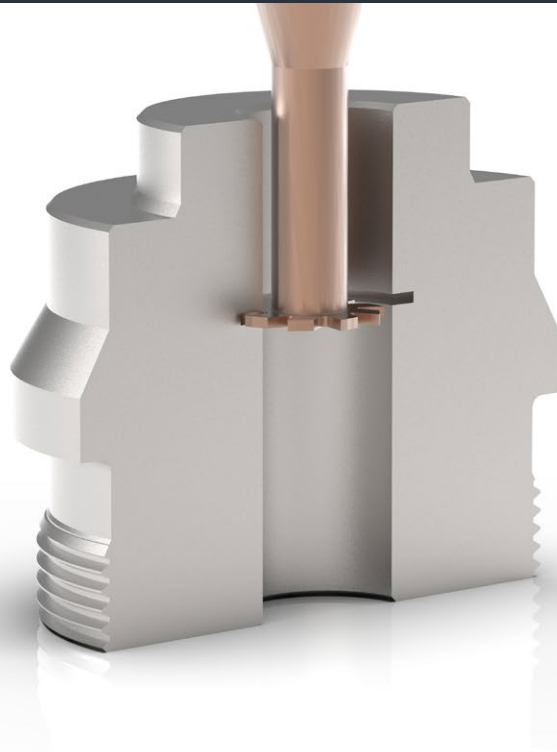
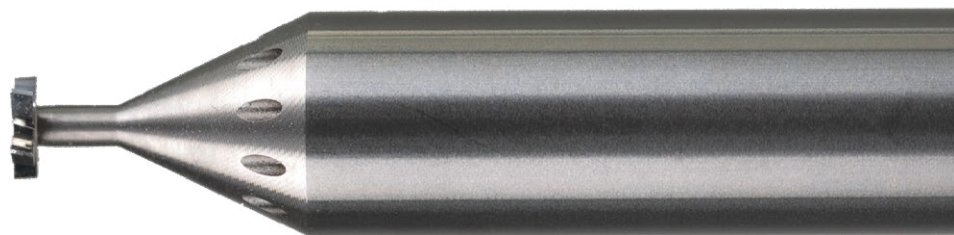
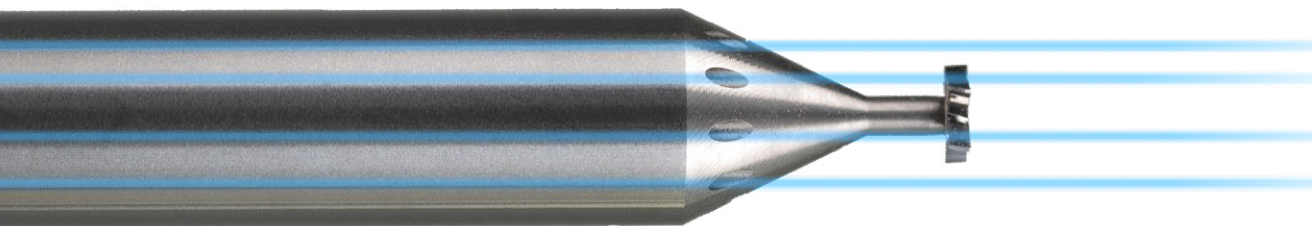
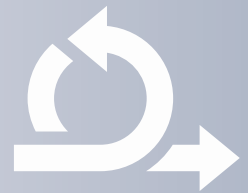


T-SLOT cooled

HBmicrotec[®]
ACTIONTOOLS & ENGINEERING



ACTIONMILL[®]
by HB microtec
T-SLOT cooled



Description

Thanks to its performance and versatility, the HB microtec® "T-slot cutter" ACTIONMILL® T-SLOT is the ideal all-purpose tool for producing T-slots. The ACTIONMILL® T-SLOT is characterized by excellent tool life and exceptionally high cutting values. The positive side effect for you: shorter cycle times and no more tedious tool changes.

A sophisticated, specially designed cutting edge geometry combined with a mirror-smooth surface to which a high-performance coating is applied guarantees the user maximum performance for every component.

The shank, made of an in-house developed ultra-fine-grain solid carbide with innovative cooling channels, is our basis for the T-SLOT and your benefit for the best possible machining.

Customization is what makes the ACTIONMILL® T-SLOT really strong. From Ø0.8 to Ø40, there is something for every application.

Our customers value the range of applications in the most diverse and demanding materials – whether titanium grade 5 (Ti6Al4V) or the classic stainless steel X20Cr13 (1.4021).

The ACTIONMILL® T-SLOT can do it all.

As a semi-standard tool, the ACTIONMILL® T-SLOT is quickly in use at your site and brings action. When it comes to performance, the details often make the difference. Your individual ACTIONMILL® T-SLOT is tailored specifically to your application, your material and your component.

We round the cutting edges and literally give the tool the finishing touch – and thus a class of its own.

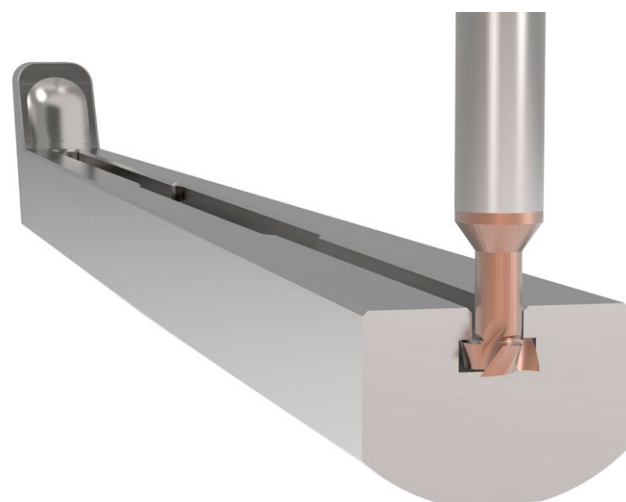
The ACTIONMILL® T-SLOT is available in two versions:

ACTIONMILL® T-SLOT cooled – with integrated cooling channels, which ensure better flushing out of the chips.

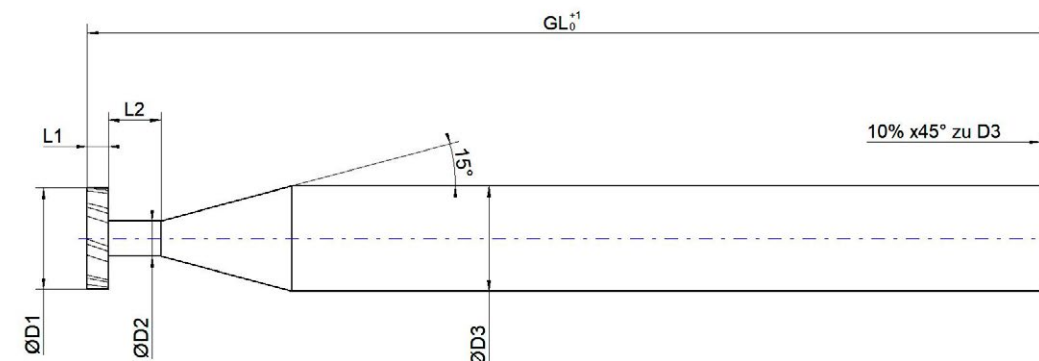
ACTIONMILL® T-SLOT – without cooling channels, as the classic version.

HB microtec® stands for action tools and engineering. Professional advice and all-round support are important parts of our philosophy.

Together with you, we develop your custom-ground T-slot cutter.



Classic



Corner alignment "sharp" = 0.004 mm - 0.01 mm rounded
(cutting edge protection)

☐ Inquiry

☐ Order

Order number: _____ Other: _____

Dimensions: D ₁ : _____ GL: _____ D ₂ : _____ L ₁ : _____ D ₃ : _____ L ₂ : _____ Z: _____ β: _____	Flute form (ZZ): ☐ Straight ☐ Helical	Coating: ☐ Coated*: _____ ☐ Uncoated	Cooling channels: ☐ Yes ☐ No Cutting direction: ☐ Left ☐ Right
Material to be machined: _____		Shank shape: _____	Quantity: _____
Date, signature & company stamp: _____			Contact person: _____

* Without further information, the most suitable coating will be used.

T-Slot cooled

Integrated cooling channels protect the tool from overheating when cutting titanium alloys and stainless steels.

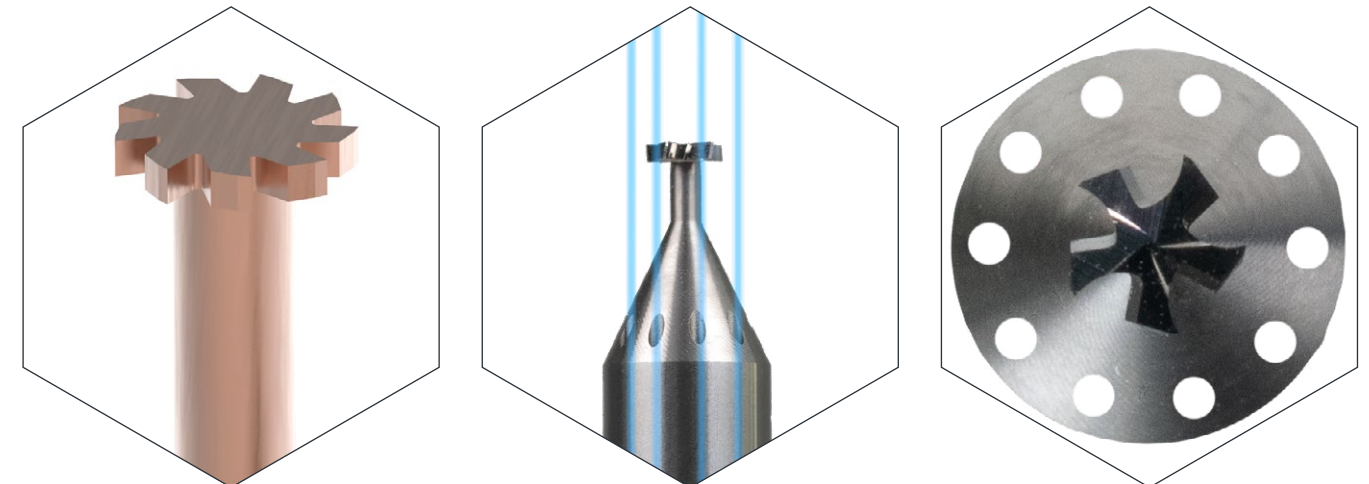
from Ø 0.8
to Ø 12.0

High-performance coatings guarantee long tool life and prevent the cutting edges from sticking.

High-performance cutting edge geometries that can be individually designed.

The reinforced shank in h6 quality combined with an optimized effective length makes the tool robust and vibration-free.

High feed and cutting speeds are made possible by the use of fine-grain solid carbide with high fracture toughness.



Semi-standardized T-slot cutters

Product features

From Ø0.8 to Ø12 with integrated cooling

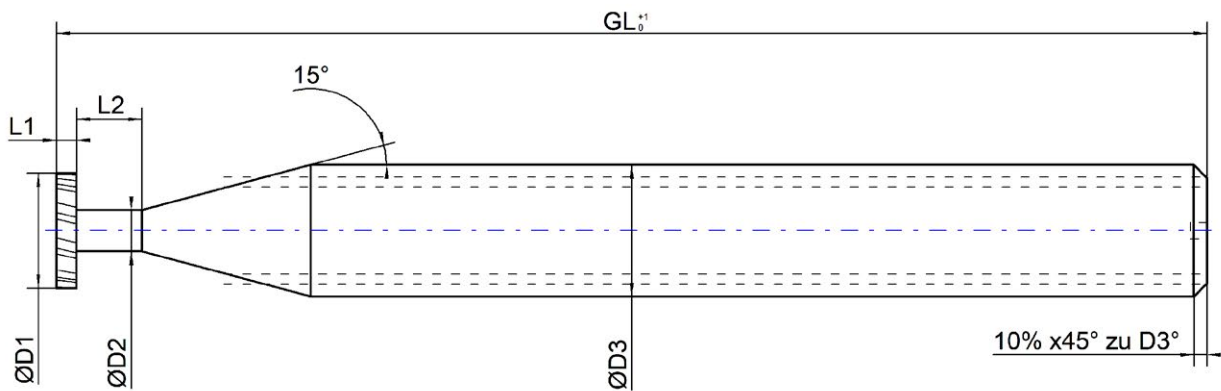
- From Ø0.8 to Ø40 without cooling
- 3 to 18 flutes depending on diameter
- Straight flutes from Ø4 or helical flutes selectable
- Rounding of sharp corners between 0.004 and 0.01 mm (edge preparation)
- Further customization possible on request

Short delivery times

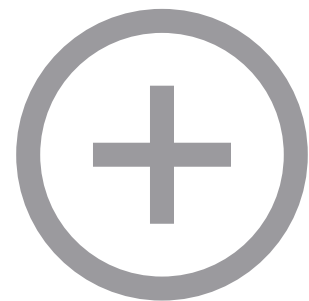
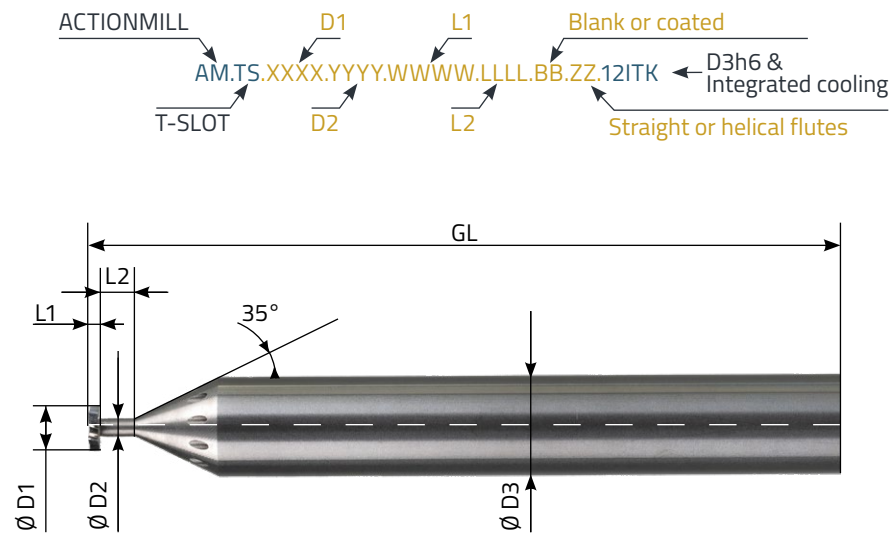
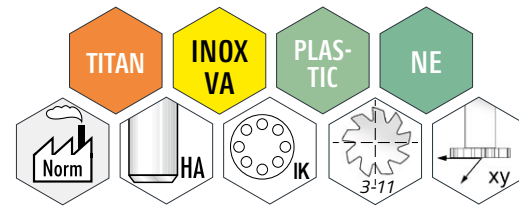
- 2 weeks blank
- 3 – 4 weeks coated
- Always select the right high-performance coating:
 - .00 = blank for plastics and non-ferrous metals
 - .01 = α -INOX for stainless steels ferritic, martensitic, austenitic & heat-resistant steels, titanium alloys, CrCo (M & S)
 - .02 = β -Titan for non-ferrous metals and titanium (N & S1)
 - .03 = γ -Steel for steels up to RM < 1²00N/mm² & cast iron (P & K)



Material short code	Material number	Shank-Ø [mm]	Overall length [mm]	Maximum cutting Ø [mm]	Amount of flutes [n]
4 ITK	R_HB.040.500.ITK	4	50	2	Z3
6 ITK	R_HB.060.600.ITK	6	60	4	Z3 / Z5 from Ø3
8 ITK	R_HB.080.681.ITK	8	68	6	Z5 / Z7 from Ø5
10 ITK	R_HB.100.840.ITK	10	84	8	Z7
12 ITK	R_HB.120.1010.ITK	12	101	10	Z9
14 ITK	R_HB.140.1010.ITK	14	101	12	Z11



INOX T-SLOT cooled Ø0.8 - Ø12



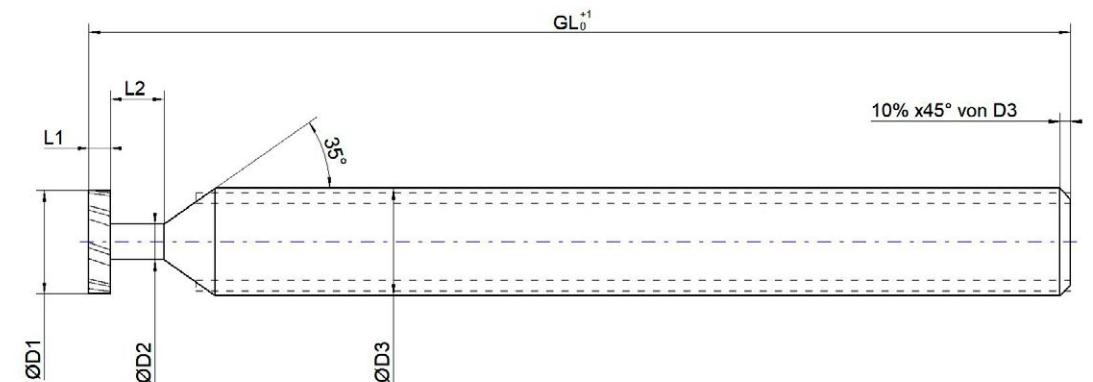
5 PRO's of the ACTIONMILL:

- Quickly available, semi-standardized T-slot mill
- Micro and macro geometry at the highest level
- High performance at a very good price-performance ratio
- Perfect for individualized applications
- Specialized also for difficult-to-cut materials

Example: T-Slot Ø9.0x5.0 mm; Neck Ø4.5x14.0 mm; Helical flutes and β-Titan coated

Article number XXXX.YYYY.WWWW.LLLL	D1 (mm) XXXX	D2 (mm) YYYY	D3 h6 (mm)	L1 ±0.005 (mm) WWW	L2 (mm) LLL	GL (mm)
AM.TS.XXXX.YYYY.WWWW.LLLL.BB.ZZ.12ITK	Ø8.0-Ø10.0	Ø3.5-Ø5.0	Ø12	0.5-10.5 mm	3.0-24 mm	101
AM.TS.0900.0450.0500.1400.02.ZD.12ITK	9.0	4.5	12h6	5.0	14.0	101

$D_1 = 0.8 \text{ mm} - 12.0 \text{ mm}$



Article number: _____

Raw material: _____

☐ Inquiry

☐ Order Order number: _____ Other: _____

Dimensions (XXXX.YYYY.WWWW.LLLL):

D₁ (XXXX) _____ L₁ (WWW) _____

D₂ (YYY) _____ L₂ (LLL) _____

Material to be machined _____

Coating (BB):

- ☐ (.00) blank
- ☐ (.01) α-INOX
- ☐ (.02) β-Titan
- ☐ (.03) γ-Steel

Flute form (ZZ):

- ☐ (.ZG) Straight
- ☐ (.ZD) Helical

Material selection (short code):

The table for material selection can be found on page 202.

Minimum order quantity from 5 pieces:

* Without further information, the most suitable coating will be used.

Z	blank BB	α-INOX BB	β-Titan BB	γ-Steel BB	Z-Straight ZZ	Z-Helix ZZ
Z9	.00	.01	.02	.03	.ZG	.ZD
Z9			.02			.ZD

Minimum order quantity: 5 pieces

Delivery time: Blank 2 weeks; Coated 3-4 weeks

ACTIONMILL®

by HB microtec

T-SLOT cooled



HBmicrotec®
ACTIONTOOLS & ENGINEERING

HB microtec GmbH & Co. KG

Bischof-Sproll-Straße 6

78532 Tuttlingen

Germany

Tel. +49 7461 1657280

Fax +49 7461 1657281

Email kontakt@hb-microtec.de

Web www.HB-microtec.de

