

HIGH PERFORMANCE DRILLS

Unit: mm

EDP #	Size	Decimal Equiv.	Wire/Fractional/ Letter	Flute Length	Overall Length	Shank Diameter
	Dc			f	L	Ds
1562274	10.72	0.4219	27/64	71	118	12
0779890	10.80	0.4252				
0779906	10.90	0.4291				
0779912	11.00	0.4331				
0779929	11.10	0.4370				
1562280	11.11	0.4375	7/16			
0779935	11.20	0.4409				
0779941	11.30	0.4449				
0779958	11.40	0.4488				
0779964	11.50	0.4528				
1562297	11.51	0.4531	29/64			
0779970	11.60	0.4567				
0779987	11.70	0.4606				
0779993	11.80	0.4646				
0780007	11.90	0.4685				
1562302	11.91	0.4688	15/32			
0780013	12.00	0.4724				
0780020	12.10	0.4764				
0780036	12.20	0.4803				
0780042	12.30	0.4843				
1562319	12.30	0.4844	31/64			
0780059	12.40	0.4882				
0780065	12.50	0.4921				
0780071	12.60	0.4961				
1562325	12.70	0.5000	1/2			
0780088	12.70	0.5000				
0780094	12.80	0.5039				
0780100	12.90	0.5079				
0780116	13.00	0.5118				
1562331	13.10	0.5156	33/64			
0780122	13.10	0.5157				
0780139	13.20	0.5197				
0780145	13.30	0.5236				
0780151	13.40	0.5276				

EDP #	Size	Decimal Equiv.	Wire/Fractional/ Letter	Flute Length	Overall Length	Shank Diameter
	Dc			f	L	Ds
1562348	13.49	0.5313	17/32	77	124	14
0780168	13.50	0.5315				
0780174	13.60	0.5354				
0780180	13.70	0.5394				
0780197	13.80	0.5433				
1562354	13.89	0.5469	35/64			
0780202	13.90	0.5472				
0780219	14.00	0.5512				
0780225	14.10	0.5551				
0780231	14.20	0.5591				
1562360	14.29	0.5625	9/16			
0780248	14.30	0.5630				
0780254	14.40	0.5669				
0780260	14.50	0.5709				
0780277	14.60	0.5748				
1562377	14.68	0.5781	37/64			
0780283	14.70	0.5787				
0780290	14.80	0.5827				
0780305	14.90	0.5866				
0780311	15.00	0.5906				
1562383	15.08	0.5938	19/32			
0780328	15.10	0.5945				
0780334	15.20	0.5984				
0780340	15.30	0.6024				
0780357	15.40	0.6063				
1562390	15.48	0.6094	39/64			
0780363	15.50	0.6102				
0780370	15.60	0.6142				
0780386	15.70	0.6181				
0780392	15.80	0.6220				
1562405	15.88	0.6250	5/8			
0780408	15.90	0.6260				
0780414	16.00	0.6299				

WARNING: Cancer - www.P65Warnings.ca.gov

Dimensions or 3D and 5D are held to DIN Standard.
For JIS standard please ask your local sales rep.

LIST 9874/9875 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:

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

CARBIDE DRILLS