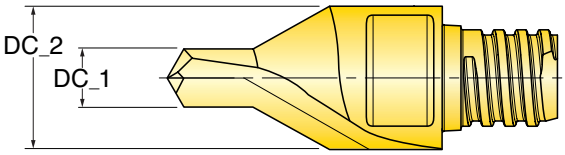
CHIPSURFER™ OPERATING GUIDELINES: 45Z • CENTER DRILL



Calculate speed and feed based on DC_1.

*Feed / Rev is based on Two-Effective (do not double).

Materials				Vc Cutting Speed SFM	DC Cutting Diameter (inch)	f* Feed/Rev (inch)
ISO	Mat'l Group #VDI 3323	Type	Examples			
P	1 - 5	Non-alloy Steel	1018, A36, 1045, A572, 1070	170-450	0.118-0.185	.002-.006
					0.186-0.292	.003-.007
	6 - 9	Low-alloy Steel	4140, 4340, P20, 8620, 300M	140-350	0.118-0.185	.002-.004
					0.186-0.292	.002-.005
	10 - 11	High-alloy Steel	H13, A2, D2, M2, T1	130-300	0.118-0.185	.002-.004
					0.186-0.292	.002-.005
M	12 - 14	Stainless Steel	410, 416, 440, 303, 304, 316, 15-5, 17-4	100-230	0.118-0.185	.002-.004
					0.186-0.292	.002-.005
K	15 - 18	Iron	CLS. 20, 30, 45, 60-40-18, 100-70-03	265-550	0.118-0.185	.005-.010
					0.186-0.292	.007-.013
N	21 - 30	Non Ferrous & Non Metallic	7075, 6061, Duroplastics	300-725	0.118-0.185	.003-.010
					0.186-0.292	.007-.014
S	31 - 37	High-Temp, Ti	Inconel, Hastelloy, 6Al-4V	70-165	0.118-0.185	.001-.003
					0.186-0.292	.002-.004
H	38-39	Hardened Steel >48	A2, O1, D2	50-125	0.118-0.185	.001-.002
					0.186-0.292	.001-.003

Note: Feed and speed recommendations are starting operating parameters. They are only guidelines from which further optimization should take place. Operating parameters are influenced by many machining variables. These variables may cause for reductions in feeds and speed or dramatic increases. Additionally, DOC and WOC may need to be revised to optimize the tools performance.