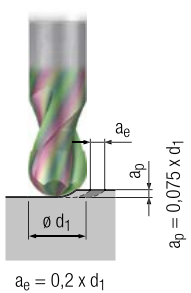
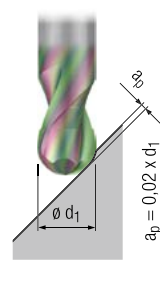


Schnittwerte Hartmetall-Kugelfräser

Kurze Ausführung

		W				Gültig für			
		Schruppen Roughing Ébauche		Schlichten Finishing Finition		RG24-52K			
									
		v_c [m/min]	f_z [mm]	v_c [m/min]	f_z [mm]				
P	1.1								
	2.1								
	3.1								
	4.1								
	5.1								
M	1.1								
	2.1								
	3.1								
	4.1								
K	1.1								
	1.2								
	2.1								
	2.2								
	3.1								
	3.2								
	4.1								
	4.2								
N	1.1	900	$0,022 \times d_1$	1200	$0,016 \times d_1$				
	1.2	900	$0,020 \times d_1$	1200	$0,014 \times d_1$				
	1.3	900	$0,017 \times d_1$	1200	$0,012 \times d_1$				
	1.4	600	$0,020 \times d_1$	800	$0,014 \times d_1$				
	1.5								
	1.6								
	2.1	200	$0,014 \times d_1$	260	$0,010 \times d_1$				
	2.2	200	$0,014 \times d_1$	260	$0,010 \times d_1$				
	2.3	200	$0,014 \times d_1$	260	$0,010 \times d_1$				
	2.4	160	$0,011 \times d_1$	220	$0,008 \times d_1$				
	2.5	160	$0,011 \times d_1$	220	$0,008 \times d_1$				
	2.6	160	$0,011 \times d_1$	220	$0,008 \times d_1$				
	2.7	100	$0,008 \times d_1$	140	$0,006 \times d_1$				
	2.8	100	$0,008 \times d_1$	140	$0,006 \times d_1$				
	3.1	450	$0,025 \times d_1$	600	$0,018 \times d_1$				
	3.2	450	$0,020 \times d_1$	600	$0,014 \times d_1$				
	4.1	350	$0,021 \times d_1$	450	$0,015 \times d_1$				
	4.2	500	$0,021 \times d_1$	650	$0,015 \times d_1$				
	4.3	200	$0,017 \times d_1$	250	$0,012 \times d_1$				
	4.4	140	$0,017 \times d_1$	180	$0,012 \times d_1$				
	5.1								
	5.2								
	5.3	220	$0,017 \times d_1$	300	$0,012 \times d_1$				
S	1.1	110	$0,010 \times d_1$	150	$0,007 \times d_1$				
	1.2	90	$0,010 \times d_1$	120	$0,006 \times d_1$				
	1.3	50	$0,008 \times d_1$	70	$0,005 \times d_1$				
	2.1	80	$0,008 \times d_1$	110	$0,006 \times d_1$				
	2.2	30	$0,006 \times d_1$	50	$0,004 \times d_1$				
	2.3	20	$0,006 \times d_1$	40	$0,004 \times d_1$				
	2.4								
	2.5								
H	1.1								
	1.2								
	1.3								
	1.4								
	1.5								

Schnittwerte Hartmetall-Torusfräser

Kurze Ausführung

						Gültig für			
						RG19-86A			
		Schruppen Roughing $a_e = 0,4 \times d_1$		Schlichten Finishing $a_p = 0,02 \times d_1$					
		v_c [m/min]	f_z [mm]	v_c [m/min]	f_z [mm]			MMS MQL	
P	1.1	220	$0,014 \times d_1$	300	$0,010 \times d_1$	☐	☒	☐	☒
	2.1	190	$0,013 \times d_1$	260	$0,009 \times d_1$	☐	☒	☐	☒
	3.1	160	$0,011 \times d_1$	220	$0,008 \times d_1$	☐	☒	☐	
	4.1	130	$0,010 \times d_1$	180	$0,007 \times d_1$	☐	☒	☐	
	5.1	110	$0,008 \times d_1$	150	$0,006 \times d_1$	☐	☒	☐	
M	1.1	110	$0,008 \times d_1$	150	$0,006 \times d_1$			☐	☒
	2.1	90	$0,008 \times d_1$	120	$0,006 \times d_1$			☐	☒
	3.1	70	$0,006 \times d_1$	90	$0,005 \times d_1$			☐	☒
	4.1	50	$0,006 \times d_1$	70	$0,005 \times d_1$			☐	☒
K	1.1	220	$0,014 \times d_1$	300	$0,010 \times d_1$	☐	☒		☐
	1.2	220	$0,014 \times d_1$	300	$0,010 \times d_1$	☐	☒		☐
	2.1	200	$0,011 \times d_1$	260	$0,008 \times d_1$	☐	☒		☐
	2.2	200	$0,011 \times d_1$	260	$0,008 \times d_1$	☐	☒		☐
	3.1	160	$0,011 \times d_1$	220	$0,008 \times d_1$	☐	☒		
	3.2	160	$0,011 \times d_1$	220	$0,008 \times d_1$	☐	☒		
	4.1	130	$0,008 \times d_1$	180	$0,006 \times d_1$	☐	☒		
	4.2	110	$0,008 \times d_1$	150	$0,006 \times d_1$	☐	☒		
N	1.1								
	1.2	1000	$0,020 \times d_1$	1350	$0,014 \times d_1$			☐	☒
	1.3	1000	$0,017 \times d_1$	1350	$0,012 \times d_1$			☐	☒
	1.4	600	$0,020 \times d_1$	800	$0,014 \times d_1$			☐	☒
	1.5								
	1.6								
	2.1	200	$0,014 \times d_1$	260	$0,010 \times d_1$			☐	☒
	2.2	200	$0,014 \times d_1$	260	$0,010 \times d_1$			☐	☒
	2.3	200	$0,014 \times d_1$	260	$0,010 \times d_1$	☐	☐	☐	☒
	2.4	160	$0,011 \times d_1$	220	$0,008 \times d_1$			☐	☒
	2.5	160	$0,011 \times d_1$	220	$0,008 \times d_1$			☐	☒
	2.6	160	$0,011 \times d_1$	220	$0,008 \times d_1$	☐	☐	☐	☒
	2.7	100	$0,008 \times d_1$	130	$0,006 \times d_1$			☐	☒
	2.8	100	$0,008 \times d_1$	130	$0,006 \times d_1$			☐	☒
	3.1								
	3.2								
	4.1								
4.2									
4.3									
4.4									
5.1									
5.2	110	$0,008 \times d_1$	150	$0,006 \times d_1$			☐	☒	
5.3									
S	1.1								
	1.2								
	1.3								
	2.1	80	$0,008 \times d_1$	110	$0,006 \times d_1$			☐	☒
	2.2	30	$0,006 \times d_1$	50	$0,004 \times d_1$			☐	☒
	2.3	30	$0,006 \times d_1$	40	$0,004 \times d_1$			☐	☒
	2.4	30	$0,006 \times d_1$	40	$0,004 \times d_1$			☐	☒
2.5	20	$0,006 \times d_1$	30	$0,004 \times d_1$			☐	☒	
2.6	30	$0,006 \times d_1$	40	$0,004 \times d_1$			☐	☒	
H	1.1			150	$0,006 \times d_1$	☐	☒		
	1.2			130	$0,005 \times d_1$	☐	☒		
	1.3								
	1.4								
	1.5								

Schnittwerte Hartmetall-Kugelfräser

Extra kurze Ausführung

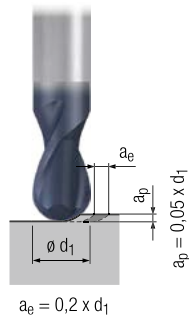


N

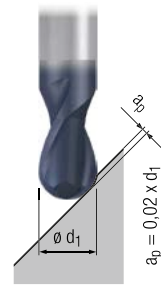
Gültig für

RG18-20A

Schruppen
Roughing



Schlichten
Finishing



		v_c [m/min]	f_z [mm]		v_c [m/min]	f_z [mm]			MMS MOL	
P	1.1	200	$0,014 \times d_1$		270	$0,010 \times d_1$	☐	☒	☐	☒
	2.1	170	$0,013 \times d_1$		230	$0,009 \times d_1$	☐	☒	☐	☒
	3.1	140	$0,011 \times d_1$		200	$0,008 \times d_1$	☐	☒	☐	
	4.1	110	$0,010 \times d_1$		160	$0,007 \times d_1$	☐	☒	☐	
	5.1	100	$0,008 \times d_1$		130	$0,006 \times d_1$	☐	☒	☐	
M	1.1	100	$0,008 \times d_1$		130	$0,006 \times d_1$			☐	☒
	2.1	80	$0,008 \times d_1$		110	$0,006 \times d_1$			☐	☒
	3.1	60	$0,006 \times d_1$		80	$0,005 \times d_1$			☐	☒
	4.1	40	$0,006 \times d_1$		60	$0,005 \times d_1$			☐	☒
K	1.1	200	$0,014 \times d_1$		270	$0,010 \times d_1$	☐	☒		☐
	1.2	200	$0,014 \times d_1$		270	$0,010 \times d_1$	☐	☒		☐
	2.1	180	$0,011 \times d_1$		230	$0,008 \times d_1$	☐	☒		☐
	2.2	180	$0,011 \times d_1$		230	$0,008 \times d_1$	☐	☒		☐
	3.1	140	$0,011 \times d_1$		200	$0,008 \times d_1$	☐	☒		
	3.2	140	$0,011 \times d_1$		200	$0,008 \times d_1$	☐	☒		
	4.1	110	$0,008 \times d_1$		160	$0,006 \times d_1$	☐	☒		
	4.2	100	$0,008 \times d_1$		130	$0,006 \times d_1$	☐	☒		
N	1.1									
	1.2									
	1.3									
	1.4									
	1.5									
	1.6									
	2.1	180	$0,014 \times d_1$		230	$0,010 \times d_1$			☐	☒
	2.2	180	$0,014 \times d_1$		230	$0,010 \times d_1$			☐	☒
	2.3	180	$0,014 \times d_1$		230	$0,010 \times d_1$	☐	☐	☐	☒
	2.4	140	$0,011 \times d_1$		200	$0,008 \times d_1$			☐	☒
	2.5	140	$0,011 \times d_1$		200	$0,008 \times d_1$			☐	☒
	2.6	140	$0,011 \times d_1$		200	$0,008 \times d_1$	☐	☐	☐	☒
	2.7	90	$0,008 \times d_1$		120	$0,006 \times d_1$			☐	☒
	2.8	90	$0,008 \times d_1$		120	$0,006 \times d_1$			☐	☒
	3.1	400	$0,025 \times d_1$		500	$0,018 \times d_1$	☐	☐	☐	☒
	3.2	400	$0,020 \times d_1$		500	$0,014 \times d_1$	☐	☐	☐	☒
	4.1	290	$0,020 \times d_1$		400	$0,015 \times d_1$		☐	☐	☒
	4.2	430	$0,020 \times d_1$		580	$0,015 \times d_1$		☐	☐	☒
	4.3									
	4.4									
	5.1									
	5.2	100	$0,008 \times d_1$		130	$0,006 \times d_1$			☐	☒
	5.3	180	$0,017 \times d_1$		270	$0,012 \times d_1$	☐	☒		☒
S	1.1	100	$0,010 \times d_1$		130	$0,007 \times d_1$			☐	☒
	1.2	80	$0,008 \times d_1$		110	$0,006 \times d_1$			☐	☒
	1.3	40	$0,007 \times d_1$		60	$0,005 \times d_1$			☐	☒
	2.1	70	$0,008 \times d_1$		100	$0,006 \times d_1$			☐	☒
	2.2	25	$0,006 \times d_1$		40	$0,004 \times d_1$			☐	☒
	2.3	25	$0,006 \times d_1$		30	$0,004 \times d_1$			☐	☒
	2.4	25	$0,006 \times d_1$		30	$0,004 \times d_1$			☐	☒
	2.5	15	$0,006 \times d_1$		25	$0,004 \times d_1$			☐	☒
H	1.1									
	1.2									
	1.3									
	1.4									
	1.5									