



### PRODUCT DESCRIPTION

- » High-performance milling cutter with non-uniform pitch and centre cut
- » Relieved behind the cutting edge

### MATERIAL

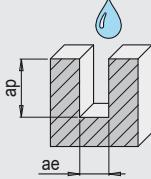
» Carbide, TiAlN multi-layer coated



Z	d2	d3	I	I1	I2	C	d	No.	EUR
4	5.7	6	75	13	34	0.3	<b>6</b>	WZF 11278/ 6	< >
4	7.7	8	100	19	50	0.3	<b>8</b>	WZF 11278/ 8	< >
4	9.5	10	100	22	50	0.3	<b>10</b>	WZF 11278/10	< >
4	11.5	12	150	26	58	0.5	<b>12</b>	WZF 11278/12	< >
4	15.5	16	150	32	78	0.5	<b>16</b>	WZF 11278/16	< >
4	19.5	20	150	38	78	0.5	<b>20</b>	WZF 11278/20	< >

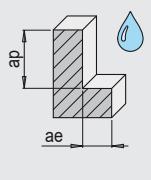


## REFERENCE VALUES FOR SLOTTING

WZF 11278	Material	Strength	Vc <sup>1</sup> m/min.	d					
				6	8	10	12	16	20
				fz <sup>2</sup> (mm/z)					
	1.1730	640 N/mm <sup>2</sup>	120	0.016	0.022	0.028	0.034	0.039	0.047
	1.2083	780 N/mm <sup>2</sup>	80	0.008	0.010	0.013	0.016	0.020	0.022
	1.2085	1080 N/mm <sup>2</sup>	80	0.008	0.010	0.013	0.016	0.020	0.022
	1.2162	660 N/mm <sup>2</sup>	100	0.014	0.020	0.025	0.030	0.036	0.043
	1.2311	1080 N/mm <sup>2</sup>	100	0.011	0.016	0.020	0.024	0.029	0.034
	1.2312	1080 N/mm <sup>2</sup>	100	0.011	0.015	0.019	0.023	0.027	0.032
	1.2316	1010 N/mm <sup>2</sup>	80	0.008	0.010	0.013	0.016	0.020	0.022
	1.2343	780 N/mm <sup>2</sup>	100	0.014	0.020	0.025	0.030	0.036	0.043
	1.2379	780 N/mm <sup>2</sup>	80	0.008	0.010	0.013	0.016	0.020	0.022
	1.2714HH	1350 N/mm <sup>2</sup>	50	0.008	0.010	0.013	0.016	0.020	0.022
	1.2767	830 N/mm <sup>2</sup>	100	0.014	0.019	0.024	0.029	0.034	0.041
	1.2842	775 N/mm <sup>2</sup>	100	0.014	0.020	0.025	0.030	0.036	0.043
	Steel	1400 N/mm <sup>2</sup>	50	0.008	0.010	0.013	0.016	0.020	0.022

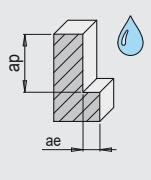
ae = 1 x d  
ap = 1 x d

## REFERENCE VALUES FOR ROUGHING

WZF 11278	Material	Strength	Vc <sup>1</sup> m/min.	d					
				6	8	10	12	16	20
				fz <sup>2</sup> (mm/z)					
	1.1730	640 N/mm <sup>2</sup>	130	0.022	0.028	0.037	0.043	0.055	0.062
	1.2083	780 N/mm <sup>2</sup>	90	0.010	0.014	0.017	0.021	0.025	0.030
	1.2085	1080 N/mm <sup>2</sup>	90	0.010	0.014	0.017	0.021	0.025	0.030
	1.2162	660 N/mm <sup>2</sup>	110	0.020	0.025	0.034	0.039	0.050	0.056
	1.2311	1080 N/mm <sup>2</sup>	110	0.016	0.020	0.027	0.031	0.040	0.045
	1.2312	1080 N/mm <sup>2</sup>	110	0.015	0.019	0.025	0.029	0.038	0.042
	1.2316	1010 N/mm <sup>2</sup>	90	0.010	0.014	0.017	0.021	0.025	0.030
	1.2343	780 N/mm <sup>2</sup>	110	0.020	0.025	0.034	0.039	0.050	0.056
	1.2379	780 N/mm <sup>2</sup>	90	0.010	0.014	0.017	0.021	0.025	0.030
	1.2714HH	1350 N/mm <sup>2</sup>	60	0.010	0.014	0.017	0.021	0.025	0.030
	1.2767	830 N/mm <sup>2</sup>	110	0.019	0.024	0.032	0.037	0.048	0.053
	1.2842	775 N/mm <sup>2</sup>	110	0.020	0.025	0.034	0.039	0.050	0.056
	Steel	1400 N/mm <sup>2</sup>	60	0.010	0.014	0.017	0.021	0.025	0.030

ae = 0.5 x d  
ap = 1 x d

## REFERENCE VALUES FOR ROUGHING

WZF 11278	Material	Strength	Vc <sup>1</sup> m/min.	d					
				6	8	10	12	16	20
				fz <sup>2</sup> (mm/z)					
	1.1730	640 N/mm <sup>2</sup>	140	0.025	0.034	0.043	0.052	0.062	0.074
	1.2083	780 N/mm <sup>2</sup>	100	0.012	0.017	0.022	0.026	0.031	0.037
	1.2085	1080 N/mm <sup>2</sup>	100	0.012	0.017	0.022	0.026	0.031	0.037
	1.2162	660 N/mm <sup>2</sup>	120	0.022	0.031	0.039	0.048	0.056	0.067
	1.2311	1080 N/mm <sup>2</sup>	120	0.018	0.025	0.031	0.038	0.045	0.054
	1.2312	1080 N/mm <sup>2</sup>	120	0.017	0.023	0.029	0.036	0.042	0.050
	1.2316	1010 N/mm <sup>2</sup>	100	0.012	0.017	0.022	0.026	0.031	0.037
	1.2343	780 N/mm <sup>2</sup>	120	0.022	0.031	0.039	0.048	0.056	0.067
	1.2379	780 N/mm <sup>2</sup>	100	0.012	0.017	0.022	0.026	0.031	0.037
	1.2714HH	1350 N/mm <sup>2</sup>	80	0.012	0.017	0.022	0.026	0.031	0.037
	1.2767	830 N/mm <sup>2</sup>	120	0.021	0.029	0.037	0.045	0.053	0.064
	1.2842	775 N/mm <sup>2</sup>	120	0.022	0.031	0.039	0.048	0.056	0.067
	Steel	1400 N/mm <sup>2</sup>	80	0.012	0.017	0.022	0.026	0.031	0.037

ae = 0.25 x d  
ap = 1 x d

1) Vc: cutting speed (m/min.)

2) fz: feed per cut (mm per tooth)

 You can find further materials and cutting values in the cutting data calculator.