

# STANDARD CUTTING CONDITIONS

## Drilling (VCP, VDP)

ISO	Workpiece material	Hardness	Cutting speed Vc (sfm)	Feed: f (ipr)				
				VDP328	VDP412	VDP513	VDP646	VCP
<b>P</b>	Low carbon steels 1045, 1055, etc.	- 300 HB	131 - 262	0.0016 - 0.0031	0.0020 - 0.0039	0.0020 - 0.0039	0.0024 - 0.0047	0.0024 - 0.0047
	High carbon steels 4140, etc.	- 300 HB	98 - 164	0.0016 - 0.0031	0.0020 - 0.0039	0.0020 - 0.0039	0.0024 - 0.0047	0.0024 - 0.0047
	Prehardened steel PX5, NAK80, etc.	30 - 40 HRC	66 - 98	0.0016 - 0.0031	0.0020 - 0.0039	0.0020 - 0.0039	0.0024 - 0.0047	0.0024 - 0.0047
<b>M</b>	Stainless steels 304, 316, etc.	- 200 HB	49 - 82	0.0016 - 0.0031	0.0020 - 0.0039	0.0020 - 0.0039	0.0024 - 0.0047	0.0024 - 0.0047
<b>K</b>	Gray cast irons 250, 300, etc.	150 - 250 HB	197 - 328	0.0020 - 0.0035	0.0028 - 0.0047	0.0028 - 0.0047	0.0047 - 0.0071	0.0047 - 0.0071
	Ductile cast irons 400-15S, etc.	150 - 250 HB	197 - 328	0.0016 - 0.0031	0.0020 - 0.0039	0.0020 - 0.0039	0.0039 - 0.0059	0.0039 - 0.0059
<b>S</b>	Titanium alloys Ti-6Al-4V, etc.	-	49 - 82	0.0016 - 0.0028	0.0016 - 0.0028	0.0016 - 0.0028	0.0016 - 0.0028	0.0016 - 0.0028
	Heat-resistant alloys Inconel 718, etc.	-	33 - 66	0.0012 - 0.0024	0.0012 - 0.0024	0.0012 - 0.0024	0.0012 - 0.0024	0.0012 - 0.0024
<b>H</b>	Hardened steel	H13, etc.	40 - 50 HRC	49 - 82	0.0016 - 0.0028	0.0016 - 0.0028	0.0016 - 0.0028	0.0016 - 0.0028
		D2, etc.	50 - 60 HRC	33 - 66	0.0012 - 0.0024	0.0012 - 0.0024	0.0012 - 0.0024	0.0012 - 0.0024

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