

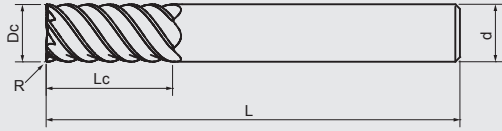
## F660TX / F661TX

## Finishing End Mills

Negative rake angle is good for cutting hardened materials.

Selected Super SMG as tool material.

Good wear resistance and lubricating effect with Nano multilayer coating.



**VHM**  
Carbide

**AlTiSiN**  
TX



**Steel**  
40-70  
HRC



H

H

Stronger strength of cutting edge is suitable for various materials from 40-70HRC.

Various application for finishing cutting.

## DIN 6527 Standard Length

Dc 0 -0.02	Lc mm	L mm	d h5	Z	R mm	F660TX AlTiSiN					
6	13	57	6	6	0.2	●					
8	19	63	8	6	0.2	●					
10	22	72	10	6	0.2	●					
12	26	83	12	6	0.2	●					
16	32	92	16	8	0.2	●					
20	38	104	20	10	0.2	●					

## Long Length

Dc 0 -0.02	Lc mm	L mm	d h5	Z	R mm		F661TX AlTiSiN				
6	19	63	6	6	0.2		●				
8	28	72	8	6	0.2		●				
10	34	84	10	6	0.2		●				
12	40	97	12	6	0.2		●				
16	48	108	16	8	0.2		●				
20	56	122	20	10	0.2		●				

## Cutting Conditions

	F660TX		F661TX		
	F660TX F661TX	 $ae=0.05xDc$		 $ae=0.02xDc$	
	cutting speed Vc (m/min)	feed per tooth fz(mm)	cutting speed Vc (m/min)	feed per tooth fz(mm)	
Hardened Steel Materials					
H	GR5 38-48HRC Hardened Steel	150	0.01xDc	130	0.002xDc
	GR6 48-56HRC Hardened Steel	100	0.008xDc	90	0.0018xDc
	GR7 56-68HRC Hardened Steel	90	0.007xDc	80	0.0015xDc

All cutting data serve for orientation only and should be adapted individually to the technical conditions on location

1. Please work with good rigidity / high precision facilities and collet chuck.
2. Please choose proper cutting fluid.
3. The cutting data is reference value only. Please adjust it according to your real working conditions.
4. If RPM is lower the reference value, the Feed rate (fz) and RPM should be reduced by the same proportion.
5. If vibration occurs during cutting, please reduce cutting parameter.