

# HIGH PERFORMANCE DRILLS

Unit: mm

EDP #	Size	Decimal Equiv.	Wire/Fractional/Letter	Flute Length	Overall Length	Shank Diameter
1561816	10,72	0,4219	27/64	55	102	12
0778580	10,80	0,4252				
0778596	10,90	0,4291				
0778601	11,00	0,4331				
0778618	11,10	0,4370				
1561822	11,11	0,4375	7/16			
0778624	11,20	0,4409				
0778630	11,30	0,4449				
0778647	11,40	0,4488				
0778653	11,50	0,4528				
1561839	11,51	0,4531	29/64			
0778660	11,60	0,4567				
0778676	11,70	0,4606				
0778682	11,80	0,4646				
0778699	11,90	0,4685				
1561845	11,91	0,4688	15/32			
0778704	12,00	0,4724				
0778710	12,10	0,4764				
0778727	12,20	0,4803				
0778733	12,30	0,4843				
1561851	12,30	0,4844	31/64			
0778740	12,40	0,4882				
0778756	12,50	0,4921				
0778762	12,60	0,4961				
1561868	12,70	0,5000	1/2			
0778779	12,70	0,5000				
0778785	12,80	0,5039				
0778791	12,90	0,5079				
0778807	13,00	0,5118				
1561874	13,10	0,5156	33/64			
0778813	13,10	0,5157				
0778820	13,20	0,5197				
0778836	13,30	0,5236				
0778842	13,40	0,5276				

EDP #	Size	Decimal Equiv.	Wire/Fractional/Letter	Flute Length	Overall Length	Shank Diameter
1561880	13,49	0,5313	17/32	60	107	14
0778859	13,50	0,5315				
0778865	13,60	0,5354				
0778871	13,70	0,5394				
0778888	13,80	0,5433				
1561897	13,89	0,5469	35/64			
0778894	13,90	0,5472				
0778900	14,00	0,5512				
0778916	14,10	0,5551				
0778922	14,20	0,5591				
1561902	14,29	0,5625	9/16			
0778939	14,30	0,5630				
0778945	14,40	0,5669				
0778951	14,50	0,5709				
0778968	14,60	0,5748				
1561919	14,68	0,5781	37/64			
0778974	14,70	0,5787				
0778980	14,80	0,5827				
0778997	14,90	0,5866				
0779001	15,00	0,5906				
1561925	15,08	0,5938	19/32			
0779018	15,10	0,5945				
0779024	15,20	0,5984				
0779030	15,30	0,6024				
0779047	15,40	0,6063				
1561931	15,48	0,6094	39/64			
0779053	15,50	0,6102				
0779060	15,60	0,6142				
0779076	15,70	0,6181				
0779082	15,80	0,6220				
1561948	15,88	0,6250	5/8			
0779099	15,90	0,6260				
0779104	16,00	0,6299				

⚠ WARNING: Cancer - www.P65Warnings.ca.gov

CARBIDE DRILLS

## LIST 9872/9873 Wet Cutting Conditions

Work Material	Structural Steel Carbon Steel Cast Iron		Alloy Steel Heat treated Steel (20-30 HRC)		Mold Steel Hardened Steel (30-40 HRC)		Hardened Steel (40-50 HRC)		Ductile Cast Iron		Stainless Steel (300 & 400 Series)		PH Stainless		Titanium Alloys		Nickel Alloys Inconel	
	Speed (SFM)	390-400 SFM	325-335 SFM		255-265 SFM		130-140 SFM		325-340 SFM		255-265 SFM		155-165 SFM		125-135 SFM		125-135 SFM	
Drill Dia. Metric Fractional	RPM	IPR	RPM	IPR	RPM	IPR	RPM	IPR	RPM	IPR	RPM	IPR	RPM	IPR	RPM	IPR	RPM	IPR
3.0	12700	0.0038	10600	0.0038	8500	0.0035	4250	0.0024	10600	0.0035	8500	0.0031	5300	0.0030	4200	0.0030	4200	0.0018
1/8	12000	0.0040	10000	0.0040	7950	0.0037	4000	0.0026	9950	0.0037	8000	0.0033	4900	0.0032	3850	0.0032	4000	0.0019
3/16	7950	0.0060	6650	0.0060	5300	0.0056	2650	0.0038	6650	0.0056	5300	0.0050	3250	0.0047	2600	0.0047	2650	0.0028
5.0	7600	0.0063	6300	0.0063	5050	0.0058	2550	0.0040	6300	0.0059	5050	0.0052	3104	0.0049	2450	0.0049	2500	0.0029
1/4	6000	0.0080	5000	0.0080	4000	0.0071	2000	0.0048	5000	0.0076	4000	0.0066	2450	0.0064	1910	0.0064	2000	0.0038
5/16	4750	0.0099	3970	0.0100	3170	0.0088	1580	0.0059	3970	0.0086	3170	0.0078	1950	0.0080	1550	0.0079	1550	0.0047
8.0	4800	0.0100	4000	0.0100	3200	0.0087	1600	0.0059	4000	0.0087	3200	0.0079	2000	0.0079	1600	0.0079	1600	0.0047
3/8	4000	0.0113	3350	0.0113	2650	0.0104	1350	0.0059	3300	0.0093	2650	0.0089	1630	0.0094	1270	0.0094	1350	0.0056
10.0	3800	0.0118	3200	0.0118	2500	0.0101	1300	0.0070	3200	0.0097	2500	0.0093	1600	0.0091	1300	0.0091	1300	0.0055
12.0	3200	0.0132	2700	0.0134	2100	0.0101	1050	0.0082	2700	0.0098	2100	0.0105	1300	0.0106	1050	0.0105	1050	0.0067
1/2	3000	0.0140	2500	0.0142	1980	0.0107	1000	0.0083	2500	0.0104	2000	0.0111	1200	0.0112	960	0.0111	990	0.0072
16.0	2400	0.0157	2000	0.0175	1600	0.0118	800	0.0103	2000	0.0122	1600	0.0125	1000	0.0126	800	0.0128	800	0.0074

NOTES:

- 1) Adjust cutting condition according to the rigidity of machine or work clamp state.
- 2) In machine or installation of machining step, when there is no rigidity of machine or chattering occurs, reduce the rotation and feed rate.
- 3) Wet condition are for drilling with water soluble cutting fluid.
- 4) In non-water soluble cutting fluid, reduce the rotation and feed rate by 20%.
- 5) Use an internal coolant.
- 6) In cases where chip jamming is a problem, use step feeding.
- 7) Retraction of the step feed is to be returned to the top of the hole.
- 8) Step feed is recommended to 0.2~1.0×Dc.