




















## TTD2030230





















**Type:** Short drill with reinforced shank

d1	d2	l1	l2
2,30	3,00	45	9,80

Coolant holes	Cut	Point angle	Spiral angle	Cutting edges Z
No	Right	140°	30°	2

Coated	Coating type	Material	Material type	Norm
Yes	TiAlN	MD	SMG SP	TUSA

Machinable Materials				
Cod.	Material type	Machinability	Cutting speed Vc	Advancement per revolution fn
		<b>Recommended</b> Part. <b>recommended</b> Not <b>recommended</b>	(m/min)	(mm/rev)
<b>P01</b>	Unalloyed steels up to 800 N/mm2		80 : 120	0,240
<b>P02</b>	Low alloy steels from 800 N/mm2 to 1100 N/mm2		60 : 100	0,240
<b>P03</b>	Highly alloyed steels from 1100 N/mm2 to 1400 N/mm2		40 : 80	0,195
<b>M01</b>	Ferritic stainless steels		20 : 40	0,070
<b>M02</b>	Martensitic stainless steels		25 : 50	0,095
<b>M03</b>	Martensitic stainless steels - PH		20 : 30	0,070
<b>M04</b>	Austenitic stainless steels		20 : 30	0,070
<b>K01</b>	Gray/lamellar cast iron		80 : 120	0,350
<b>K02</b>	Nodular/nodular cast iron		80 : 120	0,350
<b>N01</b>	Drawn aluminum alloys		150 : 200	0,145
<b>N02</b>	Die-cast aluminum alloys		150 : 200	0,130
<b>N03</b>	Copper		80 : 120	0,095
<b>N04</b>	Brass - Bronze		60 : 100	0,120
<b>N05</b>	Lead-free brass		100 : 140	0,095
<b>S01</b>	Super alloys (Inconel - Hastelloy - Nimonic)		20 : 40	0,011
<b>S02</b>	Pure titanium (Grade 2 - Grade 4)		20 : 40	0,065
<b>S03</b>	Titanium alloys (Grade 5)		15 : 30	0,075
<b>S04</b>	Cobalt Chrome Alloys		20 : 40	0,030
<b>H01</b>	Hardened steels up to 55 HRC		20 : 40	0,015

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<b>H02</b>	Hardened steels from 55 HRC		15 : 30	0,011



SWISS HIGH PRECISION TOOLS

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