



## 2 Flute - Double Margin Carbide Drill

- 135° Point Geometry
- Coolant Holes
- Double Margin
- Varianta® Supral Coating
- Available: 12xD - 50xD

### Available Upon Request:

- Firm Hold Shank
- Additional PVD Coatings



**P M K S**

P1	Low-Carbon Steel - 1000 Series (>25 HRc)	K1	Gray Cast Iron
P2	Low-Carbon Steel - 1000 Series (<25 HRc)	K2	Ductile Iron (<28 HRc)
P3	Alloy Tool Steels - 1300, 2000, 3000 (≤35 HRc)	K3	Ductile Iron (<38 HRc)
P4	Alloy Tool Steels - 1300, 2000, 3000 (36-48 HRc)	S1	Iron-Based, Heat-Resistant Alloys - Incoloy 800-802, A-286, N-155
P5	Ferritic, Martensitic & PH Stainless Steels - 400's, PH Types (≤35 HRc)	S2	Nickel-Based, Cobalt-Based, Heat-Resistant Alloys - Haynes 188, Haynes 21, Hastelloy, Waspaloy, Inconel 625/718 (≤48HRc)
P6	Ferritic, Martensitic & PH Stainless Steels - 400's, PH Types (36-48 HRc)	S4	Titanium Alloys - Commercially Pure, 6Al-AV, ASTM 1/2/3, Ti-6Al-2SN-4Zr-2Mo (≤48 HRc)
M1	Austenitic Stainless Steel - Inox, 200 Series, 300 Series		
M2	Austenitic Stainless Steel & Cast Stainless Steel - 310, 314, 316 (<25 HRc)		
M3	Duplex Steel (Austenitic & Ferritic) - 323, 329, F55, 2205		

### IMPERIAL

	SFM (Vc) Surface Feet Per Minute					IPR = Inches Per Revolution				
	12xD	16xD	20xD	25xD	30xD	.118-.197Ø	.197-.315Ø	.315-.472Ø	.473-.630Ø	.473-.787Ø
P1	295.3	262.5	246.1	229.7	213.3	.003	.005	.007	.010	.012
P3	262.5	246.1	229.7	213.3	196.9	.003	.005	.007	.010	.012
M2	213.3	180.5	164.1	164.1	147.6	.003	.004	.005	.007	.009
K1	344.5	328.1	311.7	278.9	262.5	.007	.009	.013	.015	.018
S4	148.8	141.6	134.4	127.2	117.6	.005	.007	.011	.013	.016

	SFM (Vc) Surface Feet Per Minute		IPR = Inches Per Revolution						
	40xD	50xD	.118-.158Ø	.158-.197Ø	.197-.236Ø	.237-.276Ø	.276-.296Ø	.296-.315Ø	
P1	246	246	.002	.003	.003	.004	.004	.005	
P2	180.4	180.4	.002	.002	.003	.003	.004	.004	
P3	180.4	180.4	.002	.002	.003	.003	.004	.004	
P4	147.6	147.6	.001	.001	.002	.002	.003	.003	
P5	114.8	114.8	.001	.001	.002	.002	.003	.003	
P6	114.8	114.8	.001	.001	.002	.002	.003	.003	
M1	114.8	114.8	.001	.001	.002	.002	.003	.003	
M2	114.8	114.8	.001	.001	.002	.002	.003	.003	
M3	98.4	98.4	.001	.001	.002	.002	.002	.003	
K1	229.6	229.6	.003	.004	.005	.006	.007	.008	
K2	180.4	180.4	.002	.002	.003	.003	.004	.004	
K3	164	164	.001	.002	.002	.003	.003	.004	
S1	114.8	114.8	.001	.001	.002	.002	.003	.003	
S2	98.4	98.4	.001	.001	.002	.002	.002	.003	
S4	114.8	114.8	.001	.001	.002	.002	.002	.003	

### METRIC

	Vc m/min (Cutting speed)					F[mm/u] Feed Per Revolution				
	12xD	16xD	20xD	25xD	30xD	3.00-4.99Ø	5.00-7.99Ø	8.00-11.99Ø	12.00-15.99Ø	16.00-20.00Ø
P1	85	80	75	70	65	.100	.150	.200	.260	.330
P3	80	75	70	65	60	.100	.150	.200	.260	.330
M2	65	55	50	50	45	.080	.120	.150	.200	.250
K1	105	100	95	85	80	.200	.250	.350	.400	.460
S4	45	43	41	39	36	.130	.180	.280	.330	.410

	Vc m/min (Cutting speed)		F[mm/u] Feed Per Revolution						
	40xD	50xD	3.00-3.99Ø	4.00-4.99Ø	5.00-5.99Ø	6.00-6.99Ø	7.00-7.49Ø	7.50-8.00Ø	
P1	75	75	.048	.063	.078	.093	.103	.117	
P2	55	55	.043	.058	.068	.083	.093	.103	
P3	55	55	.043	.058	.068	.083	.093	.103	
P4	45	45	.023	.033	.043	.053	.065	.071	
P5	35	35	.023	.033	.043	.055	.063	.071	
P6	35	35	.023	.033	.043	.055	.063	.071	
M1	35	35	.023	.033	.043	.055	.063	.071	
M2	35	35	.023	.033	.043	.055	.063	.071	
M3	30	30	.020	.030	.040	.051	.060	.066	
K1	70	70	.071	.098	.121	.15	.178	.198	
K2	55	55	.040	.055	.065	.078	.090	.100	
K3	50	50	.035	.050	.060	.075	.085	.095	
S1	35	35	.023	.033	.043	.055	.063	.071	
S2	30	30	.020	.030	.040	.051	.060	.066	
S4	35	35	.021	.033	.042	.053	.062	.069	