






















## TTD2040160

**Type:** Short high-performance twist drill with coolant holes

d1	d2	l1	l2
1,60	3,00	44	10,00

Coolant holes	Cut	Point angle	Spiral angle	Cutting edges Z
Yes	Right	140°	25°	2

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

Machinable Materials				
Cod.	Material type	Machinability	Cutting speed Vc	Advancement per revolution fn
		<b>Recommended</b> Part. recommended <b>Not</b> recommended	(m/min)	(mm/rev)
<b>P01</b>	Unalloyed steels up to 800 N/mm2		45 : 75	0.19
<b>P02</b>	Low alloy steels from 800 N/mm2 to 1100 N/mm2		40 : 70	0.18
<b>P03</b>	Highly alloyed steels from 1100 N/mm2 to 1400 N/mm2		35 : 70	0.15
<b>M01</b>	Ferritic stainless steels		30 : 50	0.06
<b>M02</b>	Martensitic stainless steels		30 : 50	0.09
<b>M03</b>	Martensitic stainless steels - PH		30 : 50	0.04
<b>M04</b>	Austenitic stainless steels		20 : 40	0.04
<b>K01</b>	Gray/lamellar cast iron		20 : 60	0.29
<b>K02</b>	Nodular/nodular cast iron		15 : 40	0.29
<b>N01</b>	Drawn aluminum alloys		100 : 300	0.1
<b>N02</b>	Die-cast aluminum alloys		80 : 250	0.12
<b>N03</b>	Copper		60 : 120	0.1
<b>N04</b>	Brass - Bronze		80 : 140	0.12
<b>N05</b>	Lead-free brass		80 : 140	0.14
<b>S01</b>	Super alloys (Inconel - Hastelloy - Nimonic)		15 : 25	0.019
<b>S02</b>	Pure titanium (Grade 2 - Grade 4)		15 : 25	0.075
<b>S03</b>	Titanium alloys (Grade 5)		15 : 30	0.075
<b>S04</b>	Cobalt Chrome Alloys		15 : 30	0.022
<b>H01</b>	Hardened steels up to 55 HRC		20 : 40	0.017
<b>H02</b>	Hardened steels from 55 HRC		-	-