUM CUTTING

The specially developed geometry of the AluPlus drill point is said to facilitate high feed and cutting speeds in aluminum. According to Müller, the specific design of the flute profile promotes short chip formation so that only a relatively small chip space is required. Moreover, a strong drill back stabilizes the tool and significantly increases stiffness. As is pointed out, pre-cast holes of aluminum die cast parts do not have to be solid drilled with the tool. Such drill holes are often at an incorrect position and must be drilled eccentrically. The new device has been conceived for this purpose. The innovative design enables drilling into solid materials and drilling with high positional accuracy while reportedly doubling the feed rate compared to other drill geometries.

Optionally, the drill can be coated with MC0800, a wear-resistant aluminum coating that serves to prevent built-up edges and sticking. In connection with this coating it is possible to reach feed rates witch achieved usually only by PCD tools.

The AluPlus drill point is also available as special tool and compatible with various step geometries.



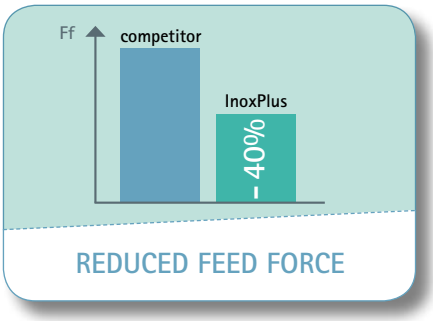
NEW
InoxPlus FOR STAINLESS AND TOUGH STEELS

Müller describe their InoxPlus drill point as a tool for performing highly rational machining of the stainless and tough steels increasingly used in mass production. As is explained, a facet point with a specially developed point thinning has been used in the product and the very sharp cutting edge with special preparation is seen as another particular merit. Owing to a fairly small chisel edge, the feed force has reportedly been reduced by as much as 40% compared to similar drill geometries. The tool can drill easily into tough materials to precisely maintain the predetermined position, a capability seen as essential when processing tough materials. The manufacturers also underline the centering properties and the accurate straightness of drilling achieved.

In addition, the special MC0700 coating is claimed to ensure a long tool life. This silicium-containing coating is described as highly temperature-resistant and highly wear-resistant as a result of the integrated silicium atoms. The coating adhesion has been enormously strengthened by an optimized interface coating between substrate and base layer and consequently perfectly protecting the highly stressed guiding chamfers.

Especially when processing tough materials, high shear stress acts on the guiding chamfers in consequence of constricting bore hole, so that coating can rub off from the guiding chamfers if coating has bad adhesion.

The InoxPlus drill point is also available as special tool and compatible with various step geometries.



Müller
Präzisionswerkzeuge GmbH

K.-H. Müller Präzisionswerkzeuge GmbH
Fürst-Dominik-Straße 44
55758 Sien (bei Idar-Oberstein)

Telefon +49 (0) 6788 9798-0
Fax +49 (0) 6788 9798-99

info@mueller-sien.de
www.mueller-sien.de