

# Accurate Positioning...

Perfect hole location



#### Features

- HSS Co material
- TIN coated
- Precise point geometry

#### Benefits

- Perfect hole location
- Offers spotting and chamfering with one tool

## ***SPOTTING DRILL***

for an on-site demonstration contact  
Sutton Tools on 1800 335 350

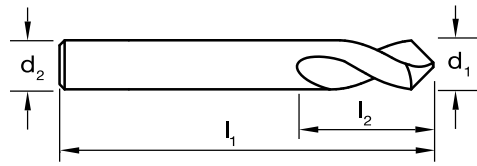
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# Drills Spotting



- Rigid twist drill
- For use to the depth of the point only
- Provides an accurate location "seat" for position accuracy
- 90° Point angle - offers hole chamfering & spotting with the one tool
- 120° Point angle - specifically for spotting, closely matches a typical drill point
- cutting edges of the following drill engage easily, for perfect hole location



Catalogue Code			<b>D175</b>		<b>D176</b>	
Discount Group			A1124		A1124	
Material			HSS Co		HSS Co	
Surface Finish			TIN		TIN	
Colour Ring & Application			N		N	
Geometry			-		-	
Point Type			90°		120°	
Shank Tolerance			h9		h9	
$d_1$	$l_1$	$l_2$	Price	Item #	Price	Item #
<b>DIN 1897</b>						
3.0	46	16		378794		423616
4.0	55	22		378800		423623
5.0	62	26		378817		423630
6.0	63	25		081748		423647
8.0	80	29		081755		423654
10.0	90	32		081762		423661
12.0	100	32		081779		423678
16.0	114	35		081786		423685
20.0	130	37		081793		423692
25.0	130	37		095066		423708
Materials			Material examples		Vc (m/min)	feed no.
Free-cutting steel					35	4
Structural steels					25	4
Carbon steels			1020, 1024, 1045, 1060		20	4
Alloy steels < 850-1200 N/mm <sup>2</sup>			4140, O1, A2, D3, M42, P20		15	3
Alloy steels hard./temp. > 1200-1400 N/mm <sup>2</sup>			EN26, O1, L6, M42, D3, 4140		10	3
Free machining stainless steel			416, 430F		10	3
Austenitic stainless steels			303, 304, 316, 317, 321		15	2
Ferritic + martensitic < 1000 N/mm <sup>2</sup>			409, 430, 436, Duplex Alloys		10	2
Cast iron ≤ 240 HB			GG10, GG20		30	5
Cast iron < 240 HB			GG25, GG40		20	4
Spheroidal graphite + Malleable cast iron			GGG50, GGG70		20	4
Copper unalloyed					50	4
Short chip brass + phosphor bronze + gun metal					30	4
Long chip brass					40	4
Al / Mg unalloyed					50	5
Al alloyed Si < 5%					50	4
Al alloyed Si > 1.5% < 10%					35	4

Feed No.	Feed Table (f) (mm/rev)									
	$\phi$									
	3.0	4.0	5.0	6.0	8.0	10.0	12.0	16.0	20.0	
1	0.030	0.040	0.045	0.050	0.060	0.080	0.080	0.100	0.150	
2	0.040	0.050	0.055	0.060	0.080	0.100	0.100	0.120	0.200	
3	0.050	0.060	0.065	0.080	0.100	0.120	0.120	0.150	0.250	
4	0.060	0.080	0.085	0.100	0.120	0.150	0.150	0.200	0.300	
5	0.080	0.100	0.110	0.120	0.150	0.200	0.200	0.250	0.400	

**LEGEND**

- n = rev. per minute
- $v_c$  = cutting speed (m/min)
- f = feed (mm/rev)
- $v_f$  = feed rate (mm/min)
- z = no. cutting edges

**FORMULAS**

- $n = (v_c \times 1000) / (\phi \times \pi)$
- $v_c = (\phi \times \pi \times n) / 1000$
- $v_f = f \times n$

Notes: For calculating revolutions per minute, apply hole diameter  
For calculating feed, apply large end diameter

