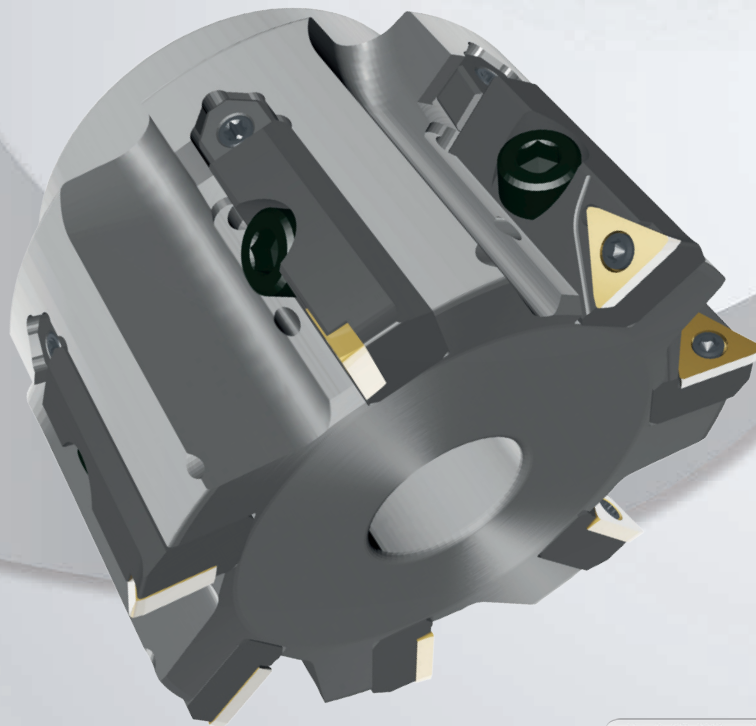


**NEW**

**INNOTOOL**

LOOK FORWARD



***SUPER FINISH***

**FINISH MILL WITH SHORT WIPER FLAT**

- For finishing up to workpiece shoulders incl. undercuts •*
- Short wiper flat for minimized cutting forces •*
- Diameter range 50 - 125 mm •*
- Adjustable axial run-out •*

### Product Overview

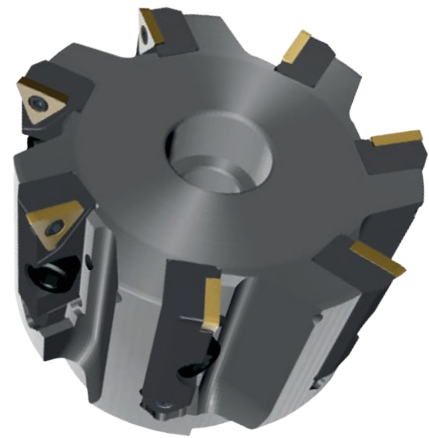
When finishing we are often faced with unstable components or workpiece clampings. Therefore only with tools that generate very low axial cutting forces, the required surface qualities can be achieved here.

The only 1 mm short wiper flat of the new **SuperFinish finishing cutters UF11D10** is ideally suited for such conditions.

Another interesting feature is the ability to realize an undercut into shoulders with this tool resp. to produce finish surfaces very close to contours.

By means of the cartridges the axial run-out of the cutter can be adjusted. The 3-edged insert is available in IN4004 and also in our **new grade IN2504**, which can be universally used for steel, cast iron and hard machining.

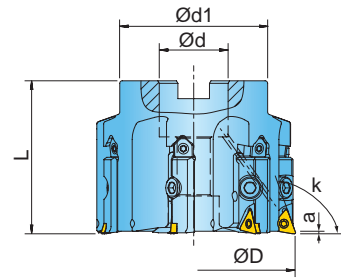
The **finishing cutters of series UF11D10** are available in diameter 50 - 125 mm with adaption acc. to DIN 8030.



### Advantages

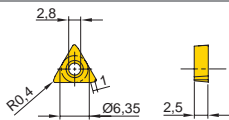
- Finishing up to workpiece shoulders incl. undercut
- Short wiper flat for low axial cutting forces
- Adjustable axial run-out
- With internal coolant supply
- Grade IN2504 for e.g. steel, cast iron and hard machining

ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	$\kappa^\circ$	a	Z	IK	kg
UF.050.001	50	22	45	60	110	1	5	✓	0,57
UF.063.001	63	22	45	60	110	1	6	✓	0,87
UF.080.001	80	27	58	60	110	1	7	✓	1,46
UF.100.002	100	32	85	60	110	1	8	✓	2,41
UF.125.003	125	40	100	63	110	1	10	✓	4,21

TCHW110204R-W



Designation	fz(min/max)	Design	Grade	IN2504	IN4004							
TCHW110204R-W	0,08/0,15	wiper finishing edge R0,4		●	●							

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



SM25-064-00 (1,1Nm) DS-T08S 55D133R00 DIN 912 M5X12-12.9 PA-5233 SB040-03

① = Insert screw ② = Screw driver ③ = Cartridge for TCHW110204R-W ④ = Insert screw ⑤ = Wedge ⑥ = Differential screw

## **SUPER FINISH** FINISH MILL

### Tips & Parameters

insert: TCHW110204R-W  
average chip thickness: **hm = 0.08 mm**  
max. cutting depth: **ap = 0.2 mm**



### Recommended Cutting Data:

material	cutting speed Vc [m/min]				feed per tooth fz [mm]
	1st choice dry machining resp. wear resistant carbide		1st choice wet machining resp. tough carbide		
unalloyed steel	IN2504	250-290	IN4004	200-240	0.08-0.15
alloyed steel 800 N/mm <sup>2</sup>	IN2504	210-250	IN4004	160-200	0.08-0.10
alloyed steel 1100 N/mm <sup>2</sup>	IN2504	160-180	IN4004	110-130	0.08
stainless steel	IN2504	120-180	IN4004	80-130	0.08-0.15
gray cast iron	IN2504	180-250	IN4004	150-200	0.08-0.15
nodular cast iron	IN2504	140-210	IN4004	110-160	0.08-0.10
aluminum	IN2504	800-1500	IN4004	500-800	0.08-0.15
high temperature alloys	IN2504	110-125	IN4004	60-80	0.08
titanium alloys	IN2504	40-50	IN4004	30-40	0.08
hard machining < 54 HRC	IN2504	70-100	-	-	0.08
hard machining < 63 HRC	IN2504	50-80	-	-	0.08

### Tips

- The worse the material machinability, the smaller the tool engagement should be chosen.
- The smaller the cutting tool diameter, the higher the cutting speed can be.

### General Information:

insert screw: **SM25-064-00**  
torque: **1.1 Nm**  
torque wrench: **DTN011S with bit DS-T08TB**