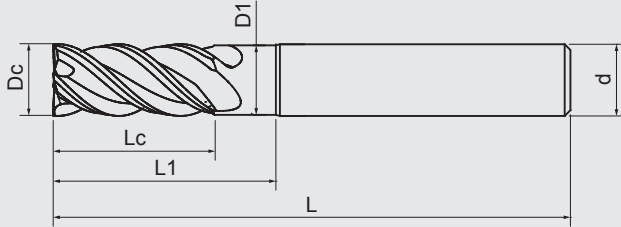


## F517TX / F518TX / F636TX

### Multipurpose End Mills

Designed with two variable helix geometry, two unequal flutes.  
 Designed with high removal cutting geometry.  
 The use of Si-silicon AlTiSiN coating has excellent wear resistance.



**VHM Carbide**

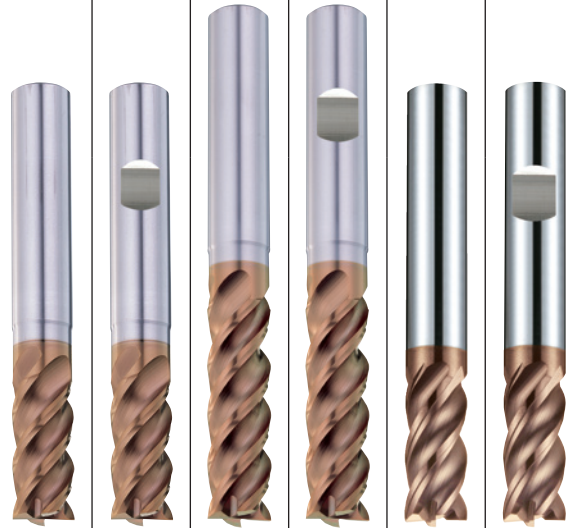
**AlTiSiN TX**

4

N  
75°

0.05-0.2  
45°

**Steel <56HRC**



Improved cutting edge strength for cutting different materials below 56HRC, stainless steel, cast iron as well as aluminium.  
 Application from roughing to finishing cutting, drilling, ramping... in different materials.

<b>P</b>	<b>P</b>	<b>P</b>	<b>P</b>	<b>P</b>	<b>P</b>
<b>H</b>	<b>H</b>	<b>H</b>	<b>H</b>	<b>H</b>	<b>H</b>
<b>M</b>	<b>M</b>	<b>M</b>	<b>M</b>	<b>M</b>	<b>M</b>
<b>K</b>	<b>K</b>	<b>K</b>	<b>K</b>	<b>K</b>	<b>K</b>

#### DIN 6527 Standard Length

Dc 0 -0.02	Lc mm	L mm	d h5	L1 mm	D1 mm	45° mm	F517TX HA	F517TX HB			F636TX HA	F636TX HB
3	8	57	6	14	2.8	0.10	●	●			●	●
4	11	57	6	16	3.8	0.10	●	●			●	●
5	13	57	6	18	4.8	0.15	●	●			●	●
6	13	57	6	20	5.8	0.15	●	●			●	●
8	19	63	8	26	7.7	0.15	●	●			●	●
10	22	72	10	31	9.7	0.20	●	●			●	●
12	26	83	12	37	11.6	0.20	●	●			●	●
14	26	83	14	37	13.5	0.20	●	●				
16	32	92	16	43	15.5	0.20	●	●			●	●
18	32	92	18	43	17.5	0.20	●	●				
20	38	104	20	53	19.5	0.20	●	●			●	●

#### Long Length

Dc 0 -0.02	Lc mm	L mm	d h5	L1 mm	D1 mm	45° mm			F518TX HA	F518TX HB		
6	19	63	6	26	5.8	0.15			●	●		
8	28	72	8	35	7.7	0.15			●	●		
10	34	84	10	43	9.7	0.20			●	●		
12	40	97	12	51	11.6	0.20			●	●		
16	48	108	16	59	15.5	0.20			●	●		
20	56	122	20	71	19.5	0.20			●	●		

## Cutting Conditions

F517TX F518TX F636TX		F517TX		F517TX		F517TX		F517TX		F518TX		F518TX		F636TX		F636TX	
		cutting speed Vc (m/min)	feed per tooth fz(mm)	cutting speed Vc (m/min)	feed per tooth fz(mm)	cutting speed Vc (m/min)	feed per tooth fz(mm)	cutting speed Vc (m/min)	feed per tooth fz(mm)	cutting speed Vc (m/min)	feed per tooth fz(mm)	cutting speed Vc (m/min)	feed per tooth fz(mm)	cutting speed Vc (m/min)	feed per tooth fz(mm)	cutting speed Vc (m/min)	feed per tooth fz(mm)
<b>Carbon Steel Materials</b>																	
P	GR1 Carbon Steel	120	0.006xDc	120	0.006xDc	130	0.006xDc	140	0.007xDc	110	0.006xDc	120	0.006xDc	120	0.006xDc	120	0.006xDc
	GR2 <24HRC Low-alloyed Steel	100	0.005xDc	100	0.005xDc	110	0.005xDc	120	0.006xDc	110	0.005xDc	100	0.005xDc	100	0.005xDc	120	0.005xDc
	GR3 <30HRC Hi-alloyed Steel	80	0.005xDc	80	0.005xDc	90	0.005xDc	100	0.006xDc	70	0.005xDc	80	0.005xDc	80	0.005xDc	80	0.005xDc
<b>Hardened Steel Materials</b>																	
H	GR4 30-38HRC Hardened Steel	65	0.004xDc	90	0.003xDc	90	0.003xDc	100	0.003xDc	90	0.004xDc	100	0.003xDc	100	0.004xDc	90	0.003xDc
	GR5 38-48HRC Hardened Steel	60	0.003xDc	80	0.003xDc	80	0.003xDc	90	0.003xDc	70	0.003xDc	90	0.003xDc	80	0.003xDc	80	0.003xDc
<b>Stainless Steel Materials</b>																	
M	GR8-1 Ferritic \ Martensitic	60	0.002xDc	70	0.004xDc	110	0.003xDc	130	0.003xDc	70	0.003xDc	80	0.004xDc	60	0.002xDc	70	0.004xDc
	GR8-2 Austenitic	50	0.002xDc	60	0.003xDc	90	0.003xDc	100	0.003xDc	60	0.003xDc	70	0.003xDc	50	0.002xDc	60	0.003xDc
	GR8-3 Austenitic-ferritic	40	0.002xDc	50	0.003xDc	90	0.002xDc	60	0.002xDc	50	0.002xDc	60	0.003xDc	40	0.002xDc	50	0.003xDc
	GR8-4 Austenitic-ferritic Heat-resistant	30	0.002xDc	40	0.003xDc	40	0.002xDc	50	0.002xDc	40	0.002xDc	50	0.003xDc	30	0.002xDc	40	0.003xDc
<b>Cast Iron Materials</b>																	
K	GR9-1 Grey cast iron	110	0.006xDc	110	0.006xDc	120	0.006xDc	130	0.007xDc	100	0.006xDc	130	0.005xDc	110	0.006xDc	110	0.006xDc
	GR9-2 Nodular cast iron	120	0.006xDc	120	0.006xDc	130	0.006xDc	140	0.007xDc	110	0.006xDc	140	0.005xDc	120	0.006xDc	120	0.006xDc

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.