

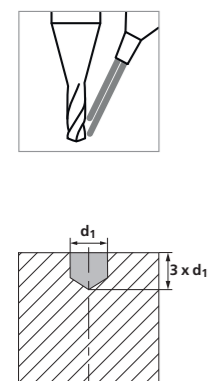
# Steel - 3 x d - revêtu / non revêtu

RECOMMANDATION D'UTILISATION

● Parfaitement recommandé | ● Recommandé | ○ Peu recommandé | ⊗ Non recommandé

P	N	S <sub>3</sub>
M	S <sub>1</sub>	H <sub>1</sub>
K	S <sub>2</sub>	H <sub>2</sub>

## PERÇAGE AVEC REFROIDISSEMENT EXTERNE | VUE D'ENSEMBLE DES DONNÉES DE COUPE



Groupe matériaux	Matériau	Mat. no.	DIN	AISI/ASTM/UNS	v <sub>c</sub> [m/min]		f [mm/tour]														
					∅d1 ≤ 0.4	∅d1 > 0.4	∅d <sub>1</sub>														
							0.1 mm	0.2 mm	0.3 mm	0.4 mm 1/64"	0.6 mm	0.8 mm 1/32"	1.0 mm - 1.2 mm								
				f	f	f	f	f	f	f											
P	Aciers non alliés Rm < 800 N/mm²	1.0301	C10	AISI 1010	5 - 40	40 - 60	0.002	0.005	0.010	0.015	0.030	0.040	0.060								
		1.0401	C15	AISI 1015																	
		1.1191	C45E/CK45	AISI 1045																	
		1.0044	S275JR	AISI 1020																	
		1.0715	11SMn30	AISI 1215																	
		1.5752	15NiCr13	ASTM 3415 / AISI 3310																	
	Aciers faiblement alliés Rm > 900 N/mm²	1.7131	16MnCr5	AISI 5115	5 - 25	25 - 50	0.002	0.003 - 0.005	0.008 - 0.010	0.012 - 0.015	0.020 - 0.025	0.035	0.050								
		1.3505	100Cr6	AISI 52100																	
		1.7225	42CrMo4	AISI 4140																	
		1.2842	90MnCrV8	AISI O2																	
		1.2379	X153CrMoV12	AISI D2																	
		1.2436	X210CrW12	AISI D4/D6																	
Aciers à outil fortement alliés Rm < 1200 N/mm²	1.3343	HS6-5-2C	AISI M2 / UNS T11302	5 - 20	20 - 35	0.0005	0.004	0.008	0.010	0.015	0.025	0.040									
	1.3355	HS18-0-1	AISI T1 / UNS T12001																		
	1.4016	X6Cr17	AISI 430 / UNS S43000										M								
	1.4105	X6CrMoS17	AISI 430F																		
	1.4034	X46Cr13	AISI 420C																		
	1.4112	X90CrMoV18	AISI 440B																		
1.4542	X5CrNiCuNb 16-4	AISI 630 / ASTM 17-4 PH																			
1.4545	X5CrNiCuNb 15-5	ASTM 15-5 PH																			
1.4301	X5CrNi 18-10	AISI 304																			
1.4435	X2CrNiMo 18-14-3	AISI 316L																			
1.4441	X2CrNiMo 18-15-3	AISI 316LM																			
1.4539	X1NiCrMoCu 25-20-5	AISI 904L																			
K	Fonte grise	0.6020	GG20	ASTM 30	5 - 40	50 - 100	0.002	0.005	0.010	0.015	0.020	0.035									0.050
		0.6030	GG30	ASTM 40B																	
		0.7040	GGG40	ASTM 60-40-18																	
		0.7060	GGG60	ASTM 80-60-03																	
				40 - 80																	
N	Alliages d'aluminium corroyés	3.2315	AlMgSi1	ASTM 6351	5 - 40	60 - 120	0.003	0.015	0.040	0.050	0.080	0.100	0.120								
		3.4365	AlZnMgCu1.5	ASTM 7075																	
	Fonte d'aluminium	3.2163	GD-AlSi9Cu3	ASTM A380	5 - 40	50 - 80	0.003	0.015	0.040	0.050	0.080	0.100	0.120								
		3.2381	GD-AlSi10Mg	UNS A03590																	
	Cuivre	2.0040	Cu-OF / CW008A	UNS C10100	5 - 40	60 - 100	0.004	0.010	0.030	0.040	0.060	0.080	0.100								
		2.0065	Cu-ETP / CW004A	UNS C11000																	
	Laiton sans plomb	2.0321	CuZn37 CW508L	UNS C27400																	
		2.0360	CuZn40 CW509L	UNS C28000																	
	Laiton, Bronze Rm < 400 N/mm²	2.0401	CuZn39Pb3 / CW614N	UNS C38500																	
		2.1020	CuSn6	UNS C51900																	
Bronze Rm < 600 N/mm²	2.0966	CuAl10Ni5Fe4	UNS C63000																		
	2.0960	CuAl9Mn2	UNS C63200																		
S <sub>1</sub>	Super alliages	2.4856		Inconel 625																	
		2.4668		Inconel 718																	
		2.4617	NiMo28	Hastelloy B-2																	
		2.4665	NiCr22Fe18Mo	Hastelloy X																	
S <sub>2</sub>	Titane pur	3.7035	Gr.2	ASTM B348 / F67																	
		3.7065	Gr.4	ASTM B348 / F68																	
S <sub>3</sub>	Alliages de titane	3.7165	TiAl6V4	ASTM B348 / F136																	
		9.9367	TiAl6Nb7	ASTM F1295																	
H <sub>1</sub>	Aciers trempés < 55 HRC	1.2510	100MnCrMoW4	AISI O1																	
		2.4964	CoCr20W15Ni	Haynes 25																	
H <sub>2</sub>	Aciers trempés ≥ 55 HRC	2.4964	CrCoMo28	ASTM F1537																	
		1.2379	X153CrMoV12	AISI D2																	