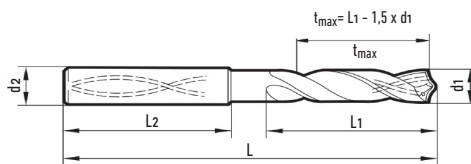


Tvrdokovový vrták 166530

s vnitřním chlazením / 5xD

- úhel čela 140°
- tolerance průměru m7
- stopka válcová



TGS
NÁSTROJE - STROJE - TECHNOLOGICKÉ SLUŽBY



Popis	Průměr (mm)	L (mm)	L ₁ (mm)	L ₂ (mm)	Stopka (mm)
V.03000411.S5	3,00	66,0	28,0	36,0	6,000
V.03100411.S5	3,10	66,0	28,0	36,0	6,000
V.03170411.S5	3,17	66,0	28,0	36,0	6,000
V.03200411.S5	3,20	66,0	28,0	36,0	6,000
V.03250411.S5	3,25	66,0	28,0	36,0	6,000
V.03300411.S5	3,30	66,0	28,0	36,0	6,000
V.03400411.S5	3,40	66,0	28,0	36,0	6,000
V.03500411.S5	3,50	66,0	28,0	36,0	6,000
V.03570411.S5	3,57	66,0	28,0	36,0	6,000
V.03600411.S5	3,60	66,0	28,0	36,0	6,000
V.03700411.S5	3,70	66,0	28,0	36,0	6,000
V.03800411.S5	3,80	74,0	36,0	36,0	6,000
V.03900411.S5	3,90	74,0	36,0	36,0	6,000
V.03970411.S5	3,97	74,0	36,0	36,0	6,000
V.04000411.S5	4,00	74,0	36,0	36,0	6,000
V.04100411.S5	4,10	74,0	36,0	36,0	6,000
V.04200411.S5	4,20	74,0	36,0	36,0	6,000
V.04300411.S5	4,30	74,0	36,0	36,0	6,000
V.04370411.S5	4,37	74,0	36,0	36,0	6,000
V.04400411.S5	4,40	74,0	36,0	36,0	6,000
V.04500411.S5	4,50	74,0	36,0	36,0	6,000
V.04600411.S5	4,60	74,0	36,0	36,0	6,000
V.04650411.S5	4,65	74,0	36,0	36,0	6,000
V.04700411.S5	4,70	74,0	36,0	36,0	6,000
V.04760411.S5	4,76	82,0	44,0	36,0	6,000
V.04800411.S5	4,80	82,0	44,0	36,0	6,000
V.04900411.S5	4,90	82,0	44,0	36,0	6,000
V.05000411.S5	5,00	82,0	44,0	36,0	6,000
V.05100411.S5	5,10	82,0	44,0	36,0	6,000
V.05160411.S5	5,16	82,0	44,0	36,0	6,000
V.05200411.S5	5,20	82,0	44,0	36,0	6,000
V.05300411.S5	5,30	82,0	44,0	36,0	6,000
V.05400411.S5	5,40	82,0	44,0	36,0	6,000
V.05500411.S5	5,50	82,0	44,0	36,0	6,000
V.05550411.S5	5,55	82,0	44,0	36,0	6,000
V.05560411.S5	5,56	82,0	44,0	36,0	6,000
V.05600411.S5	5,60	82,0	44,0	36,0	6,000
V.05700411.S5	5,70	82,0	44,0	36,0	6,000
V.05800411.S5	5,80	82,0	44,0	36,0	6,000
V.05900411.S5	5,90	82,0	44,0	36,0	6,000
V.05950411.S5	5,95	82,0	44,0	36,0	6,000
V.06000411.S5	6,00	82,0	44,0	36,0	6,000
V.06100411.S5	6,10	91,0	53,0	36,0	8,000
V.06200411.S5	6,20	91,0	53,0	36,0	8,000
V.06300411.S5	6,30	91,0	53,0	36,0	8,000
V.06350411.S5	6,35	91,0	53,0	36,0	8,000
V.06400411.S5	6,40	91,0	53,0	36,0	8,000
V.06500411.S5	6,50	91,0	53,0	36,0	8,000
V.06600411.S5	6,60	91,0	53,0	36,0	8,000
V.06700411.S5	6,70	91,0	53,0	36,0	8,000
V.06750411.S5	6,75	91,0	53,0	36,0	8,000
V.06800411.S5	6,80	91,0	53,0	36,0	8,000

Popis	Průměr (mm)	L (mm)	L ₁ (mm)	L ₂ (mm)	Stopka (mm)
V.06900411.S5	6,90	91,0	53,0	36,0	8,000
V.07000411.S5	7,00	91,0	53,0	36,0	8,000
V.07100411.S5	7,10	91,0	53,0	36,0	8,000
V.07140411.S5	7,14	91,0	53,0	36,0	8,000
V.07200411.S5	7,20	91,0	53,0	36,0	8,000
V.07300411.S5	7,30	91,0	53,0	36,0	8,000
V.07400411.S5	7,40	91,0	53,0	36,0	8,000
V.07500411.S5	7,50	91,0	53,0	36,0	8,000
V.07540411.S5	7,54	91,0	53,0	36,0	8,000
V.07600411.S5	7,60	91,0	53,0	36,0	8,000
V.07700411.S5	7,70	91,0	53,0	36,0	8,000
V.07800411.S5	7,80	91,0	53,0	36,0	8,000
V.07900411.S5	7,90	91,0	53,0	36,0	8,000
V.07940411.S5	7,94	91,0	53,0	36,0	8,000
V.08000411.S5	8,00	91,0	53,0	36,0	8,000
V.08100411.S5	8,10	103,0	61,0	40,0	10,000
V.08200411.S5	8,20	103,0	61,0	40,0	10,000
V.08300411.S5	8,30	103,0	61,0	40,0	10,000
V.08330411.S5	8,33	103,0	61,0	40,0	10,000
V.08400411.S5	8,40	103,0	61,0	40,0	10,000
V.08500411.S5	8,50	103,0	61,0	40,0	10,000
V.08600411.S5	8,60	103,0	61,0	40,0	10,000
V.08700411.S5	8,70	103,0	61,0	40,0	10,000
V.08730411.S5	8,73	103,0	61,0	40,0	10,000
V.08800411.S5	8,80	103,0	61,0	40,0	10,000
V.08900411.S5	8,90	103,0	61,0	40,0	10,000
V.09000411.S5	9,00	103,0	61,0	40,0	10,000
V.09100411.S5	9,10	103,0	61,0	40,0	10,000
V.09130411.S5	9,13	103,0	61,0	40,0	10,000
V.09200411.S5	9,20	103,0	61,0	40,0	10,000
V.09250411.S5	9,25	103,0	61,0	40,0	10,000
V.09300411.S5	9,30	103,0	61,0	40,0	10,000
V.09400411.S5	9,40	103,0	61,0	40,0	10,000
V.09500411.S5	9,50	103,0	61,0	40,0	10,000
V.09520411.S5	9,52	103,0	61,0	40,0	10,000
V.09600411.S5	9,60	103,0	61,0	40,0	10,000
V.09700411.S5	9,70	103,0	61,0	40,0	10,000
V.09800411.S5	9,80	103,0	61,0	40,0	10,000
V.09900411.S5	9,90	103,0	61,0	40,0	10,000
V.09920411.S5	9,92	103,0	61,0	40,0	10,000
V.10000411.S5	10,00	103,0	61,0	40,0	10,000
V.10100411.S5	10,10	118,0	71,0	45,0	12,000
V.10200411.S5	10,20	118,0	71,0	45,0	12,000
V.10300411.S5	10,30	118,0	71,0	45,0	12,000
V.10320411.S5	10,32	118,0	71,0	45,0	12,000
V.10400411.S5	10,40	118,0	71,0	45,0	12,000
V.10500411.S5	10,50	118,0	71,0	45,0	12,000
V.10600411.S5	10,60	118,0	71,0	45,0	12,000
V.10700411.S5	10,70	118,0	71,0	45,0	12,000
V.10800411.S5	10,80	118,0	71,0	45,0	12,000
V.10900411.S5	10,90	102,0	55,0	45,0	12,000
V.11000411.S5	11,00	102,0	55,0	45,0	12,000

Popis	Průměr (mm)	L (mm)	L ₁ (mm)	L ₂ (mm)	Stopka (mm)
V.11100411.S5	11,10	118,0	71,0	45,0	12,000
V.11110411.S5	11,11	118,0	71,0	45,0	12,000
V.11200411.S5	11,20	118,0	71,0	45,0	12,000
V.11300411.S5	11,30	118,0	71,0	45,0	12,000
V.11400411.S5	11,40	118,0	71,0	45,0	12,000
V.11500411.S5	11,50	118,0	71,0	45,0	12,000
V.11600411.S5	11,60	118,0	71,0	45,0	12,000
V.11700411.S5	11,70	118,0	71,0	45,0	12,000
V.11800411.S5	11,80	118,0	71,0	45,0	12,000
V.11900411.S5	11,90	118,0	71,0	45,0	12,000
V.11910411.S5	11,91	118,0	71,0	45,0	12,000
V.12000411.S5	12,00	118,0	71,0	45,0	12,000
V.12100411.S5	12,10	124,0	77,0	45,0	14,000
V.12200411.S5	12,20	124,0	77,0	45,0	14,000
V.12300411.S5	12,30	124,0	77,0	45,0	14,000
V.12400411.S5	12,40	124,0	77,0	45,0	14,000
V.12500411.S5	12,50	124,0	77,0	45,0	14,000
V.12560411.S5	12,60	124,0	77,0	45,0	14,000
V.12700411.S5	12,70	124,0	77,0	45,0	14,000
V.12800411.S5	12,80	124,0	77,0	45,0	14,000
V.13000411.S5	13,00	124,0	77,0	45,0	14,000
V.13100411.S5	13,10	124,0	77,0	45,0	14,000
V.13300411.S5	13,30	124,0	77,0	45,0	14,000
V.13500411.S5	13,50	124,0	77,0	45,0	14,000
V.13700411.S5	13,70	124,0	77,0	45,0	14,000
V.13800411.S5	13,80	124,0	77,0	45,0	14,000
V.14000411.S5	14,00	124,0	77,0	45,0	14,000
V.14100411.S5	14,10	133,0	83,0	48,0	16,000
V.14200411.S5	14,20	133,0	83,0	48,0	16,000
V.14290411.S5	14,29	133,0	83,0	48,0	16,000
V.14500411.S5	14,50	133,0	83,0	48,0	16,000
V.14600411.S5	14,60	133,0	83,0	48,0	16,000
V.14700411.S5	14,70	133,0	83,0	48,0	16,000
V.14800411.S5	14,80	133,0	83,0	48,0	16,000
V.15000411.S5	15,00	133,0	83,0	48,0	16,000
V.15100411.S5	15,10	133,0	83,0	48,0	16,000
V.15200411.S5	15,20	133,0	83,0	48,0	16,000
V.15300411.S5	15,30	133,0	83,0	48,0	16,000
V.15500410.S3	15,50	133,0	83,0	48,0	16,000
V.15700411.S5	15,70	133,0	83,0	48,0	16,000
V.15800411.S5	15,80	133,0	83,0	48,0	16,000
V.16000411.S5	16,00	133,0	83,0	48,0	16,000
V.16500411.S5	16,50	143,0	93,0	48,0	18,000
V.16900411.S5	16,90	143,0	93,0	48,0	18,000
V.17000411.S5	17,00	143,0	93,0	48,0	18,000
V.17500411.S5	17,50	143,0	93,0	48,0	18,000
V.18000411.S5	18,00	143,0	93,0	48,0	18,000
V.18500411.S5	18,50	153,0	101,0	50,0	20,000
V.18900411.S5	18,90	153,0	101,0	50,0	20,000
V.19000411.S5	19,00	153,0	101,0	50,0	20,000
V.19050411.S5	19,05	153,0	101,0	50,0	20,000
V.19500411.S5	19,50	153,0	101,0	50,0	20,000
V.20000411.S5	20,00	153,0	101,0	50,0	20,000

Tvrdokovový vrták 166530

s vnitřním / 5xD

Řezné podmínky

	Typ materiálu	Pevnost v tahu (N/mm ²) Tvrlost	v _c (m/min.)	Posuv (mm/ot.)			
				3,0 - 7,9	8,0 - 15,9	16,0 - 20,0	
P	Konstrukční ocel	≤500	145	0,125 - 0,160 - 0,200	0,250 - 0,315	0,400 - 0,500	
		≤1000	120	0,100 - 0,125 - 0,160	0,200 - 0,250	0,315 - 0,400	
	Automatová ocel	≤850	170	0,160 - 0,200 - 0,250	0,315 - 0,400	0,500 - 0,630	
		≤1000	145	0,160 - 0,200 - 0,250	0,315 - 0,400	0,500 - 0,630	
	Nelegovaná kalená ocel	≤700	130	0,160 - 0,200 - 0,250	0,315 - 0,400	0,500 - 0,630	
		≤850	125	0,125 - 0,160 - 0,200	0,250 - 0,315	0,400 - 0,500	
		≤1000	120	0,125 - 0,160 - 0,200	0,250 - 0,315	0,400 - 0,500	
	Legovaná kalená ocel	≤1000	120	0,125 - 0,160 - 0,200	0,250 - 0,315	0,400 - 0,500	
		≤1400	105	0,125 - 0,160 - 0,200	0,250 - 0,315	0,400 - 0,500	
	Nelegovaná cementovaná ocel	≤850	145	0,160 - 0,200 - 0,250	0,315 - 0,400	0,500 - 0,630	
		≤1000	120	0,125 - 0,160 - 0,200	0,250 - 0,315	0,400 - 0,500	
	Legovaná cementovaná ocel	≤1400	85	0,080 - 0,100 - 0,125	0,160 - 0,200	0,250 - 0,315	
		≤1000	105	0,125 - 0,160 - 0,200	0,250 - 0,315	0,400 - 0,500	
	Nitridovaná ocel	≤1400	100	0,080 - 0,100 - 0,125	0,160 - 0,200	0,250 - 0,315	
≤850		70	0,100 - 0,125 - 0,160	0,200 - 0,250	0,315 - 0,400		
Nástrojová ocel	≤1400	55	0,080 - 0,100 - 0,125	0,160 - 0,200	0,250 - 0,315		
	≤900	60	0,080 - 0,100 - 0,125	0,160 - 0,200	0,250 - 0,315		
M	Nerezová ocel	≤1100	55	0,080 - 0,100 - 0,125	0,160 - 0,200	0,250 - 0,315	
		≤1500	45	0,080 - 0,100 - 0,125	0,160 - 0,200	0,250 - 0,315	
	Martenzitická	≤1500	45	0,080 - 0,100 - 0,125	0,160 - 0,200	0,250 - 0,315	
H	Kalená ocel	≤48 HRC	55	0,050 - 0,063 - 0,080	0,100 - 0,125	0,160 - 0,200	
		≤66 HRC	35	0,040 - 0,050 - 0,063	0,080 - 0,100	0,125 - 0,160	
K	Litina	≤240 HB	195	0,160 - 0,200 - 0,250	0,315 - 0,400	0,500 - 0,630	
		≤350 HB	160	0,160 - 0,200 - 0,250	0,315 - 0,400	0,500 - 0,630	
	Temperovaná litina	≤240 HB	140	0,160 - 0,200 - 0,250	0,315 - 0,400	0,500 - 0,630	
		≤350 HB	130	0,160 - 0,200 - 0,250	0,315 - 0,400	0,500 - 0,630	
	Tvrzená litina	≤350 HB	40	0,050 - 0,063 - 0,080	0,100 - 0,125	0,160 - 0,200	
S	Titan a slitiny Titanu	≤850	45	0,063 - 0,080 - 0,100	0,125 - 0,160	0,200 - 0,250	
		≤1400	40	0,050 - 0,063 - 0,080	0,100 - 0,125	0,160 - 0,200	
N	Hliník a slitiny hliníku	≤400	310	0,160 - 0,200 - 0,315	0,315 - 0,500	0,500 - 0,630	
		≤650	310	0,160 - 0,200 - 0,315	0,315 - 0,500	0,500 - 0,630	
	Slitiny hliníku ≤ 10 % Si	≤600	260	0,160 - 0,200 - 0,315	0,315 - 0,500	0,500 - 0,630	
		> 10 % Si	≤600	220	0,160 - 0,200 - 0,315	0,315 - 0,500	0,500 - 0,630
	Hořčík a slitiny hořčíku	≤400	280	0,160 - 0,200 - 0,250	0,315 - 0,400	0,500 - 0,630	
	Měď	≤500	125	0,125 - 0,160 - 0,200	0,250 - 0,315	0,400 - 0,500	
		Mosaz	≤600	325	0,160 - 0,200 - 0,250	0,315 - 0,400	0,500 - 0,630
			≤600	220	0,125 - 0,160 - 0,200	0,250 - 0,315	0,400 - 0,500
		Bronz	≤600	125	0,125 - 0,160 - 0,200	0,250 - 0,315	0,400 - 0,500
			≤850	105	0,100 - 0,125 - 0,160	0,200 - 0,250	0,315 - 0,400
			≤850	90	0,100 - 0,125 - 0,160	0,200 - 0,250	0,315 - 0,400
≤1000		80	0,100 - 0,125 - 0,160	0,200 - 0,250	0,315 - 0,400		