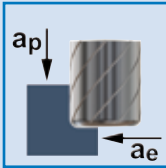
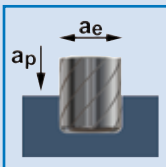


Schnittdatenempfehlung VHM 476W R TS35

Parameters recommendation, Paramètres conseillés, Parametri di taglio indicativi



Material	D [mm]	V _c [m/min]	f _z [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	V _f [mm/min]
Baustahl Unlegierter Stahl <i>Structural steel Unalloyed steel</i> Acier de construction Acier non allié Acciaio di costruzione Acciaio non legato <800 N/mm ²	4	160 (140-180)	0,040 (0,010-0,060)	7,0	1,80	12.730	1.985
	5	160 (140-180)	0,040 (0,010-0,060)	9,0	2,25	10.190	1.590
	6	160 (140-180)	0,075 (0,050-0,090)	11,0	2,70	8.490	2.615
	8	160 (140-180)	0,100 (0,070-0,110)	14,0	3,60	6.370	2.525
	10	160 (140-180)	0,130 (0,100-0,140)	18,0	4,50	5.090	2.690
	12	160 (140-180)	0,155 (0,120-0,160)	22,0	5,40	4.240	2.610
	16	160 (140-180)	0,200 (0,160-0,240)	29,0	7,20	3.180	2.520
20	160 (140-180)	0,240 (0,200-0,260)	36,0	9,00	2.550	2.470	
Werkzeugstahl Vergütungsstahl Legierter Stahl <i>Tool steel, heat-treatable steel, alloyed steel</i> Acier à outil, acier par traitement thermique, acier allié Acciaio d'utensile, acciaio bonificato, acciaio legato 800-1200 N/mm ²	4	120 (90-150)	0,040 (0,010-0,060)	7,0	1,80	9.550	1.490
	5	120 (90-150)	0,040 (0,010-0,060)	9,0	2,25	7.640	1.190
	6	120 (90-150)	0,075 (0,050-0,090)	11,0	2,70	6.370	1.960
	8	120 (90-150)	0,100 (0,070-0,110)	14,0	3,60	4.770	1.890
	10	120 (90-150)	0,130 (0,100-0,140)	18,0	4,50	3.820	2.015
	12	120 (90-150)	0,155 (0,120-0,160)	22,0	5,40	3.180	1.960
	16	120 (90-150)	0,200 (0,160-0,240)	29,0	7,20	2.390	1.895
20	120 (90-150)	0,240 (0,200-0,260)	36,0	9,00	1.910	1.850	
Edelstahl Hochlegierter Stahl <i>High grade steel High alloyed steel</i> Acier noble Acier fortement allié Acciaio superiore Acciaio di alta lega	4	100 (60-120)	0,040 (0,010-0,060)	7,0	1,80	7.960	1.240
	5	100 (60-120)	0,040 (0,010-0,060)	9,0	2,25	6.370	995
	6	100 (60-120)	0,075 (0,050-0,090)	11,0	2,70	5.310	1.635
	8	100 (60-120)	0,100 (0,070-0,110)	14,0	3,60	3.980	1.575
	10	100 (60-120)	0,130 (0,100-0,140)	18,0	4,50	3.180	1.680
	12	100 (60-120)	0,155 (0,120-0,160)	22,0	5,40	2.650	1.630
	16	100 (60-120)	0,200 (0,160-0,240)	29,0	7,20	1.990	1.575
20	100 (60-120)	0,240 (0,200-0,260)	36,0	9,00	1.590	1.540	
Titanlegierungen <i>Titanium alloys</i> Alliage titane Leghe di titanio >300 HB (z.B., e.g., p.ex., p.e. TiAlV6)	4	60 (40-80)	0,020 (0,010-0,060)	7,0	1,00	4.770	420
	5	60 (40-80)	0,020 (0,010-0,060)	9,0	1,25	3.820	335
	6	60 (40-80)	0,055 (0,030-0,090)	11,0	1,50	3.180	700
	8	60 (40-80)	0,075 (0,050-0,110)	14,0	2,00	2.390	735
	10	60 (40-80)	0,110 (0,080-0,140)	18,0	2,50	1.910	840
	12	60 (40-80)	0,130 (0,100-0,160)	22,0	3,00	1.590	840
	16	60 (40-80)	0,175 (0,140-0,200)	29,0	4,00	1.190	840
20	60 (40-80)	0,200 (0,160-0,240)	36,0	5,00	950	750	
Nickelbasislegierungen aushärtbar <i>Nickel-base alloy hardenable</i> Alliages traitable à base de nickel Leghe a base di Nickel (z.B., e.g., p.ex., p.e. Inconell 718)	4	30 (20-60)	0,020 (0,010-0,060)	7,0	1,00	2.390	210
	5	30 (20-60)	0,020 (0,010-0,060)	9,0	1,25	1.910	170
	6	30 (20-60)	0,055 (0,030-0,090)	11,0	1,50	1.590	350
	8	30 (20-60)	0,075 (0,050-0,110)	14,0	2,00	1.190	365
	10	30 (20-60)	0,110 (0,080-0,140)	18,0	2,50	950	420
	12	30 (20-60)	0,130 (0,100-0,160)	22,0	3,00	800	420
	16	30 (20-60)	0,175 (0,140-0,200)	29,0	4,00	600	420
20	30 (20-60)	0,200 (0,160-0,240)	36,0	5,00	480	380	



Material	D [mm]	V _c [m/min]	f _z [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	V _f [mm/min]
Baustahl Unlegierter Stahl <i>Structural steel Unalloyed steel</i> Acier de construction Acier non allié Acciaio di costruzione Acciaio non legato <800 N/mm ²	4	160 (140-180)	0,035 (0,010-0,050)	4,0	4,0	12.730	1.680
	5	160 (140-180)	0,035 (0,010-0,050)	5,0	5,0	10.190	1.345
	6	160 (140-180)	0,065 (0,040-0,080)	6,0	6,0	8.490	2.240
	8	160 (140-180)	0,090 (0,060-0,100)	8,0	8,0	6.370	2.240
	10	160 (140-180)	0,110 (0,080-0,120)	10,0	10,0	5.090	2.240
	12	160 (140-180)	0,130 (0,100-0,140)	12,0	12,0	4.240	2.240
	16	160 (140-180)	0,175 (0,140-0,180)	16,0	16,0	3.180	2.240
20	160 (140-180)	0,220 (0,180-0,240)	20,0	20,0	2.550	2.245	
Werkzeugstahl Vergütungsstahl Legierter Stahl <i>Tool steel, heat-treatable steel, alloyed steel</i> Acier à outil, acier par traitement thermique, acier allié Acciaio d'utensile, acciaio bonificato, acciaio legato 800-1200 N/mm ²	4	120 (90-150)	0,035 (0,010-0,050)	4,0	4,0	9.550	1.260
	5	120 (90-150)	0,035 (0,010-0,050)	5,0	5,0	7.640	1.010
	6	120 (90-150)	0,065 (0,040-0,080)	6,0	6,0	6.370	1.680
	8	120 (90-150)	0,090 (0,060-0,100)	8,0	8,0	4.770	1.680
	10	120 (90-150)	0,110 (0,080-0,120)	10,0	10,0	3.820	1.680
	12	120 (90-150)	0,130 (0,100-0,140)	12,0	12,0	3.180	1.680
	16	120 (90-150)	0,175 (0,140-0,180)	16,0	16,0	2.390	1.685
20	120 (90-150)	0,220 (0,180-0,240)	20,0	20,0	1.910	1.680	
Edelstahl Hochlegierter Stahl <i>High grade steel High alloyed steel</i> Acier noble Acier fortement allié Acciaio superiore Acciaio di alta lega	4	100 (60-120)	0,035 (0,010-0,050)	4,0	4,0	7.960	1.050
	5	100 (60-120)	0,035 (0,010-0,050)	5,0	5,0	6.370	840
	6	100 (60-120)	0,065 (0,040-0,080)	6,0	6,0	5.310	1.400
	8	100 (60-120)	0,090 (0,060-0,100)	8,0	8,0	3.980	1.400
	10	100 (60-120)	0,110 (0,080-0,120)	10,0	10,0	3.180	1.400
	12	100 (60-120)	0,130 (0,100-0,140)	12,0	12,0	2.650	1.400
	16	100 (60-120)	0,175 (0,140-0,180)	16,0	16,0	1.990	1.400
20	100 (60-120)	0,220 (0,180-0,240)	20,0	20,0	1.590	1.400	
Titanlegierungen <i>Titanium alloys</i> Alliage titane Leghe di titanio >300 HB (z.B., e.g., p.ex., p.e. TiAlV6)	4	40 (20-60)	0,010 (0,005-0,030)	4,0	4,0	3.180	140
	5	40 (20-60)	0,010 (0,005-0,150)	5,0	5,0	2.550	110
	6	40 (20-60)	0,030 (0,020-0,070)	6,0	6,0	2.120	235
	8	40 (20-60)	0,040 (0,020-0,100)	8,0	8,0	1.590	250
	10	40 (20-60)	0,055 (0,030-0,100)	10,0	10,0	1.270	280
	12	40 (20-60)	0,065 (0,040-0,100)	12,0	12,0	1.060	280
	16	40 (20-60)	0,090 (0,060-0,120)	16,0	16,0	800	280
20	40 (20-60)	0,100 (0,060-0,140)	20,0	20,0	640	255	
Nickelbasislegierungen aushärtbar <i>Nickel-base alloy hardenable</i> Alliages traitable à base de nickel Leghe a base di Nickel (z.B., e.g., p.ex., p.e. Inconell 718)	4	30 (20-60)	0,010 (0,005-0,030)	4,0	4,0	2.390	105
	5	30 (20-60)	0,010 (0,005-0,030)	5,0	5,0	1.910	85
	6	30 (20-60)	0,030 (0,010-0,070)	6,0	6,0	1.590	180
	8	30 (20-60)	0,040 (0,020-0,100)	8,0	8,0	1.190	185
	10	30 (20-60)	0,055 (0,030-0,100)	10,0	10,0	950	210
	12	30 (20-60)	0,065 (0,040-0,100)	12,0	12,0	800	210
	16	30 (20-60)	0,090 (0,060-0,120)	16,0	16,0	600	210
20	30 (20-60)	0,100 (0,060-0,140)	20,0	20,0	480	190	