

$$\text{Formule pour } t.\text{min}^{-1} = \frac{V_c \text{ (m/min)} \times 1000}{d \text{ (}\varnothing \text{ mm)} \times 3,14}$$

Trous débouchants
Profondeur de perçage
Revêtu TiN
Tarauds à former
Lubrification centrale

Groupe matière		Exemples matière (selon DIN EN 10027 pour les chiffres en gras)	Résistance N/mm <sup>2</sup>
Aciers de construction		<b>1.0035</b> St 33, <b>1.0254</b> St 37.0, <b>1.0486</b> StE 285, <b>1.0345</b> H1, <b>1.0425</b> H2 <b>1.0050</b> St 50-2, <b>1.0070</b> St 70-2, <b>1.8937</b> WStE500	≤ 500 > 500-850
Aciers de décolletage		<b>1.0718</b> 9SMnPb28, <b>1.0723</b> 15 S20, <b>1.0736</b> 9 SMn36 <b>1.0727</b> 45 S20, <b>1.0728</b> 60 S20, <b>1.0757</b> 45SPb20	≤ 850 850-1000
Aciers d'amélioration non-alliés		<b>1.0402</b> C22 <b>1.1178</b> Ck30 <b>1.0503</b> C45 <b>1.1191</b> Ck45 <b>1.0601</b> C60 <b>1.1221</b> Ck60	≤ 700 700-850 850-1000
Aciers d'amélioration alliés		<b>1.5131</b> 50MnSi4, <b>1.7003</b> 38Cr2, <b>1.7030</b> 28Cr4 <b>1.5710</b> 36NiCr6, <b>1.0735</b> 41Cr4, <b>1.7225</b> 42CrMo5	850-1000 > 1000-1200
Aciers de cémentation non-alliés		<b>1.0301</b> C10, <b>1.1121</b> Ck10, <b>1.1140</b> Cm15	≤ 750
Aciers de cémentation alliés		<b>1.5919</b> 15CrNi6, <b>1.7012</b> 13Cr2, <b>1.7015</b> 15Cr13 <b>1.5752</b> 14NiCr14, <b>1.7131</b> 16MnCr5, <b>1.7264</b> 20CrMo5	850-1000 > 1000-1200
Aciers de nitruration		<b>1.8504</b> 34CrAl6, <b>1.8506</b> 34CrAlS5, <b>1.8509</b> 41CrAlMo7 <b>1.8507</b> 34CrAlMo5, <b>1.8519</b> 31CrMoV9, <b>1.8550</b> 34CrAlNi7	≥ 850-1000 > 1000-1200
Aciers à outils		<b>1.1750</b> C75W, <b>1.2067</b> 100Cr6, <b>1.2307</b> 29CrMoV <b>1.2080</b> X210Cr12, <b>1.2083</b> X42Cr13, <b>1.2419</b> 105WCr6, <b>1.2767</b> X45NiCrMo4	≤ 850 > 850-1000
Aciers rapide		<b>1.3243</b> S 6-5-2-5, <b>1.3343</b> S 6-5-2, <b>1.3344</b> S 6-5-3	≥ 650-1000
Aciers inoxydables	sulphured austenitic martensitic	<b>1.4005</b> X12CrS13, <b>1.4104</b> X2CrMoS17, <b>1.4105</b> X4CrMoS18, <b>1.4305</b> <b>1.4301</b> X5CrNi1810, <b>1.4541</b> X6CrNiTi1810, <b>1.4571</b> X6CrNiMoTi 1712 2 <b>1.4057</b> X20CrNi17 2, <b>1.4122</b> X35CrMo17, <b>1.4521</b> X2CrMoTi18 2	≤ 850 ≤ 850 ≤ 850
Fontes	≤ 240 HB < 300 HB	GG 10-GG 20 GG 25-GG 45	
Fontes graphite et malléables		GTW 35, GTS 55, GGG 50 GTW 65, GTS 70, GGG 70	
Titane et alliages de titane		<b>3.7024</b> Ti99,5, <b>3.7114</b> TiAl5Su2,5, <b>3.7124</b> TiCu2 <b>3.7154</b> TiAl6Zr5, <b>3.7164</b> TiAl6V4, <b>3.7184</b> TiAl4Mo45Su2, - TiAl8Mo1V1	≤ 850 > 850-1200
Aluminium et alliages d'aluminium		<b>3.0255</b> Al99,5, <b>3.2315</b> AlMgSi1, <b>3.3515</b> AlMg1	≤ 400
Alliages malléables		<b>3.0615</b> AlMgSiPb, <b>3.1325</b> AlCuMg1, <b>3.3245</b> AlMg3Si, <b>3.4365</b> AlZnMgCu1,5	≤ 450
Alliages d'aluminium pour injection	≤ 10 % Si < 10 % Si	<b>3.2131</b> G-AlSi5Cu1, <b>3.2153</b> G-AlSi7Cu3, <b>3.2573</b> G-AlSi9 <b>3.2581</b> G-AlSi12, <b>3.2583</b> G-AlSi12Cu, - G-AlSi12CuNiMg	≤ 600 ≤ 600
Alliages de magnésium		MgMn2, G-MgAl18Zn1, G-MgAl6Zn3	≤ 450
Cuivre, faiblement allié		<b>2.0070</b> SE-Cu, <b>2.1020</b> CuSn6, <b>2.1096</b> G-CuSn5ZnPb	≤ 400
Laiton	copeaux courts copeaux longs	<b>2.0380</b> CuZn39Pb2, <b>2.0401</b> CuZn39Pb3, <b>2.0410</b> CuZn43Pb2 <b>2.0250</b> CuZn20, <b>2.0280</b> CuZn33, <b>2.0332</b> CuZn37Pb0,5	≤ 600 ≤ 600
Bronze à copeaux courts		<b>2.1090</b> CuSn7ZnPb, <b>2.1170</b> CuPb5Sn5, <b>2.1176</b> CuPb10Sn <b>2.0790</b> CuNi18Zn19Pb	≤ 600 > 600-850
Bronze à copeaux longs		<b>2.0916</b> CuAl5, <b>2.0960</b> CuAl9Mn, <b>2.1050</b> CuSn10 <b>2.0980</b> CuAl11Ni, 2.1247 CuBe2	≤ 850 850-1000
Thermodurcissables et plastiques	a b	Bakelit, Resopal, Pertinax, Moltopren Plexiglas, Hostalen, Novodur, Makralon	

	<2xD	<2xD	≥2xD	≥2xD	≥2xD	≥2xD	≥2xD	≥2xD	>2xD	>2xD	>2xD	>2xD	>2xD
		TiN		TiN				TiN		TiN		TiN	
					F								F
						X							
	1	2	3	4	5	6	7	8	9	10	11	12	13
	m/min	m/min	m/min	m/min	m/min	m/min	m/min	m/min	m/min	m/min	m/min	m/min	m/min
	18 15	25 25	18 15	25 25	30 30	18 15	18 15		18 15	25 25			30 30
	18 15	25 25	18 15	25 25	30 30	18 15	18 15		18 15	25 25	8 6		30 30
	8 8 6	12 10 8	8 8 8	15 15 12	20 20 18	8 8 6	8 8 6		8 8 6	12 10 8			14 12 12
	8 6	12 10	15		12 12	8 6	8 6		8 6	12 10			
	15	25		25	30				20	25	8		30
	12 8		8	10		15 12	15 12		15 12	20 20			
	8 8				30 30				8 8	12 10		10 10	12 12
	6 4		6 6		12 12	6 4					6 4	8 8	
	4					4					4		
	8 6 6		8 6 6		12 12 12	8 6 6			6 6 6	8 8 6		10 8 8	
	15 12		12	40 30		20 15	20 15	40 30		30 20			
	20 15	40 30						20 15	20 15				
	20		20	25	40	20	25						40
	18		16							25			
	16 15	40 25		40 25		20			20 12				
			6		8	12			15				40
	25 20					25 20	25 20		25 20		4 4		40
	12 10		4 4			4 4			12 12	15 15			
			12 12			12 12			15 15	20 20			
	8 8						8	12					