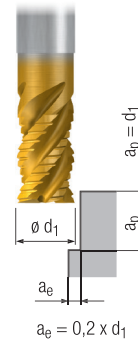
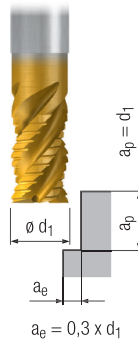
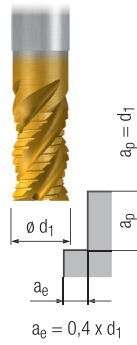
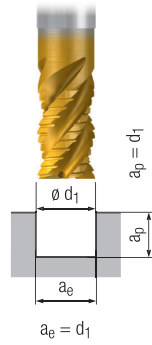


**Hartmetall-Schafffräser – kurze, lange und extra lange Ausführung**  
Solid carbide end mills – short, long and extra long design

NF

Gültig für · Valid for

2642TT	2648TT	2658TT
2642TZ	2648TZ	2658TZ
2643TZ	2649TZ	2659TZ
2646TT	2656TT	2670TT
2646TZ	2656TZ	2670TZ
2647TZ	2657TZ	2671TZ



		Vc		fz		MMS MQL	Coolant	Chipbreaker	Vc / fz	
		[m/min]	[mm]	[m/min]	[mm]					
P	1.1	120	0,005 x d <sub>1</sub>	140	0,006 x d <sub>1</sub>					
	2.1	110	0,004 x d <sub>1</sub>	130	0,005 x d <sub>1</sub>					
	3.1	90	0,004 x d <sub>1</sub>	110	0,005 x d <sub>1</sub>					
	4.1	70	0,003 x d <sub>1</sub>	80	0,004 x d <sub>1</sub>					
	5.1	60	0,003 x d <sub>1</sub>	70	0,003 x d <sub>1</sub>					
M	1.1	100	0,004 x d <sub>1</sub>	120	0,004 x d <sub>1</sub>					
	2.1	80	0,004 x d <sub>1</sub>	100	0,004 x d <sub>1</sub>					
	3.1	50	0,003 x d <sub>1</sub>	60	0,003 x d <sub>1</sub>					
	4.1	40	0,003 x d <sub>1</sub>	50	0,003 x d <sub>1</sub>					
K	1.1	120	0,005 x d <sub>1</sub>	140	0,006 x d <sub>1</sub>					
	1.2	120	0,005 x d <sub>1</sub>	140	0,006 x d <sub>1</sub>					
	2.1	110	0,004 x d <sub>1</sub>	130	0,005 x d <sub>1</sub>					
	2.2	110	0,004 x d <sub>1</sub>	130	0,005 x d <sub>1</sub>					
	3.1	90	0,004 x d <sub>1</sub>	110	0,005 x d <sub>1</sub>					
	3.2	90	0,004 x d <sub>1</sub>	110	0,005 x d <sub>1</sub>					
	4.1	70	0,003 x d <sub>1</sub>	80	0,004 x d <sub>1</sub>					
	4.2	60	0,003 x d <sub>1</sub>	70	0,004 x d <sub>1</sub>					
N	1.1									
	1.2									
	1.3									
	1.4									
	1.5									
	1.6									
	2.1	110	0,005 x d <sub>1</sub>	130	0,006 x d <sub>1</sub>	150	0,007 x d <sub>1</sub>	180	0,008 x d <sub>1</sub>	
	2.2	110	0,005 x d <sub>1</sub>	130	0,006 x d <sub>1</sub>	150	0,007 x d <sub>1</sub>	180	0,008 x d <sub>1</sub>	
	2.3	110	0,005 x d <sub>1</sub>	130	0,006 x d <sub>1</sub>	150	0,007 x d <sub>1</sub>	180	0,008 x d <sub>1</sub>	
	2.4	100	0,004 x d <sub>1</sub>	120	0,005 x d <sub>1</sub>	140	0,006 x d <sub>1</sub>	160	0,006 x d <sub>1</sub>	
	2.5	100	0,004 x d <sub>1</sub>	120	0,005 x d <sub>1</sub>	140	0,006 x d <sub>1</sub>	160	0,006 x d <sub>1</sub>	
	2.6	100	0,004 x d <sub>1</sub>	120	0,005 x d <sub>1</sub>	140	0,006 x d <sub>1</sub>	160	0,006 x d <sub>1</sub>	
	2.7	60	0,003 x d <sub>1</sub>	70	0,004 x d <sub>1</sub>	80	0,004 x d <sub>1</sub>	100	0,005 x d <sub>1</sub>	
	2.8	60	0,003 x d <sub>1</sub>	70	0,004 x d <sub>1</sub>	80	0,004 x d <sub>1</sub>	100	0,005 x d <sub>1</sub>	
	3.1									
	3.2									
4.1										
4.2										
4.3										
4.4										
5.1										
5.2	60	0,003 x d <sub>1</sub>	70	0,004 x d <sub>1</sub>	80	0,004 x d <sub>1</sub>	100	0,005 x d <sub>1</sub>		
5.3										
S	1.1	70	0,005 x d <sub>1</sub>	80	0,005 x d <sub>1</sub>	100	0,006 x d <sub>1</sub>	110	0,007 x d <sub>1</sub>	
	1.2	60	0,004 x d <sub>1</sub>	70	0,004 x d <sub>1</sub>	80	0,005 x d <sub>1</sub>	100	0,006 x d <sub>1</sub>	
	1.3	30	0,003 x d <sub>1</sub>	40	0,003 x d <sub>1</sub>	40	0,004 x d <sub>1</sub>	50	0,004 x d <sub>1</sub>	
	2.1	70	0,004 x d <sub>1</sub>	80	0,004 x d <sub>1</sub>	100	0,005 x d <sub>1</sub>	110	0,006 x d <sub>1</sub>	
	2.2	20	0,003 x d <sub>1</sub>	20	0,004 x d <sub>1</sub>	25	0,004 x d <sub>1</sub>	30	0,005 x d <sub>1</sub>	
	2.3	10	0,002 x d <sub>1</sub>	15	0,002 x d <sub>1</sub>	15	0,003 x d <sub>1</sub>	20	0,003 x d <sub>1</sub>	
2.4	20	0,003 x d <sub>1</sub>	25	0,003 x d <sub>1</sub>	35	0,004 x d <sub>1</sub>	30	0,004 x d <sub>1</sub>		
2.5	10	0,002 x d <sub>1</sub>	10	0,002 x d <sub>1</sub>	10	0,003 x d <sub>1</sub>	20	0,003 x d <sub>1</sub>		
2.6	10	0,003 x d <sub>1</sub>	10	0,003 x d <sub>1</sub>	10	0,004 x d <sub>1</sub>	20	0,004 x d <sub>1</sub>		
H	1.1									
	1.2									
	1.3									
	1.4									
	1.5									

■ = sehr gut geeignet · very suitable  
□ = gut geeignet · suitable

