

90° NC spot drills

Series

723

6027



Tool material

Carbide

Carbide

Coating

Uncoated

FIREX

Shank form

cyl./flat

cyl./flat

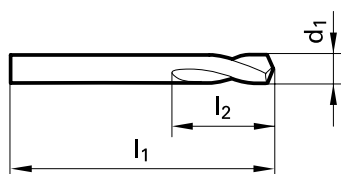
Material		Suitability uncoated	Suitability FIREX
P	Steel	○	●
M	Stainless steel	○	●
K	Cast iron	○	●
N	Aluminum	●	○
S	Ni / Ti alloys	○	●
H	Hardened steel	○	○
●=Optimal ○=Secondary			

facet point grinding
only suitable for spotting
Shank diameter = cut diameter

* Weldon flat on drills ≥ 6mm diameter



Operating parameters pg. 15



Diameter (d1)				l1	l2	Code no.	EDP Number	EDP Number
inch	wire	ltr	mm	mm	mm			
0.1575			4.00	55.00	12.00	4.000	9007230040000	9060270040000
0.1969			5.00	62.00	14.00	5.000	9007230050000	9060270050000
0.2362			6.00	66.00	16.00	6.000	9007230060000*	9060270060000*
0.2500	1/4	E	6.35	70.00	17.00	6.350	9007230063500*	9060270063500*
0.3150			8.00	79.00	21.00	8.000	9007230080000*	9060270080000*
0.3748	3/8		9.52	89.00	25.00	9.520	9007230095200*	9060270095200*
0.3937			10.00	89.00	25.00	10.000	9007230100000*	9060270100000*
0.4724			12.00	102.00	30.00	12.000	9007230120000*	9060270120000*
0.5000	1/2		12.70	102.00	30.00	12.700	9007230127000*	9060270127000*
0.6248	5/8		15.87	115.00	37.50	15.870	9007230158700*	9060270158700*
0.6299			16.00	115.00	37.50	16.000	9007230160000*	9060270160000*
0.7500	3/4		19.05	131.00	45.00	19.050	9007230190500*	9060270190500*
0.7874			20.00	131.00	45.00	20.000	9007230200000*	9060270200000*



Material group	Hardness		SFM	Feed Rate - IPR								
	HRC	BHN		1/64 in. 0.500 mm	1/16 in. 1.590 mm	1/8 in. 3.170 mm	1/4 in. 6.350 mm	3/8 in. 9.520 mm	1/2 in. 12.700 mm	5/8 in. 15.870 mm	3/4 in. 19.050 mm	1 in. 25.400 mm
Common structural steels	-	≤ 150	245			0.0040	0.0065	0.0100	0.0100	0.0125	0.0155	0.0195
	≤ 32	≤ 301	205			0.0030	0.0050	0.0080	0.0080	0.0100	0.0125	0.0155
Free-cutting steels	≤ 25	≤ 255	260			0.0040	0.0065	0.0100	0.0100	0.0125	0.0155	0.0195
	≤ 32	≤ 301	245			0.0030	0.0050	0.0080	0.0080	0.0100	0.0125	0.0155
Unalloyed heat-treatable steels	≤ 20	≤ 220	205			0.0030	0.0050	0.0080	0.0080	0.0100	0.0125	0.0155
	≤ 25	≤ 255	205			0.0030	0.0050	0.0080	0.0080	0.0100	0.0125	0.0155
	≤ 32	≤ 301	165			0.0025	0.0040	0.0065	0.0065	0.0080	0.0100	0.0125
Alloyed heat-treatable steels	≤ 32	≤ 301	125			0.0025	0.0040	0.0065	0.0065	0.0080	0.0100	0.0125
	≤ 43	≤ 402	100			0.0020	0.0030	0.0050	0.0050	0.0065	0.0080	0.0100
Unalloyed case hardened steels	≤ 25	≤ 255	245			0.0040	0.0065	0.0100	0.0100	0.0125	0.0155	0.0195
Alloyed case hardened steels	≤ 32	≤ 301	125			0.0025	0.0040	0.0065	0.0065	0.0080	0.0100	0.0125
	≤ 43	≤ 402	65			0.0020	0.0030	0.0050	0.0050	0.0065	0.0080	0.0100
Nitriding steels	≤ 32	≤ 301										
	≤ 43	≤ 402										
Tool steels	≤ 25	≤ 255	130			0.0025	0.0040	0.0065	0.0065	0.0080	0.0100	0.0125
	≤ 43	≤ 402										
High speed steels	≤ 43	≤ 402										
Spring steels	≤ 38	≤ 354										
Hardened steels	≤ 48	≤ 460	65			0.0015	0.0025	0.0040	0.0040	0.0050	0.0065	0.0080
	≤ 66	-										
Stainless steels, sulphured austenitic	≤ 28	≤ 273	80			0.0020	0.0030	0.0050	0.0050	0.0065	0.0080	0.0100
	≤ 36	≤ 337	50			0.0020	0.0030	0.0050	0.0050	0.0065	0.0080	0.0100
	≤ 46	≤ 435	65			0.0020	0.0030	0.0050	0.0050	0.0065	0.0080	0.0100
Cast iron	≤ 23	≤ 242	245			0.0040	0.0065	0.0100	0.0100	0.0125	0.0155	0.0195
	≤ 38	≤ 354	245			0.0040	0.0065	0.0100	0.0100	0.0125	0.0155	0.0195
Spheroidal graphite iron and malleable cast iron	≤ 23	≤ 242	205			0.0040	0.0065	0.0100	0.0100	0.0125	0.0155	0.0195
	≤ 38	≤ 354	165			0.0040	0.0065	0.0100	0.0100	0.0125	0.0155	0.0195
Chilled cast iron	≤ 38	≤ 354										
New cast materials GGV	≤ 20	≤ 220										
	≤ 32	≤ 301										
New cast materials ADI	≤ 32	≤ 301										
	≤ 43	≤ 402										
Special alloys	≤ 54	≤ 549	50			0.0015	0.0025	0.0040	0.0040	0.0050	0.0065	0.0080
Ti and Ti-alloys	≤ 25	≤ 255	50			0.0015	0.0020	0.0030	0.0030	0.0040	0.0050	0.0065
	≤ 43	≤ 402	50			0.0015	0.0020	0.0030	0.0030	0.0040	0.0050	0.0065
Aluminium and Al-alloys	-	≤ 120	575			0.0050	0.0080	0.0125	0.0125	0.0155	0.0195	0.0250
Al wrought alloys	-	≤ 200	575			0.0050	0.0080	0.0125	0.0125	0.0155	0.0195	0.0250
Al cast alloys ≤ 10 % Si	-	≤ 180	410			0.0050	0.0080	0.0125	0.0125	0.0155	0.0195	0.0250
≤ 24 % Si	-	≤ 180	410			0.0040	0.0065	0.0100	0.0100	0.0125	0.0155	0.0195
Magnesium alloys	-	≤ 120	575			0.0040	0.0065	0.0100	0.0100	0.0125	0.0155	0.0195
Copper, low-alloyed	-	≤ 150	490			0.0030	0.0050	0.0080	0.0080	0.0100	0.0125	0.0155
Brass, short-chipping	-	≤ 180	490			0.0030	0.0050	0.0080	0.0080	0.0100	0.0125	0.0155
long-chipping	-	≤ 180	330			0.0030	0.0050	0.0080	0.0080	0.0100	0.0125	0.0155
Bronze, short-chipping	-	≤ 180	245			0.0025	0.0040	0.0065	0.0065	0.0080	0.0100	0.0125
	≤ 25	≤ 255	205			0.0025	0.0040	0.0065	0.0065	0.0080	0.0100	0.0125
Bronze, long-chipping	≤ 25	≤ 255	125			0.0025	0.0040	0.0065	0.0065	0.0080	0.0100	0.0125
	≤ 32	≤ 301	100			0.0025	0.0040	0.0065	0.0065	0.0080	0.0100	0.0125
Duroplastics			150			0.0025	0.0040	0.0065	0.0065	0.0080	0.0100	0.0125
Thermoplastics			230			0.0030	0.0050	0.0080	0.0080	0.0100	0.0125	0.0155

Material group	Hardness		SFM	Feed Rate - IPR								
	HRC	BHN		1/64 in. 0.500 mm	1/16 in. 1.590 mm	1/8 in. 3.170 mm	1/4 in. 6.350 mm	3/8 in. 9.520 mm	1/2 in. 12.700 mm	5/8 in. 15.870 mm	3/4 in. 19.050 mm	1 in. 25.400 mm
Common structural steels	-	≤ 150	330		0.0005	0.0005	0.0040	0.0065	0.0100	0.0125	0.0155	0.0195
	≤ 32	≤ 301	280		0.0005	0.0005	0.0030	0.0050	0.0080	0.0100	0.0125	0.0155
Free-cutting steels	≤ 25	≤ 255	345		0.0005	0.0005	0.0040	0.0065	0.0100	0.0125	0.0155	0.0195
	≤ 32	≤ 301	330		0.0005	0.0005	0.0030	0.0050	0.0080	0.0100	0.0125	0.0155
Unalloyed heat-treatable steels	≤ 20	≤ 220	280		0.0005	0.0005	0.0030	0.0050	0.0080	0.0100	0.0125	0.0155
	≤ 25	≤ 255	280		0.0005	0.0005	0.0030	0.0050	0.0080	0.0100	0.0125	0.0155
	≤ 32	≤ 301	230		0.0005	0.0005	0.0025	0.0040	0.0065	0.0080	0.0100	0.0125
Alloyed heat-treatable steels	≤ 32	≤ 301	180		0.0005	0.0005	0.0025	0.0040	0.0065	0.0080	0.0100	0.0125
	≤ 43	≤ 402	150		0.0005	0.0005	0.0020	0.0030	0.0050	0.0065	0.0080	0.0100
Unalloyed case hardened steels	≤ 25	≤ 255	330		0.0005	0.0005	0.0040	0.0065	0.0100	0.0125	0.0155	0.0195
Alloyed case hardened steels	≤ 32	≤ 301	180		0.0005	0.0005	0.0025	0.0040	0.0065	0.0080	0.0100	0.0125
	≤ 43	≤ 402	100		0.0005	0.0005	0.0020	0.0030	0.0050	0.0065	0.0080	0.0100
Nitriding steels	≤ 32	≤ 301										
	≤ 43	≤ 402										
Tool steels	≤ 25	≤ 255	180		0.0005	0.0005	0.0025	0.0040	0.0065	0.0080	0.0100	0.0125
	≤ 43	≤ 402										
High speed steels	≤ 43	≤ 402										
Spring steels	≤ 38	≤ 354										
Hardened steels	≤ 48	≤ 460	100		0.0005	0.0005	0.0015	0.0025	0.0040	0.0050	0.0065	0.0080
	≤ 66	-										
Stainless steels, sulphured austenitic	≤ 28	≤ 273	115		0.0005	0.0005	0.0020	0.0030	0.0050	0.0065	0.0080	0.0100
	≤ 36	≤ 337	80		0.0005	0.0005	0.0020	0.0030	0.0050	0.0065	0.0080	0.0100
	≤ 46	≤ 435	100		0.0005	0.0005	0.0020	0.0030	0.0050	0.0065	0.0080	0.0100
Cast iron	≤ 23	≤ 242	330		0.0005	0.0005	0.0040	0.0065	0.0100	0.0125	0.0155	0.0195
	≤ 38	≤ 354	330		0.0005	0.0005	0.0040	0.0065	0.0100	0.0125	0.0155	0.0195
Spheroidal graphite iron and malleable cast iron	≤ 23	≤ 242	280		0.0005	0.0005	0.0040	0.0065	0.0100	0.0125	0.0155	0.0195
	≤ 38	≤ 354	230		0.0005	0.0005	0.0040	0.0065	0.0100	0.0125	0.0155	0.0195
Chilled cast iron	≤ 38	≤ 354										
New cast materials GGV	≤ 20	≤ 220										
	≤ 32	≤ 301										
New cast materials ADI	≤ 32	≤ 301										
	≤ 43	≤ 402										
Special alloys	≤ 54	≤ 549	80		0.0005	0.0005	0.0015	0.0025	0.0040	0.0050	0.0065	0.0080
Ti and Ti-alloys	≤ 25	≤ 255	80		0.0005	0.0005	0.0015	0.0020	0.0030	0.0040	0.0050	0.0065
	≤ 43	≤ 402	80		0.0005	0.0005	0.0015	0.0020	0.0030	0.0040	0.0050	0.0065
Aluminium and Al-alloys	-	≤ 120	755		0.0005	0.0010	0.0050	0.0080	0.0125	0.0125	0.0155	0.0250
Al wrought alloys	-	≤ 200	755		0.0005	0.0010	0.0050	0.0080	0.0125	0.0125	0.0155	0.0250
Al cast alloys ≤ 10 % Si	-	≤ 180	540		0.0005	0.0010	0.0050	0.0080	0.0125	0.0125	0.0155	0.0250
≤ 24 % Si	-	≤ 180	540		0.0005	0.0005	0.0040	0.0065	0.0100	0.0100	0.0125	0.0155
Magnesium alloys	-	≤ 120	755		0.0005	0.0005	0.0040	0.0065	0.0100	0.0100	0.0125	0.0155
Copper, low-alloyed	-	≤ 150	655		0.0005	0.0005	0.0030	0.0050	0.0080	0.0080	0.0100	0.0125
Brass, short-chipping	-	≤ 180	655		0.0005	0.0005	0.0030	0.0050	0.0080	0.0080	0.0100	0.0125
long-chipping	-	≤ 180	445		0.0005	0.0005	0.0030	0.0050	0.0080	0.0080	0.0100	0.0125
Bronze, short-chipping	-	≤ 180	330		0.0005	0.0005	0.0025	0.0040	0.0065	0.0065	0.0080	0.0100
	≤ 25	≤ 255	280		0.0005	0.0005	0.0025	0.0040	0.0065	0.0065	0.0080	0.0100
Bronze, long-chipping	≤ 25	≤ 255	180		0.0005	0.0005	0.0025	0.0040	0.0065	0.0065	0.0080	0.0100
	≤ 32	≤ 301	150		0.0005	0.0005	0.0025	0.0040	0.0065	0.0065	0.0080	0.0100
Duroplastics			215		0.0005	0.0005	0.0025	0.0040	0.0065	0.0065	0.0080	0.0100
Thermoplastics			310		0.0005	0.0005	0.0030	0.0050	0.0080	0.0080	0.0100	0.0125