

sutton[®]



DRILLING HSS

• Stub Series • Jobber Series • Long Series

BLACK
MAGIC

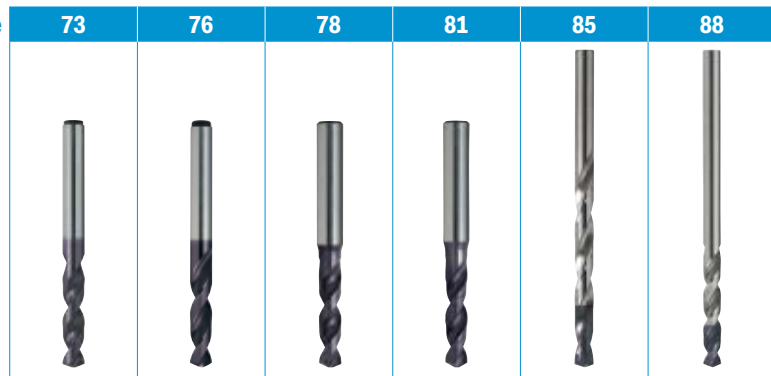
VIPER
PLUS4

INOX

ISO	VDI	Material Group	Sutton	Page
P	A	Steel	N	73
M	R	Stainless Steel	VA	
K	F	Cast Iron	GG	
N	N	Non-Ferrous Metals, Aluminiums & Coppers	Al W	
S	S	Titaniums & Super Alloys	Ti	
H	H	Hard Materials (≥ 45 HRC)	H	

^ VDI 3323 material groups can also be determined by referring to the material cross reference listing in the application guide at the back of this catalogue.

Catalogue Code
Material
Surface Finish
Sutton Designation
Standard
Depth of Cut
Shank Tolerance









73	76	78	81	85	88
D151	D177	D155	D153	D179	D180
HSS Co	HSS Co	SPM	HSS Co	HSS	HSS
TiAlN	TiAlN	TiAlN	TiAlN	TiAlN Tip	TiAlN Tip
NH	WN	UNI	VA	N	VA
DIN 1897	DIN 1897	- DIN 1897		DIN 338	- DIN 338
≤ 3xØ	≤ 3xØ	≤ 3xØ	≤ 3xØ	≤ 5xØ	≤ 3xØ
h9	h9	h7	h7	h9	h9

ISO	VDI ³³²³	Material	Condition	HB	N/mm ²	73	76	78	81	85	88	
P	1	Steel - Non-alloy, cast & free cutting	- 0.15 %C	A	125	440	●	●	●	●	●	
	2		- 0.45 %C	A	190	640	●	●	●	○	●	
	3		- 0.75 %C	QT	250	840	●	●	●	○	●	
	4			A	270	910	●	●	●	○	○	
	5			QT	300	1010	●	○	●	○	○	
	6	Steel - Low alloy & cast < 5% of alloying elements	A	180	610	●	●	●	○	●	●	
	7		QT	275	930	●	○	●	○	●	○	
	8		QT	300	1010	●	○	●	○	○	○	
	9		QT	350	1180	○	○	○	○	○	○	
	10	Steel - High alloy, cast & tool	A	200	680	●	○	●	○	●	○	
	11		HT	325	1100	○	○	○	○	○	○	
	12	Steel - Corrosion resistant & cast	Ferritic / Martensitic	A	200	680	○	○	●	○	○	○
	13		Martensitic	QT	240	810	○	○	○	○	○	○
M	14.1	Stainless Steel	Austenitic	AH	180	610	○	○	○	●	○	
	14.2		Duplex	230	780	○	○	○	●	○	●	
	14.3		Precipitation Hardening	300	780	●	○	○	●	○	○	
K	15	Cast Iron - Grey (GG)	Ferritic / Pearlitic	180	610	●	○	●	○	●	○	
	16		Pearlitic	260	880	●	○	○	○	○	○	
	17	Cast Iron - Nodular (GGG)	Ferritic	160	570	●	○	○	○	○	○	
	18		Pearlitic	250	840	●	○	○	○	○	○	
	19	Cast Iron - Malleable	Ferritic	130	460	●	○	○	○	○	○	
20	Pearlitic		230	780	●	○	○	○	○	○		
N	21	Aluminum & Magnesium - wrought alloy	Non Heat Treatable	60	210	○	○	○	○	○	○	
	22		Heat Treatable	AH	100	360	○	○	○	○	○	
	23	Aluminum & Magnesium - cast alloy ≤12% Si	Non Heat Treatable	75	270	●	●	●	●	○	●	
	24		Heat Treatable	AH	90	320	●	●	●	●	○	●
	25	Al & Mg - cast alloy >12% Si	Non Heat Treatable	130	460	●	○	○	○	○	○	
	26	Copper & Cu alloys (Brass/Bronze)	Free cutting, Pb > 1%	110	390	○	○	○	○	○	○	
	27	Brass (CuZn, CuSnZn)	90	320	○	○	○	○	○	○	○	
	28		Bronze (CuSn)	100	360	○	○	○	○	○	○	
	29		Non-metallic - Thermosetting & fiber-reinforced plastics			○	○	○	○	○	○	
	30	Non-metallic - Hard rubber, wood etc.										
S	31	High temp. alloys	Fe based	A	200	680						
	32			AH	280	950						
	33		Ni / Co based	A	250	840			○			
	34			AH	350	1180						
	35			C	320	1080						
	36	Titanium & Ti alloys	CP Titanium		400 MPa							
	37.1		Alpha alloys		860 MPa			○	○			
	37.2		Alpha / Beta alloys	A	960 MPa				○			
37.3	AH			1170 MPa								
37.4	Beta alloys		A	830 MPa				○				
37.5	AH	1400 MPa										
H	38.1	Hardened steel	HT	45 HRC				○				
	38.2		HT	55 HRC								
	39.1		HT	58 HRC								
	39.2		HT	62 HRC								
	40	Cast Iron	Chilled	C	400	1350	○		○			
41		HT	55 HRC									

Condition: A (Annealed), AH (Age Hardened), C (Cast), HT (Hardened & Tempered), QT (Quenched & Tempered)

CO3ALT

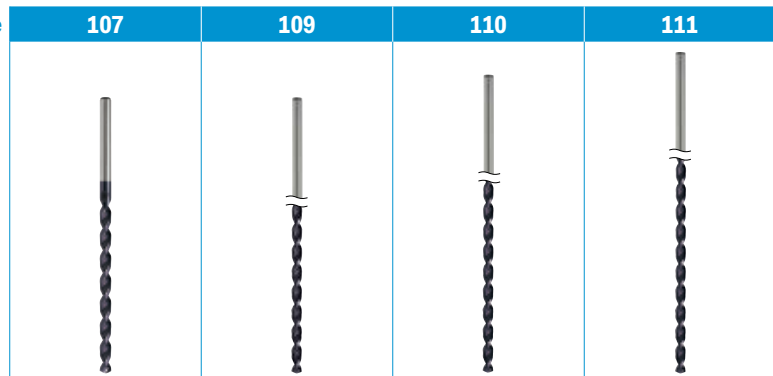
BLACK MAGIC

91	94	97	99	101	104		
							
D109	D163	D182	D165	D168	D169		
HSS Co	HSS Co	HSS Co	HSS Co	SPM	HSS Co		
Colour Temp	TiAIN	TiAIN	TiAIN	TiAIN	TiAIN		
Hard Mat.	NH	NH	WN	UNI	VA		
DIN 338	DIN 338	-	DIN 338	- DIN 338	- DIN 338		
≤ 5xØ	≤ 5xØ	≤ 5xØ	≤ 5xØ	≤ 5xØ	≤ 5xØ		
-	h9	-	h9	h7	h7		
						VDI 3323	ISO
	●	●	●	●	●		1
	●	●	●	●	○		2
●	●	●	●	●	○		3
○	●	●	●	●	○		4
●	●	○	○	●	○		5
	●	●	●	●	○		6
●	●	●	○	●	○		7
●	●	○	○	●	○		8
○	○	○		○			9
○	●	○	○	●			10
○	○	○		○			11
	○	●		●	●		12
	○	○		●	○		13
○	○	○	○	○	●		14.1
○		○	○	○	●		14.2
	○	●		●	●		14.3
○	●	●	●	●	●		15
○	●	●	●	●	●		16
○	●	●	●	●	●		17
○	●	●	●	●	●		18
○	●	●	●	●	●		19
○	●	●	●	●	●		20
		○	●	○	○		21
		○	●	○	○		22
	○	●	●	●	○		23
	●	●	●	●	○		24
	●	○	○	●	○		25
	○	○	●	○	○		26
●	○	●	○	●	○		27
		●	●	●	○		28
	○	○	○	○			29
							30
		○					31
		○					32
		○		○			33
		○					34
		○					35
		○					36
		○		○	○		37.1
		○			○		37.2
		○					37.3
		○			○		37.4
		○					37.5
○		○		○			38.1
							38.2
							39.1
							39.2
○	●	●		●			40
							41

ISO	VDI	Material Group	Sutton
P	A	Steel	N
M	R	Stainless Steel	VA
K	F	Cast Iron	GG
N	N	Non-Ferrous Metals, Aluminiums & Coppers	Al W
S	S	Titaniums & Super Alloys	Ti Ni
H	H	Hard Materials (≥ 45 HRC)	H

^ VDI 3323 material groups can also be determined by referring to the material cross reference listing in the application guide at the back of this catalogue.

Page



Catalogue Code
Material
Surface Finish
Sutton Designation
Standard
Depth of Cut
Shank Tolerance

107	109	110	111
D171	D194	D195	D196
HSS Co		HSSCo	
TiAlN		TiAlN	
NH		NH	
DIN 340	DIN 1869-1	DIN 1869-2	DIN 1869-3
8xØ	≤ 10xØ	≤ 12xØ	≤ 14xØ
h9		h9	

ISO	VDI ³³²³	Material	Condition	HB	N/mm ²	107	109	110	111	
P	1	Steel - Non-alloy, cast & free cutting	- 0.15 %C	A	125	440	●	●	●	●
	2		- 0.45 %C	A	190	640	●	●	●	●
	3			QT	250	840	●	●	●	●
	4		- 0.75 %C	A	270	910	●	●	●	●
	5			QT	300	1010	●	●	●	●
	6	Steel - Low alloy & cast < 5% of alloying elements		A	180	610	●	●	●	●
	7			QT	275	930	●	●	●	●
	8			QT	300	1010	●	●	●	●
	9			QT	350	1180	○	○	○	○
	10	Steel - High alloy, cast & tool		A	200	680	●	●	●	●
	11			HT	325	1100	○	○	○	○
12	Steel - Corrosion resistant & cast	Ferritic / Martensitic	A	200	680	○	○	○	○	
13		Martensitic	QT	240	810	○	○	○	○	
M	14.1	Stainless Steel	Austenitic	AH	180	610	○	○	○	○
	14.2		Duplex		230	780				
	14.3		Precipitation Hardening		300	780				
K	15	Cast Iron - Grey (GG)	Ferritic / Pearlitic		180	610	●	●	●	●
	16		Pearlitic		260	880	●	●	●	●
	17	Cast Iron - Nodular (GGG)	Ferritic		160	570	●	●	●	●
	18		Pearlitic		250	840	●	●	●	●
	19	Cast Iron - Malleable	Ferritic		130	460	●	●	●	●
20	Pearlitic			230	780	●	●	●	●	
N	21	Aluminum & Magnesium - wrought alloy	Non Heat Treatable		60	210				
	22		Heat Treatable	AH	100	360				
	23	Aluminum & Magnesium - cast alloy ≤12% Si	Non Heat Treatable		75	270	○	○	○	○
	24		Heat Treatable	AH	90	320	●	●	●	●
	25	Al & Mg - cast alloy >12% Si	Non Heat Treatable		130	460	●	●	●	●
	26	Copper & Cu alloys (Brass/Bronze)	Free cutting, Pb > 1%		110	390	○	○	○	○
	27		Brass (CuZn, CuSnZn)		90	320	○	○	○	○
	28		Bronze (CuSn)		100	360				
	29	Non-metallic - Thermosetting & fiber-reinforced plastics					○	○	○	○
	30	Non-metallic - Hard rubber, wood etc.								
S	31	High temp. alloys	Fe based	A	200	680				
	32			AH	280	950				
	33		Ni / Co based	A	250	840				
	34			AH	350	1180				
	35			C	320	1080				
	36	Titanium & Ti alloys	CP Titanium		400	MPa				
	37.1			Alpha alloys		860	MPa			
	37.2		Alpha / Beta alloys	A	960	MPa				
37.3	AH			1170	MPa					
37.4	Beta alloys		A	830	MPa					
37.5		AH	1400	MPa						
H	38.1	Hardened steel		HT	45	HRC				
	38.2			HT	55	HRC				
	39.1			HT	58	HRC				
	39.2			HT	62	HRC				
	40	Cast Iron	Chilled	C	400	1350	●	●	●	●
41			HT	55	HRC					

Condition: A (Annealed), AH (Age Hardened), C (Cast), HT (Hardened & Tempered), QT (Quenched & Tempered)

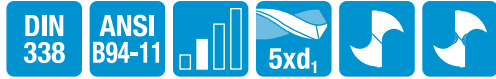
Drills Sets

- Various combinations available
- Metric and Imperial

- Coffrets de Forets**
- Nombreuses combinaisons
- Métrique et Inch

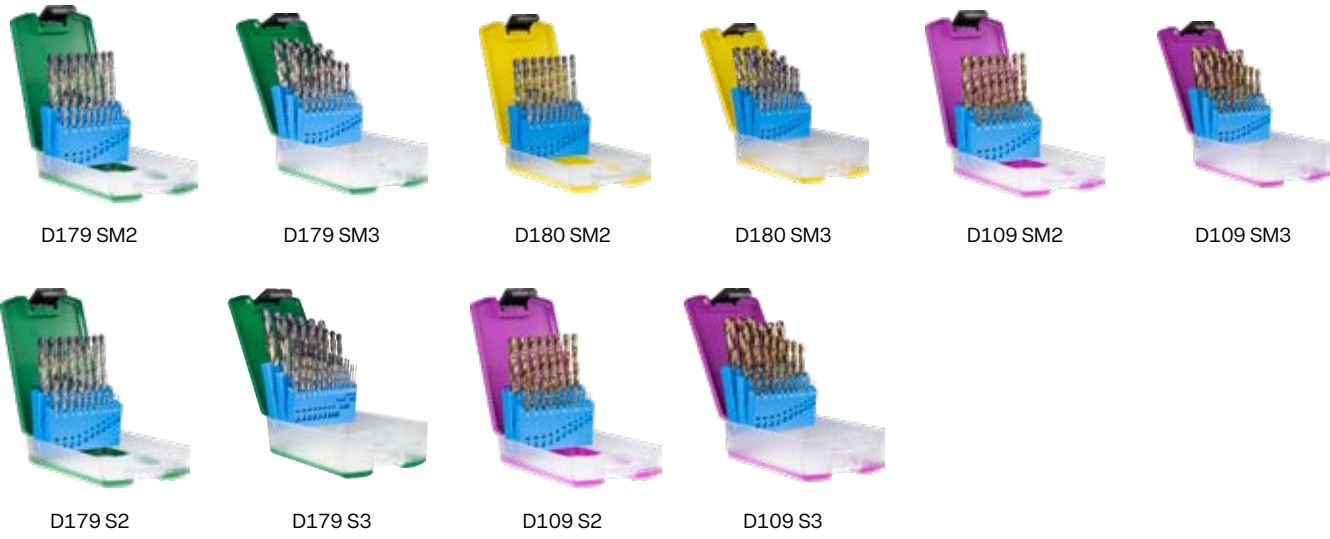
- Set di Punta**
- Disponibile in varie combinazione
- Metrico e Pollici

- Sets de Brocas**
- Varias combinaciones disponibles
- Métrico e Imperial



Catalogue Code	D179	D180	D109
Discount Group	A1202	A1202	A0404
Material	HSS	HSS	HSS Co
Surface Finish	TiAIN Tip	TiAIN Tip	Colour Temp
Sutton Designation	N	VA	Hard Materials
Geometry	R30	R40	R25
Point Type	118° Form C	130° Standard	135° Form C
Shank Tolerance	h9	h9	-

Size Ref.	Range	Case	Pieces	Item #	Item #	Item #
Metric (DIN 338)						
SM2	1.0 - 10.0mm x 0.5	ABS	19	D179 SM2	D180 SM2	D109 SM2
SM3	1.0 - 13.0mm x 0.5	ABS	25	D179 SM3	D180 SM3	D109 SM3
SM30	1.0mm - 5.9mm x 0.1	Metal	50	D179 SM30	D180 SM30	
SM41	6.0mm - 10.0mm x 0.1	Metal	41	D179 SM41	D180 SM41	
Imperial (ANSI B94-11)						
S2	1/16 - 3/8 x 1/64	ABS	21	D179 S2		D109 S2
S3	1/16 - 1/2 x 1/64	ABS	29	D179 S3		D109 S3



ISO	P										M			K						N										S										H											
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41		
D179	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○		
D180	●	●	●	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
D109		●	○	●		●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials ● Optimal ○ Effective



- Suitable for materials up to 1200N/mm²
- Point geometry ensures high strength
- Parabolic flute design for optimal chip transportation
- TiAIN for longer tool life



Forets queue cylindrique haute performance court CNC

- Adaptés au matériaux jusqu'à 1200N/mm²
- Affûtage 130° pour un parfait centrage
- Taillage parabolique pour une meilleure évacuation copeaux
- TiAIN for longer tool life



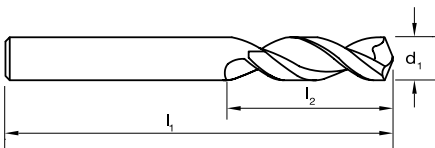
Punte Stub, CNC

- Ideale per materiali fino a 1200N/mm²
- Geometria di punta per garantire un'elevata resistenza
- Scalanatura tagliente progettato per ottima evaquazione truciolo
- TiAIN per massimizzare vita utensile



Broca Stub, CNC

- Adecuado para materiales de hasta 1200N/mm²
- La geometría de la punta garantiza una alta resistencia
- Diseño de hélice parabólica para una evacuación óptima de la viruta
- TiAIN para una mayor vida útil de la herramienta



Vc Page #: 414 →



Catalogue Code	D151
Discount Group	A1006
Material	HSS Co
Surface Finish	TiAIN
Sutton Designation	NH
Geometry	R40
Point Type	130°
Shank Tolerance	h9

Size Ref.	d ₁ (h8)	l ₁	l ₂	Point	Item #
0100	1.0	26	6	A	D151 0100
0110	1.1	28	7	A	D151 0110
0120	1.2	30	8	A	D151 0120
0130	1.3	30	8	A	D151 0130
0140	1.4	32	9	A	D151 0140
0150	1.5	32	9	A	D151 0150
0160	1.6	34	10	A	D151 0160
0170	1.7	34	10	A	D151 0170
0180	1.8	36	11	A	D151 0180
0190	1.9	36	11	A	D151 0190
0200	2.0	38	12	B	D151 0200
0210	2.1	40	13	B	D151 0210
0220	2.2	40	13	B	D151 0220
0230	2.3	40	13	B	D151 0230
0240	2.4	43	14	B	D151 0240
0250	2.5	43	14	B	D151 0250
0260	2.6	43	14	B	D151 0260
0270	2.7	46	16	B	D151 0270
0280	2.8	46	16	B	D151 0280
0290	2.9	46	16	B	D151 0290
0300	3.0	46	16		D151 0300
0310	3.1	49	18		D151 0310
0318	3.18	49	18		D151 0318
0320	3.2	49	18		D151 0320
0330	3.3	49	18		D151 0330
0340	3.4	52	20		D151 0340
0350	3.5	52	20		D151 0350
0360	3.6	52	20		D151 0360

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
0370	3.7	52	20	D151 0370
0380	3.8	55	22	D151 0380
0390	3.9	55	22	D151 0390
0400	4.0	55	22	D151 0400
0410	4.1	55	22	D151 0410
0420	4.2	55	22	D151 0420
0430	4.3	58	24	D151 0430
0440	4.4	58	24	D151 0440
0450	4.5	58	24	D151 0450
0460	4.6	58	24	D151 0460
0470	4.7	58	24	D151 0470
0480	4.8	62	26	D151 0480
0490	4.9	62	26	D151 0490
0500	5.0	62	26	D151 0500
0510	5.1	62	26	D151 0510
0520	5.2	62	26	D151 0520
0530	5.3	62	26	D151 0530
0540	5.4	66	28	D151 0540
0550	5.5	66	28	D151 0550
0560	5.6	66	28	D151 0560
0570	5.7	66	28	D151 0570
0580	5.8	66	28	D151 0580
0590	5.9	66	28	D151 0590
0600	6.0	66	28	D151 0600
0610	6.1	70	31	D151 0610
0620	6.2	70	31	D151 0620
0630	6.3	70	31	D151 0630
0640	6.4	70	31	D151 0640

ISO	P										M					K					N						S						H																				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41				
D151	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel
 M Stainless Steel
 K Cast Iron
 N Non-Ferrous Metals
 S Titanium & Super Alloys
 H Hard Materials

● Optimal ○ Effective



- Suitable for materials up to 1200N/mm²
- Point geometry ensures high strength
- Parabolic flute design for optimal chip transportation
- TiAlN for longer tool life



Forets queue cylindrique haute performance court CNC

- Adaptés au matériaux jusqu'à 1200N/mm²
- Affûtage 130° pour un parfait centrage
- Taillage parabolique pour une meilleure évacuation copeaux
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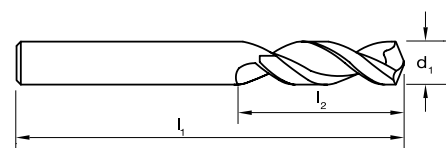
Punte Stub, CNC

- Ideale per materiali fino a 1200N/mm²
- Geometria di punta per garantire un'elevata resistenza
- Scalatura tagliente progettato per ottima evaquazione truciolo
- TiAlN per massimizzare vita utensile



Broca Stub, CNC

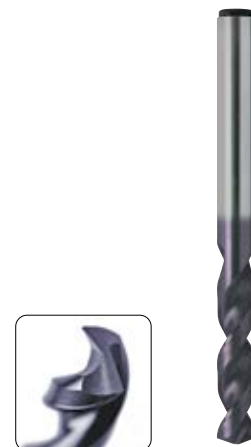
- Adecuado para materiales de hasta 1200N/mm²
- La geometría de la punta garantiza una alta resistencia
- Diseño de hélice parabólica para una evacuación óptima de la viruta
- TiAlN para una mayor vida útil de la herramienta



Vc Page #: 414 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
0650	6.5	70	31	D151 0650
0660	6.6	70	31	D151 0660
0670	6.7	70	31	D151 0670
0680	6.8	74	34	D151 0680
0690	6.9	74	34	D151 0690
0700	7.0	74	34	D151 0700
0710	7.1	74	34	D151 0710
0720	7.2	74	34	D151 0720
0730	7.3	74	34	D151 0730
0740	7.4	74	34	D151 0740
0750	7.5	74	34	D151 0750
0760	7.6	79	37	D151 0760
0770	7.7	79	37	D151 0770
0780	7.8	79	37	D151 0780
0790	7.9	79	37	D151 0790
0800	8.0	79	37	D151 0800
0810	8.1	79	37	D151 0810
0820	8.2	79	37	D151 0820
0830	8.3	79	37	D151 0830
0840	8.4	79	37	D151 0840
0850	8.5	79	37	D151 0850
0860	8.6	84	40	D151 0860
0870	8.7	84	40	D151 0870
0880	8.8	84	40	D151 0880
0890	8.9	84	40	D151 0890
0900	9.0	84	40	D151 0900
0910	9.1	84	40	D151 0910
0920	9.2	84	40	D151 0920

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
0930	9.3	84	40	D151 0930
0940	9.4	84	40	D151 0940
0950	9.5	84	40	D151 0950
0960	9.6	89	43	D151 0960
0970	9.7	89	43	D151 0970
0980	9.8	89	43	D151 0980
0990	9.9	89	43	D151 0990
1000	10.0	89	43	D151 1000
1010	10.1	89	43	•
1020	10.2	89	43	D151 1020
1030	10.3	89	43	D151 1030
1040	10.4	89	43	D151 1040
1050	10.5	89	43	D151 1050
1060	10.6	95	47	D151 1060
1070	10.7	95	47	D151 1070
1080	10.8	95	47	D151 1080
1090	10.9	95	47	D151 1090
1100	11.0	95	47	D151 1100
1110	11.1	95	47	D151 1110
1120	11.2	95	47	•
1130	11.3	95	47	D151 1130
1140	11.4	95	47	D151 1140
1150	11.5	95	47	D151 1150
1160	11.6	95	47	•
1170	11.7	95	47	•
1180	11.8	95	47	D151 1180
1190	11.9	102	51	•
1200	12.0	102	51	D151 1200



Catalogue Code	D151
Discount Group	A1006
Material	HSS Co
Surface Finish	TiAlN
Sutton Designation	NH
Geometry	R40
Point Type	130°
Shank Tolerance	h9

ISO	P										M			K					N										S										H										
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41
D151	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	○

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective



- Suitable for materials up to 1200N/mm²
- Point geometry ensures high strength
- Parabolic flute design for optimal chip transportation
- TiAlN for longer tool life



Forets queue cylindrique haute performance court CNC

- Adaptés au matériaux jusqu'à 1200N/mm²
- Affûtage 130° pour un parfait centrage
- Taillage parabolique pour une meilleure évacuation copeaux
- TiAlN for longer tool life



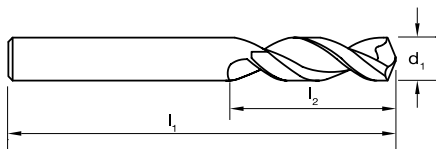
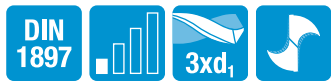
Punte Stub, CNC

- Ideale per materiali fino a 1200N/mm²
- Geometria di punta per garantire un'elevata resistenza
- Scanatura tagliente progettato per ottima evaquazione truciolo
- TiAlN per massimizzare vita utensile



Broca Stub, CNC

- Adecuado para materiales de hasta 1200N/mm²
- La geometría de la punta garantiza una alta resistencia
- Diseño de hélice parabólica para una evacuación óptima de la viruta
- TiAlN para una mayor vida útil de la herramienta



Vc Page #: 414 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
1210	12.1	102	51	•
1220	12.2	102	51	D151 1220
1230	12.3	102	51	•
1240	12.4	102	51	•
1250	12.5	102	51	D151 1250
1260	12.6	102	51	•
1270	12.7	102	51	D151 1270
1280	12.8	102	51	D151 1280
1290	12.9	102	51	D151 1290
1300	13.0	102	51	D151 1300
1350	13.5	107	54	D151 1350
1400	14.0	107	54	D151 1400
1450	14.5	111	56	D151 1450
1500	15.0	111	56	D151 1500
1550	15.5	115	58	D151 1550
1600	16.0	115	58	D151 1600
1650	16.5	119	60	D151 1650
1700	17.0	119	60	D151 1700
1750	17.5	123	62	D151 1750
1800	18.0	123	62	D151 1800
1850	18.5	127	64	D151 1850
1900	19.0	127	64	D151 1900
1950	19.5	131	66	D151 1950
2000	20.0	131	66	D151 2000



Catalogue Code	D151
Discount Group	A1006
Material	HSS Co
Surface Finish	TIAlN
Sutton Designation	NH
Geometry	R40
Point Type	130°
Shank Tolerance	h9

Size Ref.	d ₁ (h8)	l ₁	l ₂	Pieces	Item #

ISO	P										M					K					N										S					H													
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41
D151	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	P	M										K	N										S					H																					

● Optimal ○ Effective

• Available on request as special manufacture. Subject to lead time.



- Suitable for materials up to 850N/mm²
- Special point geometry with radius cutting lips
- Produces short chips
- TiAlN for longer tool life



Forets queue cylindrique haute performance court DXS

- Utilisable dans les matériaux jusqu'à 850N/mm²
- Affûtage spécial avec rayon de coupe en bout
- Produit des copeaux courts
- Revêtement TiAlN pour une meilleure durée de vie



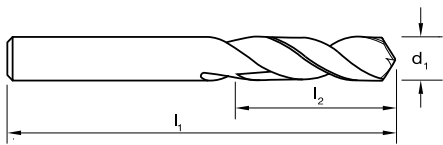
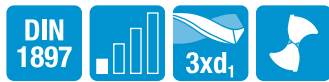
Punte Stub, DXS

- Ideale per materiali fino a 850N/mm²
- Geometria di punta speciale con labbro di rinforzo tagliente
- Produce trucioli piccoli
- TiAlN per massimizzare vita utensile



Broca Stub, DXS

- Adecuado para materiales de hasta 800N/mm²
- Geometría de punta especial con labios de corte radial
- Produce virutas cortas
- TiAlN para una mayor vida útil de la herramienta



Vc Page #: 414 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
0100	1.0	26	6	D177 0100
0110	1.1	28	7	D177 0110
0120	1.2	30	8	D177 0120
0130	1.3	30	8	D177 0130
0140	1.4	32	9	D177 0140
0150	1.5	32	9	D177 0150
0160	1.6	34	10	D177 0160
0170	1.7	34	10	D177 0170
0180	1.8	36	11	D177 0180
0190	1.9	36	11	D177 0190
0200	2.0	38	12	D177 0200
0210	2.1	40	13	D177 0210
0220	2.2	40	13	D177 0220
0230	2.3	40	13	D177 0230
0240	2.4	43	14	D177 0240
0250	2.5	43	14	D177 0250
0260	2.6	43	14	D177 0260
0270	2.7	46	16	D177 0270
0280	2.8	46	16	D177 0280
0290	2.9	46	16	D177 0290
0300	3.0	46	16	D177 0300
0310	3.1	49	18	D177 0310
0320	3.2	49	18	D177 0320
0330	3.3	49	18	D177 0330
0340	3.4	52	20	D177 0340
0350	3.5	52	20	D177 0350
0360	3.6	52	20	D177 0360
0370	3.7	52	20	D177 0370
0380	3.8	55	22	D177 0380
0390	3.9	55	22	D177 0390
0400	4.0	55	22	D177 0400
0410	4.1	55	22	D177 0410

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
0420	4.2	55	22	D177 0420
0430	4.3	58	24	D177 0430
0440	4.4	58	24	D177 0440
0450	4.5	58	24	D177 0450
0460	4.6	58	24	D177 0460
0470	4.7	58	24	D177 0470
0480	4.8	62	26	D177 0480
0490	4.9	62	26	D177 0490
0500	5.0	62	26	D177 0500
0510	5.1	62	26	D177 0510
0520	5.2	62	26	D177 0520
0530	5.3	62	26	D177 0530
0540	5.4	66	28	D177 0540
0550	5.5	66	28	D177 0550
0560	5.6	66	28	D177 0560
0570	5.7	66	28	D177 0570
0580	5.8	66	28	D177 0580
0590	5.9	66	28	D177 0590
0600	6.0	66	28	D177 0600
0610	6.1	70	31	D177 0610
0620	6.2	70	31	D177 0620
0630	6.3	70	31	D177 0630
0640	6.4	70	31	D177 0640
0650	6.5	70	31	D177 0650
0660	6.6	70	31	D177 0660
0670	6.7	70	31	D177 0670
0680	6.8	74	34	D177 0680
0690	6.9	74	34	D177 0690
0700	7.0	74	34	D177 0700
0710	7.1	74	34	D177 0710
0720	7.2	74	34	D177 0720
0730	7.3	74	34	D177 0730



Catalogue Code	D177
Discount Group	A1006
Material	HSS Co
Surface Finish	TiAlN
Sutton Designation	WN
Geometry	R35
Point Type	130° Form A
Shank Tolerance	h9

ISO	P										M					K					N										S										H														
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41						
D177	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel
 M Stainless Steel
 K Cast Iron
 N Non-Ferrous Metals
 S Titanium & Super Alloys
 H Hard Materials

● Optimal ○ Effective



- Suitable for materials up to 850N/mm²
- Special point geometry with radius cutting lips
- Produces short chips
- TiAlN for longer tool life



Forets queue cylindrique haute performance court DXS

- Utilisable dans les matériaux jusqu'à 850N/mm²
- Affûtage spécial avec rayon de coupe en bout
- Produit des copeaux courts
- Revêtement TiAlN pour une meilleure durée de vie



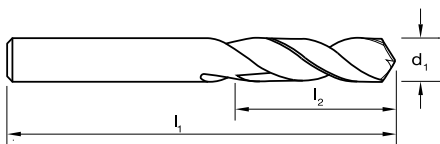
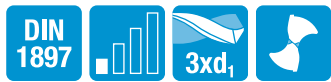
Punte Stub, DXS

- Ideale per materiali fino a 850N/mm²
- Geometria di punta speciale con labbro di rinforzo tagliente
- Produce trucioli piccoli
- TiAlN per massimizzare vita utensile



Broca Stub, DXS

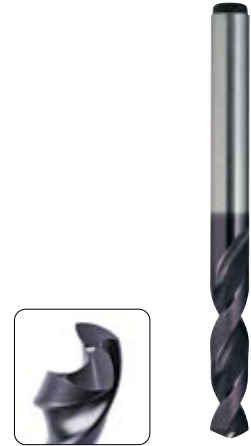
- Adecuado para materiales de hasta 800N/mm²
- Geometría de punta especial con labios de corte radial
- Produce virutas cortas
- TiAlN para una mayor vida útil de la herramienta



Vc Page #: 414 →

Size Ref.	d ₁ (m7)	l ₁	l ₂	Item #
0740	7.4	74	34	D177 0740
0750	7.5	74	34	D177 0750
0760	7.6	79	37	D177 0760
0770	7.7	79	37	D177 0770
0780	7.8	79	37	D177 0780
0790	7.9	79	37	D177 0790
0800	8.0	79	37	D177 0800
0810	8.1	79	37	D177 0810
0820	8.2	79	37	D177 0820
0830	8.3	79	37	D177 0830
0840	8.4	79	37	D177 0840
0850	8.5	79	37	D177 0850
0860	8.6	84	40	D177 0860
0870	8.7	84	40	D177 0870
0880	8.8	84	40	D177 0880
0890	8.9	84	40	D177 0890
0900	9.0	84	40	D177 0900
0910	9.1	84	40	D177 0910
0920	9.2	84	40	D177 0920
0930	9.3	84	40	D177 0930
0940	9.4	84	40	D177 0940
0950	9.5	84	40	D177 0950
0960	9.6	89	43	D177 0960
0970	9.7	89	43	D177 0970
0980	9.8	89	43	D177 0980
0990	9.9	89	43	D177 0990
1000	10.0	89	43	D177 1000
1010	10.1	89	43	D177 1010
1020	10.2	89	43	D177 1020
1050	10.5	89	43	D177 1050
1080	10.8	95	47	D177 1080
1100	11.0	95	47	D177 1100

Size Ref.	Range	Pieces	Item #
1120	11.2	95 47	D177 1120
1150	11.5	95 47	D177 1150
1180	11.8	95 47	D177 1180
1200	12.0	102 51	D177 1200
1220	12.2	102 51	D177 1220
1250	12.5	102 51	D177 1250
1280	12.8	102 51	D177 1280
1300	13.0	102 51	D177 1300
1350	13.5	107 54	D177 1350
1400	14.0	107 54	D177 1400
1450	14.5	111 56	D177 1450
1500	15.0	111 56	D177 1500
1550	15.5	115 58	D177 1550
1600	16.0	115 58	D177 1600
1650	16.5	119 60	D177 1650
1700	17.0	119 60	D177 1700
1750	17.5	123 62	D177 1750
1800	18.0	123 62	D177 1800
1850	18.5	127 64	D177 1850
1900	19.0	127 64	D177 1900
1950	19.5	131 66	D177 1950
2000	20.0	131 66	D177 2000



Catalogue Code	D177
Discount Group	A1006
Material	HSS Co
Surface Finish	TiAlN
Sutton Designation	WN
Geometry	R35
Point Type	130° Form A
Shank Tolerance	h9

ISO	P													M					K					N										S										H										
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41					
D177	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective



- SPM offers superior performance
- Suitable for production drilling as an alternative to carbide drills
- Suitable for materials up to 1500N/mm²
- Point geometry ensures high strength & short chips
- Endmill shank for greater accuracy
- TiAlN for longer tool life



Forets queue cylindrique haute performance court, Hélice 40°, universel

- Substrat SPM pour une meilleure performance
- Adapté à la production de masse, une alternative au foret carbure
- Utilisable dans les matériaux jusqu'à 1500N/mm² et les
- Super Alliages
- Affûtage 4 faces, pour un meilleur centrage, produit des copeaux courts
- Queue cylindrique de plus gros diamètre pour une meilleure stabilité
- Revêtement TiAlN pour une meilleure durée de vie



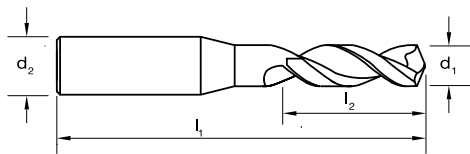
Punte Stub, R40 UNI

- SPM offre una prestazione superiore
- Ideale per foratura di produzione come alternativa al metallo duro
- Ideale per materiali fino a 1500N/mm²
- Geometria di punta per garantire un'elevata resistenza e trucioli corti
- Precisione gambo di attacco paritetica a Gambo Frese
- TiAlN per massimizzare vita utensile



Broca Stub, R40 UNI

- SPM ofrece un rendimiento superior
- Adecuado para taladrado de producción como alternativa a las brocas de metal duro
- Adecuado para materiales de hasta 1500N/mm²
- La geometría de la punta garantiza alta resistencia y virutas cortas
- Mango de mayor precisión
- TiAlN para una mayor vida útil de la herramienta



Catalogue Code	D155
Discount Group	A1502
Material	SPM
Surface Finish	TiAlN
Sutton Designation	UNI
Geometry	R40
Point Type	130° 4 Facet Form B
Shank Tolerance	h7

Vc Page #: 414 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Item #
0100	1.0	38	6	3	D155 0100
0110	1.1	39	7	3	D155 0110
0120	1.2	40	8	3	D155 0120
0130	1.3	40	8	3	D155 0130
0140	1.4	41	9	3	D155 0140
0150	1.5	41	9	3	D155 0150
0160	1.6	42	10	3	D155 0160
0170	1.7	42	10	3	D155 0170
0180	1.8	43	11	3	D155 0180
0190	1.9	43	11	3	D155 0190
0200	2.0	44	12	3	D155 0200
0210	2.1	44	12	3	D155 0210
0220	2.2	45	13	3	D155 0220
0230	2.3	45	13	3	D155 0230
0240	2.4	46	14	3	D155 0240
0250	2.5	46	14	3	D155 0250
0260	2.6	46	14	3	D155 0260
0270	2.7	46	16	3	D155 0270
0280	2.8	46	16	3	D155 0280
0290	2.9	46	16	3	D155 0290
0300	3.0	46	16	3	D155 0300
0310	3.1	49	18	4	D155 0310
0320	3.2	49	18	4	D155 0320
0330	3.3	49	18	4	D155 0330
0340	3.4	52	20	4	D155 0340
0350	3.5	52	20	4	D155 0350
0360	3.6	52	20	4	D155 0360
0370	3.7	52	20	4	D155 0370

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Item #
0380	3.8	55	22	4	D155 0380
0390	3.9	55	22	4	D155 0390
0400	4.0	55	22	4	D155 0400
0410	4.1	55	22	6	D155 0410
0420	4.2	55	22	6	D155 0420
0430	4.3	58	24	6	D155 0430
0440	4.4	58	24	6	D155 0440
0450	4.5	58	24	6	D155 0450
0460	4.6	58	24	6	D155 0460
0470	4.7	58	24	6	D155 0470
0480	4.8	62	26	6	D155 0480
0490	4.9	62	26	6	D155 0490
0500	5.0	62	26	6	D155 0500
0510	5.1	62	26	6	D155 0510
0520	5.2	62	26	6	D155 0520
0530	5.3	62	26	6	D155 0530
0540	5.4	66	28	6	D155 0540
0550	5.5	66	28	6	D155 0550
0560	5.6	66	28	6	D155 0560
0570	5.7	66	28	6	D155 0570
0580	5.8	66	28	6	D155 0580
0590	5.9	66	28	6	D155 0590
0600	6.0	66	28	6	D155 0600
0610	6.1	70	31	8	D155 0610
0620	6.2	70	31	8	D155 0620
0630	6.3	70	31	8	D155 0630
0640	6.4	70	31	8	D155 0640
0650	6.5	70	31	8	D155 0650

ISO	P										M					K										N										S										H									
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41						
D155	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective



- SPM offers superior performance
- Suitable for production drilling as an alternative to carbide drills
- Suitable for materials up to 1500N/mm²
- Point geometry ensures high strength & short chips
- Endmill shank for greater accuracy
- TiAlN for longer tool life



Forets queue cylindrique haute performance court, Hélice 40°, universel

- Substrat SPM pour une meilleure performance
- Adapté à la production de masse, une alternative au foret carbure
- Utilisable dans les matériaux jusqu'à 1500N/mm² et les Super Alliages
- Affûtage 4 faces, pour un meilleur centrage, produit des copeaux courts
- Queue cylindrique de plus gros diamètre pour une meilleure stabilité
- Revêtement TiAlN pour une meilleure durée de vie



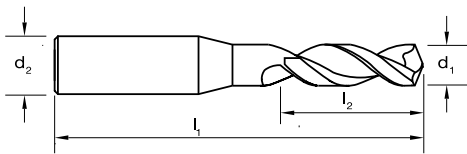
Punte Stub, R40 UNI

- SPM offre una prestazione superiore
- Ideale per foratura di produzione come alternativa al metallo duro
- Ideale per materiali fino a 1500N/mm²
- Geometria di punta per garantire un'elevata resistenza e trucioli corti
- Precisione gambo di attacco paritetica a Gambo Frese
- TiAlN per massimizzare vita utensile



Broca Stub, R40 UNI

- SPM ofrece un rendimiento superior
- Adecuado para taladrado de producción como alternativa a las brocas de metal duro
- Adecuado para materiales de hasta 1500N/mm²
- La geometría de la punta garantiza alta resistencia y virutas cortas
- Mango de mayor precisión
- TiAlN para una mayor vida útil de la herramienta



Vc Page #: 414 →

Size Ref.	d ₁ (m7)	l ₁	l ₂	d ₂	Item #
0660	6.6	70	31	8	D155 0660
0670	6.7	70	31	8	D155 0670
0680	6.8	74	34	8	D155 0680
0690	6.9	74	34	8	D155 0690
0700	7.0	74	34	8	D155 0700
0710	7.1	74	34	8	D155 0710
0720	7.2	74	34	8	D155 0720
0730	7.3	74	34	8	D155 0730
0740	7.4	74	34	8	D155 0740
0750	7.5	74	34	8	D155 0750
0760	7.6	79	37	8	D155 0760
0770	7.7	79	37	8	D155 0770
0780	7.8	79	37	8	D155 0780
0790	7.9	79	37	8	D155 0790
0800	8.0	79	37	8	D155 0800
0810	8.1	79	37	10	D155 0810
0820	8.2	79	37	10	D155 0820
0830	8.3	79	37	10	D155 0830
0840	8.4	79	37	10	D155 0840
0850	8.5	79	37	10	D155 0850
0860	8.6	84	40	10	D155 0860
0870	8.7	84	40	10	D155 0870
0880	8.8	84	40	10	D155 0880
0890	8.9	84	40	10	D155 0890
0900	9.0	84	40	10	D155 0900
0910	9.1	84	40	10	D155 0910
0920	9.2	84	40	10	D155 0920
0930	9.3	84	40	10	D155 0930

Size Ref.	d ₁ (m7)	l ₁	l ₂	d ₂	Item #
0940	9.4	84	40	10	D155 0940
0950	9.5	84	40	10	D155 0950
0960	9.6	89	43	10	D155 0960
0970	9.7	89	43	10	D155 0970
0980	9.8	89	43	10	D155 0980
0990	9.9	89	43	10	D155 0990
1000	10.0	89	43	10	D155 1000
1010	10.1	89	43	10	D155 1010
1020	10.2	89	43	10	D155 1020
1030	10.3	89	43	10	D155 1030
1040	10.4	89	43	10	D155 1040
1050	10.5	89	43	10	D155 1050
1060	10.6	95	47	12	D155 1060
1070	10.7	95	47	12	D155 1070
1080	10.8	95	47	12	D155 1080
1090	10.9	95	47	12	D155 1090
1100	11.0	95	47	12	D155 1100
1110	11.1	95	47	12	D155 1110
1120	11.2	95	47	12	D155 1120
1130	11.3	95	47	12	D155 1130
1140	11.4	95	47	12	D155 1140
1150	11.5	95	47	12	D155 1150
1160	11.6	95	47	12	D155 1160
1170	11.7	95	47	12	D155 1170
1180	11.8	95	47	12	D155 1180
1190	11.9	102	51	12	D155 1190
1200	12.0	102	51	12	D155 1200
1210	12.1	102	51	12	D155 1210



Catalogue Code	D155
Discount Group	A1502
Material	SPM
Surface Finish	TiAlN
Sutton Designation	UNI
Geometry	R40
Point Type	130° 4 Facet Form B
Shank Tolerance	h7

ISO	P											M					K					N					S					H																			
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41		
D155	●	●	●	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective

Drills Stub, R40 UNI



- SPM offers superior performance
- Suitable for production drilling as an alternative to carbide drills
- Suitable for materials up to 1500N/mm²
- Point geometry ensures high strength & short chips
- Endmill shank for greater accuracy
- TiAlN for longer tool life



Forets queue cylindrique haute performance court, Hélice 40°, universel

- Substrat SPM pour une meilleure performance
- Adapté à la production de masse, une alternative au foret carbure
- Utilisable dans les matériaux jusqu'à 1500N/mm² et les Super Alliages
- Affûtage 4 faces, pour un meilleur centrage, produit des copeaux courts
- Queue cylindrique de plus gros diamètre pour une meilleure stabilité
- Revêtement TiAlN pour une meilleure durée de vie



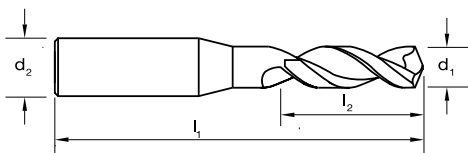
Punte Stub, R40 UNI

- SPM offre una prestazione superiore
- Ideale per foratura di produzione come alternativa al metallo duro
- Ideale per materiali fino a 1500N/mm²
- Geometria di punta per garantire un'elevata resistenza e trucioli corti
- Precisione gambo di attacco paritetica a Gambo Frese
- TiAlN per massimizzare vita utensile



Broca Stub, R40 UNI

- SPM ofrece un rendimiento superior
- Adecuado para taladrado de producción como alternativa a las brocas de metal duro
- Adecuado para materiales de hasta 1500N/mm²
- La geometría de la punta garantiza alta resistencia y virutas cortas
- Mango de mayor precisión
- TiAlN para una mayor vida útil de la herramienta



Catalogue Code	D155
Discount Group	A1502
Material	SPM
Surface Finish	TiAlN
Sutton Designation	UNI
Geometry	R40
Point Type	130° 4 Facet Form B
Shank Tolerance	h7

Vc Page #: 414 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Item #
1220	12.2	102	51	12	D155 1220
1230	12.3	102	51	12	D155 1230
1240	12.4	102	51	12	D155 1240
1250	12.5	102	51	12	D155 1250
1260	12.6	102	51	12	D155 1260
1270	12.7	102	51	12	D155 1270
1280	12.8	102	51	12	D155 1280
1290	12.9	102	51	12	D155 1290
1300	13.0	102	51	12	D155 1300
1350	13.5	107	54	16	D155 1350
1400	14.0	107	54	16	D155 1400
1450	14.5	111	56	16	D155 1450
1500	15.0	111	56	16	D155 1500
1550	15.5	115	58	16	D155 1550
1600	16.0	115	58	16	D155 1600
1650	16.5	119	60	20	D155 1650
1700	17.0	119	60	20	D155 1700
1750	17.5	123	62	20	D155 1750
1800	18.0	123	62	20	D155 1800
1850	18.5	127	64	20	D155 1850
1900	19.0	127	64	20	D155 1900
1950	19.5	131	66	20	D155 1950
2000	20.0	131	66	20	D155 2000

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Item #

ISO	P										M			K						N						S						H																				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41			
D155	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials ● Optimal ○ Effective

Drills Stub, R40 VA, Black Magic



- Excellent solution for austenitic stainless steels and most long chipping materials
- Optimised geometry ensures no work hardening and high productivity
- Endmill shank for greater accuracy
- TiAlN for longer tool life



Brocas Stub, R40 UNI, VA, Black Magic

- Excelente solución para aceros inoxidable austeníticos y la mayoría de los materiales de viruta larga
- La geometría optimizada que garantiza una alta productividad
- Mango de mayor precisión
- TiAlN para una mayor vida útil de la herramienta



watch the video



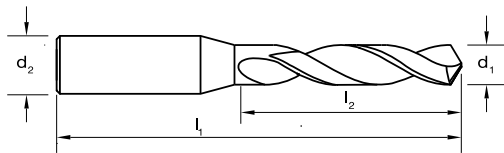
Forets queue cylindrique haute performance court, Hélice 40° VA, Black Magic

- Excellente solution pour les Inox et matériaux à copeaux longs
- Géométrie optimisée pour réduire les efforts
- Queue cylindrique de plus gros diamètre pour une meilleure stabilité
- TiAlN for longer tool life



Punte Stub, R40 VA Black Magic

- Eccellente soluzione per acciai inossidabili e materiale di scarsa truciolabilità
- Geometria ottimizzata per lavorare intensamente ad alta produttività
- Precisione gambo di attacco paritetica a Gambo Frese
- TiAlN per massimizzare vita utensile



Vc Page #: 414 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Point Angle	Item #
0050	0.5	38	3	3	140°	D153 0050
0060	0.6	38	3.5	3	140°	D153 0060
0070	0.7	38	4.5	3	140°	D153 0070
0080	0.8	38	5	3	140°	D153 0080
0086	0.86	38	5.5	3	140°	•
0090	0.9	38	5.5	3	140°	D153 0090
0100	1.0	38	6	3	140°	D153 0100
0106	1.06	38	7	3	140°	•
0110	1.1	39	7	3	140°	D153 0110
0120	1.2	40	8	3	140°	D153 0120
0126	1.26	40	8	3	140°	•
0130	1.3	40	8	3	140°	D153 0130
0135	1.35	41	8	3	140°	•
0138	1.38	41	9	3	140°	•
0140	1.4	41	9	3	140°	D153 0140
0142	1.42	41	9	3	140°	•
0146	1.46	41	9	3	140°	•
0148	1.48	41	9	3	140°	•
0150	1.5	41	9	3	140°	D153 0150
0153	1.53	42	10	3	140°	•
0160	1.6	42	10	3	140°	D153 0160
0170	1.7	42	10	3	140°	D153 0170
0180	1.8	43	11	3	140°	D153 0180
0183	1.83	43	11	3	140°	•
0190	1.9	43	11	3	140°	D153 0190
0195	1.95	44	12	3	140°	D153 0195
0200	2.0	44	12	3	130°	D153 0200
0209	2.09	44	12	3	130°	•

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Point Angle	Item #	
0210	2.1	44	12	3	130°	D153 0210	
0220	2.2	45	13	3	130°	D153 0220	
0226	2.26	45	13	3	130°	•	
0230	2.3	45	13	3	130°	D153 0230	
0240	2.4	46	14	3	130°	D153 0240	
0250	2.5	46	14	3	130°	D153 0250	
0260	2.6	46	14	3	130°	D153 0260	
0270	2.7	46	16	3	130°	D153 0270	
0276	2.76	46	16	3	130°	•	
0280	2.8	46	16	3	130°	D153 0280	
0285	2.85	46	16	3	130°	D153 0285	
0290	2.9	46	16	3	130°	D153 0290	
0300	3.0	46	16	3	130°	D153 0300	
0310	3.1	49	18	4	130°	D153 0310	
0318	3.18	1/8	49	18	4	130°	D153 0318
0320	3.2	49	18	4	130°	D153 0320	
0330	3.3	49	18	4	130°	D153 0330	
0340	3.4	52	20	4	130°	D153 0340	
0350	3.5	52	20	4	130°	D153 0350	
0357	3.57	9/64	52	20	4	130°	D153 0357
0360	3.6	52	20	4	130°	D153 0360	
0370	3.7	52	20	4	130°	D153 0370	
0378	3.78	52	20	4	130°	D153 0378	
0380	3.8	55	22	4	130°	D153 0380	
0390	3.9	55	22	4	130°	D153 0390	
0397	3.97	5/32	55	22	4	130°	D153 0397
0400	4.0	55	22	4	130°	D153 0400	
0410	4.1	55	22	6	120°	D153 0410	



Catalogue Code	D153
Discount Group	A1502
Material	HSS Co
Surface Finish	TiAlN
Sutton Designation	VA
Geometry	R40
Point Type	4 Facet
Shank Tolerance	h7

ISO	P					M					K					N					S					H																												
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41					
D153	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel
 M Stainless Steel
 K Cast Iron
 N Non-Ferrous Metals
 S Titanium & Super Alloys
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● Optimal ○ Effective



- Excellent solution for austenitic stainless steels and most long chipping materials
- Optimised geometry ensures no work hardening and high productivity
- Endmill shank for greater accuracy
- TiAlN for longer tool life



Brocas Stub, R40 UNI, VA, Black Magic

- Excelente solución para aceros inoxidables austeníticos y la mayoría de los materiales de viruta larga
- La geometría optimizada que garantiza una alta productividad
- Mango de mayor precisión
- TiAlN para una mayor vida útil de la herramienta



watch the video



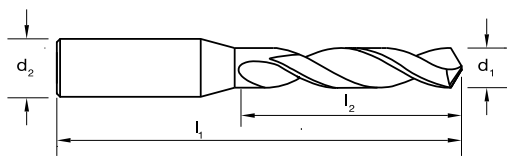
Forets queue cylindrique haute performance court, Hélice 40° VA, Black Magic

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- Géométrie optimisée pour réduire les efforts
- Queue cylindrique de plus gros diamètre pour une meilleure stabilité
- TiAlN for longer tool life



Punte Stub, R40 VA Black Magic

- Eccellente soluzione per acciai inossidabili e materiale di scarsa truciolabilità
- Geometria ottimizzata per lavorare intensamente ad alta produttività
- Precisione gambo di attacco paritetica a Gambo Frese
- TiAlN per massimizzare vita utensile



Catalogue Code	D153
Discount Group	A1502
Material	HSS Co
Surface Finish	TiAlN
Sutton Designation	VA
Geometry	R40
Point Type	4 Facet
Shank Tolerance	h7

Vc Page #: 414 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Point Angle	Item #
0420	4.2	55	22	6	120°	D153 0420
0430	4.3	58	24	6	120°	D153 0430
0437	4.37 11/64	58	24	6	120°	D153 0437
0440	4.4	58	24	6	120°	D153 0440
0450	4.5	58	24	6	120°	D153 0450
0460	4.6	58	24	6	120°	D153 0460
0465	4.65	58	24	6	120°	D153 0465
0470	4.7	58	24	6	120°	D153 0470
0476	4.76 3/16	62	26	6	120°	D153 0476
0478	4.78	62	26	6	120°	D153 0478
0480	4.8	62	26	6	120°	D153 0480
0490	4.9	62	26	6	120°	D153 0490
0500	5.0	62	26	6	120°	D153 0500
0505	5.05	62	26	6	120°	D153 0505
0510	5.1	62	26	6	120°	D153 0510
0516	5.16 13/64	62	26	6	120°	D153 0516
0520	5.2	62	26	6	120°	D153 0520
0530	5.3	62	26	6	120°	D153 0530
0540	5.4	66	28	6	120°	D153 0540
0550	5.5	66	28	6	120°	D153 0550
0555	5.55	66	28	6	120°	D153 0555
0556	5.56 7/32	66	28	6	120°	D153 0556
0560	5.6	66	28	6	120°	D153 0560
0565	5.65	66	28	6	120°	D153 0565
0570	5.7	66	28	6	120°	D153 0570
0580	5.8	66	28	6	120°	D153 0580
0590	5.9	66	28	6	120°	D153 0590
0595	5.95 15/64	66	28	6	120°	D153 0595

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Point Angle	Item #
0600	6.0	66	28	6	120°	D153 0600
0610	6.1	70	31	8	120°	D153 0610
0620	6.2	70	31	8	120°	D153 0620
0630	6.3	70	31	8	120°	D153 0630
0635	6.35 1/4	70	31	8	120°	D153 0635
0640	6.4	70	31	8	120°	D153 0640
0650	6.5	70	31	8	120°	D153 0650
0660	6.6	70	31	8	120°	D153 0660
0670	6.7	70	31	8	120°	D153 0670
0676	6.76 17/64	74	34	8	120°	D153 0676
0680	6.8	74	34	8	120°	D153 0680
0690	6.9	74	34	8	120°	D153 0690
0700	7.0	74	34	8	120°	D153 0700
0710	7.1	74	34	8	120°	D153 0710
0714	7.14 9/32	74	34	8	120°	D153 0714
0720	7.2	74	34	8	120°	D153 0720
0730	7.3	74	34	8	120°	D153 0730
0740	7.4	74	34	8	120°	D153 0740
0750	7.5	74	34	8	120°	D153 0750
0754	7.54 19/64	79	37	8	120°	D153 0754
0755	7.55	79	37	8	120°	D153 0755
0760	7.6	79	37	8	120°	D153 0760
0770	7.7	79	37	8	120°	D153 0770
0780	7.8	79	37	8	120°	D153 0780
0790	7.9	79	37	8	120°	D153 0790
0794	7.94 5/16	79	37	8	120°	D153 0794
0800	8.0	79	37	8	120°	D153 0800
0810	8.1	79	37	10	120°	D153 0810

ISO	P										M			K										N										S										H										
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41					
D153	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel
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 S Titanium & Super Alloys
 H Hard Materials

● Optimal ○ Effective



- Excellent solution for austenitic stainless steels and most long chipping materials
- Optimised geometry ensures no work hardening and high productivity
- Endmill shank for greater accuracy
- TiAIN for longer tool life



Brocas Stub, R40 UNI, VA, Black Magic

- Excelente solución para aceros inoxidable austeníticos y la mayoría de los materiales de viruta larga
- La geometría optimizada que garantiza una alta productividad
- Mango de mayor precisión
- TiAIN para una mayor vida útil de la herramienta



watch the video



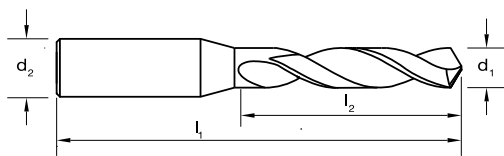
Forets queue cylindrique haute performance court, Hélice 40° VA, Black Magic

- Excellente solution pour les Inox et matériaux à copeaux longs
- Géométrie optimisée pour réduire les efforts
- Queue cylindrique de plus gros diamètre pour une meilleure stabilité
- TiAIN for longer tool life



Punte Stub, R40 VA Black Magic

- Eccellente soluzione per acciai inossidabili e materiale di scarsa truciolabilità
- Geometria ottimizzata per lavorare intensamente ad alta produttività
- Precisione gambo di attacco paritetica a Gambo Frese
- TiAIN per massimizzare vita utensile



Vc Page #: 414 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Point Angle	Item #	
0820	8.2	79	37	10	120°	D153 0820	
0830	8.3	79	37	10	120°	D153 0830	
0833	8.33	21/64	79	37	10	120°	D153 0833
0840	8.4	79	37	10	120°	D153 0840	
0850	8.5	79	37	10	120°	D153 0850	
0860	8.6	84	40	10	120°	D153 0860	
0870	8.7	84	40	10	120°	D153 0870	
0873	8.73	11/32	84	40	10	120°	D153 0873
0880	8.8	84	40	10	120°	D153 0880	
0890	8.9	84	40	10	120°	D153 0890	
0900	9.0	84	40	10	120°	D153 0900	
0910	9.1	84	40	10	120°	D153 0910	
0913	9.13	23/64	84	40	10	120°	D153 0913
0920	9.2	84	40	10	120°	D153 0920	
0930	9.3	84	40	10	120°	D153 0930	
0940	9.4	84	40	10	120°	D153 0940	
0950	9.5	84	40	10	120°	D153 0950	
0953	9.53	3/8	89	43	10	120°	D153 0953
0955	9.55	89	43	10	120°	D153 0955	
0960	9.6	89	43	10	120°	D153 0960	
0970	9.7	89	43	10	120°	D153 0970	
0980	9.8	89	43	10	120°	D153 0980	
0990	9.9	89	43	10	120°	D153 0990	
0992	9.92	25/64	89	43	10	120°	D153 0992
1000	10.0	89	43	10	120°	D153 1000	
1010	10.1	89	43	10	120°	D153 1010	
1020	10.2	89	43	10	120°	D153 1020	
1030	10.3	89	43	10	120°	D153 1030	

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Point Angle	Item #	
1032	10.32	13/32	89	43	10	120°	D153 1032
1040	10.4	89	43	10	120°	D153 1040	
1050	10.5	89	43	10	120°	D153 1050	
1060	10.6	89	43	12	120°	D153 1060	
1070	10.7	95	47	12	120°	D153 1070	
1072	10.72	27/64	95	47	12	120°	D153 1072
1080	10.8	95	47	12	120°	D153 1080	
1090	10.9	95	47	12	120°	D153 1090	
1100	11.0	95	47	12	120°	D153 1100	
1110	11.1	95	47	12	120°	D153 1110	
1111	11.11	7/16	95	47	12	120°	D153 1111
1120	11.2	95	47	12	120°	D153 1120	
1125	11.25	95	47	12	120°	D153 1125	
1130	11.3	95	47	12	120°	D153 1130	
1140	11.4	95	47	12	120°	D153 1140	
1150	11.5	95	47	12	120°	D153 1150	
1151	11.51	29/64	95	47	12	120°	D153 1151
1160	11.6	95	47	12	120°	D153 1160	
1170	11.7	95	47	12	120°	D153 1170	
1180	11.8	95	47	12	120°	D153 1180	
1190	11.9	102	51	12	120°	D153 1190	
1191	11.91	15/32	102	51	12	120°	D153 1191
1200	12.0	102	51	12	120°	D153 1200	
1210	12.1	102	51	12	120°	D153 1210	
1220	12.2	102	51	12	120°	D153 1220	
1230	12.3	102	51	12	120°	D153 1230	
1231	12.3	31/64	102	51	12	120°	D153 1231
1240	12.4	102	51	12	120°	D153 1240	



Catalogue Code	D153
Discount Group	A1502
Material	HSS Co
Surface Finish	TiAIN
Sutton Designation	VA
Geometry	R40
Point Type	4 Facet
Shank Tolerance	h7

ISO	P											M					K					N										S										H															
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	37.1	37.2	37.3	37.4	37.5	38	38.1	38.2	39	39.1	39.2	40	41				
D153	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel
 M Stainless Steel
 K Cast Iron
 N Non-Ferrous Metals
 S Titanium & Super Alloys
 H Hard Materials
 ● Optimal ○ Effective

Drills Stub, R40 VA, Black Magic



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- Endmill shank for greater accuracy
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Brocas Stub, R40 UNI, VA, Black Magic

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watch the video



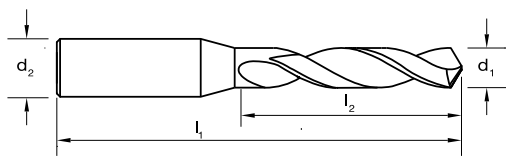
Forets queue cylindrique haute performance court, Hélice 40° VA, Black Magic

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- Géométrie optimisée pour réduire les efforts
- Queue cylindrique de plus gros diamètre pour une meilleure stabilité
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Punte Stub, R40 VA Black Magic

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- Geometria ottimizzata per lavorare intensamente ad alta produttività
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Catalogue Code	D153
Discount Group	A1502
Material	HSS Co
Surface Finish	TiAIN
Sutton Designation	VA
Geometry	R40
Point Type	4 Facet
Shank Tolerance	h7

Vc Page #: 414 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Point Angle	Form	Item #
1250	12.5	102	51	12	120°		D153 1250
1260	12.6	102	51	12	120°		D153 1260
1270	12.7	102	51	12	120°		D153 1270
1269	12.7	1/2	102	51	12	120°	D153 1269
1280	12.8	102	51	12	120°		D153 1280
1290	12.9	102	51	12	120°		D153 1290
1300	13.0	102	51	12	120°		D153 1300
1350	13.5	107	54	16	120°	A	D153 1350
1400	14.0	107	54	16	120°	A	D153 1400
1450	14.5	111	56	16	120°	A	D153 1450
1500	15.0	111	56	16	120°	A	D153 1500
1550	15.5	115	58	16	120°	A	D153 1550
1600	16.0	115	58	16	120°	A	D153 1600
1650	16.5	119	60	20	120°	A	D153 1650
1700	17.0	119	60	20	120°	A	D153 1700
1750	17.5	123	62	20	120°	A	D153 1750
1800	18.0	123	62	20	120°	A	D153 1800
1850	18.5	127	64	20	120°	A	D153 1850
1900	19.0	127	64	20	120°	A	D153 1900
1950	19.5	131	66	20	120°	A	D153 1950
2000	20.0	131	66	20	120°	A	D153 2000

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Point Angle	Form	Item #

ISO	P													M			K					N										S										H									
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41		
D153	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective



- General purpose drill
- Web thinned[†] point for easier penetration
- Split point for easier penetration
- Designed for machine and hand held drilling



Foretts queue cylindrique

- Pour applications générales
- Pointe amincie pour une pénétration plus facile
- Pointe fendue pour une pénétration plus facile
- Pour utilisation sur machine et à main



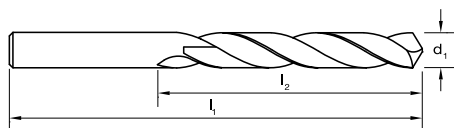
Punte da trapano

- Punta Universale
- Nocciolo assottigliato per facilitare la foratura
- Tagliente trasversale per facilitare la foratura
- Progettata per uso con Macchine e Manuale



Brocas Jobber

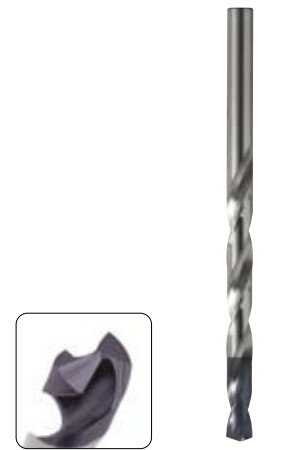
- Taladro de uso general
- Punta reducida para penetración más fácil
- División de punta para penetración más fácil
- Diseñado para máquinas y taladrado manual



Vc Page #: 414 →

Size Ref.	d ₁ (h8)		l ₁	l ₂	Item #
	mm	inch			
0100	1.00		34	12	D179 0100
0110	1.10		36	14	D179 0110
0119	1.19	3/64	44	19	D179 0119
0120	1.20		38	16	D179 0120
0130	1.30		38	16	D179 0130
0140	1.40		40	18	D179 0140
0150	1.50		40	18	D179 0150
0159	1.59	1/16	43	20	D179 0159
0160	1.60		43	20	D179 0160
0170	1.70		43	20	D179 0170
0180	1.80		46	22	D179 0180
0190	1.90		46	22	D179 0190
0198	1.98	5/64	49	24	D179 0198
0200	2.00		49	24	D179 0200
0210	2.10		49	24	D179 0210
0220	2.20		53	27	D179 0220
0230	2.30		53	27	D179 0230
0238	2.38	3/32	57	30	D179 0238
0240	2.40		57	30	D179 0240
0250	2.50		57	30	D179 0250
0260	2.60		57	30	D179 0260
0270	2.70		61	33	D179 0270
0278	2.78	7/64	61	33	D179 0278
0280	2.80		61	33	D179 0280
0290	2.90		61	33	D179 0290
0300	3.00		61	33	D179 0300
0310	3.10		65	36	D179 0310
0318	3.18	1/8	65	36	D179 0318

Size Ref.	d ₁ (h8)		l ₁	l ₂	Item #
	mm	inch			
0320	3.20		65	36	D179 0320
0330	3.30		65	36	D179 0330
0340	3.40		70	39	D179 0340
0350	3.50		70	39	D179 0350
0357	3.57	9/64	70	39	D179 0357
0360	3.60		70	39	D179 0360
0370	3.70		70	39	D179 0370
0380	3.80		75	43	D179 0380
0390	3.90		75	43	D179 0390
0397	3.97	5/32	75	43	D179 0397
0400	4.00		75	43	D179 0400
0410	4.10		75	43	D179 0410
0420	4.20		75	43	D179 0420
0430	4.30		80	47	D179 0430
0437	4.37	11/64	80	47	D179 0437
0440	4.40		80	47	D179 0440
0450	4.50		80	47	D179 0450
0460	4.60		80	47	D179 0460
0470	4.70		80	47	D179 0470
0476	4.76	3/16	86	52	D179 0476
0480	4.80		86	52	D179 0480
0490	4.90		86	52	D179 0490
0500	5.00		86	52	D179 0500
0510	5.10		86	52	D179 0510
0516	5.16	13/64	86	52	D179 0516
0520	5.20		86	52	D179 0520
0530	5.30		86	52	D179 0530
0540	5.40		93	57	D179 0540



Catalogue Code	D179
Discount Group	A0402
Material	HSS
Surface Finish	TiAIN Tip
Sutton Designation	N
Geometry	R30
Point Type	118° Form C
Order Quantity	Bulk (10)

ISO	P										M					K					N										S										H										
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41		
D179	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials ● Optimal ○ Effective

• Available on request as special manufacture. Subject to lead time. † Web thinning only applies to metric sizes



- General purpose drill
- Web thinned¹ point for easier penetration
- Split point for easier penetration
- Designed for machine and hand held drilling



Forets queue cylindrique

- Pour applications générales
- Pointe amincie pour une pénétration plus facile
- Pointe fendue pour une pénétration plus facile
- Pour utilisation sur machine et à main



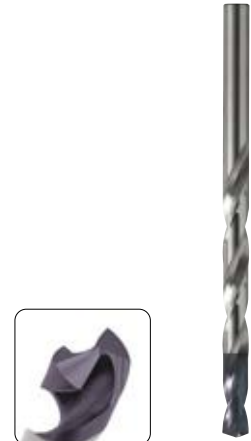
Punte da trapano

- Punta Universale
- Nocciolo assottigliato per facilitare la foratura
- Tagliente trasversale per facilitare la foratura
- Progettata per uso con Macchine e Manuale

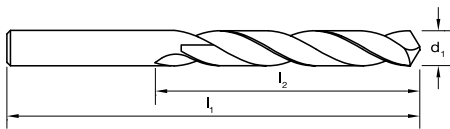


Brocas Jobber

- Taladro de uso general
- Punta reducida para penetración más fácil
- División de punta para penetración más fácil
- Diseñado para máquinas y taladrado manual



Catalogue Code	D179
Discount Group	A0402
Material	HSS
Surface Finish	TiAlN Tip
Sutton Designation	N
Geometry	R30
Point Type	118° Form C
Order Quantity	Bulk 10



Vc Page #: 414 →

Size Ref.	d ₁ (h8)		l ₁	l ₂	Item #
	mm	inch			
0550	5.50		93	57	D179 0550
0556	5.56	7/32	93	57	D179 0556
0560	5.60		93	57	D179 0560
0570	5.70		93	57	D179 0570
0580	5.80		93	57	D179 0580
0590	5.90		93	57	D179 0590
0595	5.95	15/64	93	57	D179 0595
0600	6.00		93	57	D179 0600
0610	6.10		101	63	D179 0610
0620	6.20		101	63	D179 0620
0630	6.30		101	63	D179 0630
0635	6.35	1/4	101	63	D179 0635
0640	6.40		101	63	D179 0640
0650	6.50		101	63	D179 0650
0660	6.60		101	63	D179 0660
0670	6.70		101	63	D179 0670
0676	6.75	17/64	109	69	D179 0676
0680	6.80		109	69	D179 0680
0690	6.90		109	69	D179 0690
0700	7.00		109	69	D179 0700
0710	7.10		109	69	D179 0710
0714	7.14	9/32	109	69	D179 0714
0720	7.20		109	69	D179 0720
0730	7.30		109	69	D179 0730
0740	7.40		109	69	D179 0740
0750	7.50		109	69	D179 0750
0754	7.54	19/64	117	75	D179 0754
0760	7.60		117	75	D179 0760

Size Ref.	d ₁ (h8)		l ₁	l ₂	Item #
	mm	inch			
0770	7.70		117	75	D179 0770
0780	7.80		117	75	D179 0780
0790	7.90		117	75	D179 0790
0794	7.94	5/16	117	75	D179 0794
0800	8.00		117	75	D179 0800
0810	8.10		117	75	D179 0810
0820	8.20		117	75	D179 0820
0830	8.30		117	75	D179 0830
0833	8.33	21/64	117	75	D179 0833
0840	8.40		117	75	D179 0840
0850	8.50		117	75	D179 0850
0860	8.60		125	81	D179 0860
0870	8.70		125	81	D179 0870
0873	8.73	11/32	125	81	D179 0873
0880	8.80		125	81	D179 0880
0890	8.90		125	81	D179 0890
0900	9.00		125	81	D179 0900
0910	9.10		125	81	D179 0910
0913	9.13	23/64	125	81	D179 0913
0920	9.20		125	81	D179 0920
0930	9.30		125	81	D179 0930
0940	9.40		125	81	D179 0940
0950	9.50		125	81	D179 0950
0953	9.52	3/8	133	87	D179 0953
0960	9.60		133	87	D179 0960
0970	9.70		133	87	D179 0970
0980	9.80		133	87	D179 0980
0990	9.90		133	87	D179 0990

ISO	P										M					K					N										S										H													
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41					
D179	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○																																

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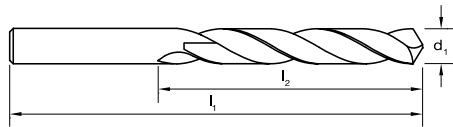
Punte da trapano

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- Tagliente trasversale per facilitare la foratura
- Progettata per uso con Macchine e Manuale



Brocas Jobber

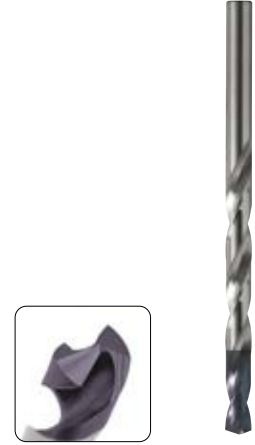
- Taladro de uso general
- Punta reducida para penetración más fácil
- División de punta para penetración más fácil
- Diseñado para máquinas y taladrado manual



Vc Page #: 414 →

Size Ref.	d ₁ (h8) mm	d ₁ (h8) inch	l ₁	l ₂	Item #
0992	9.92	25/64	133	87	D179 0992
1000	10.00		133	87	D179 1000
1010	10.10		133	87	D179 1010
1020	10.20		133	87	D179 1020
1030	10.30		133	87	D179 1030
1032	10.32	13/32	133	87	D179 1032
1040	10.40		133	87	D179 1040
1050	10.50		133	87	D179 1050
1060	10.60		133	87	D179 1060
1070	10.70		142	94	D179 1070
1072	10.72	27/64	142	94	D179 1072
1080	10.80		142	94	D179 1080
1090	10.90		142	94	D179 1090
1100	11.00		142	94	D179 1100
1110	11.10		142	94	D179 1110
1111	11.11	7/16	142	94	D179 1111
1120	11.20		142	94	D179 1120
1130	11.30		142	94	D179 1130
1140	11.40		142	94	D179 1140
1150	11.50		142	94	D179 1150
1151	11.51	29/64	142	94	D179 1151
1160	11.60		142	94	D179 1160
1170	11.70		142	94	D179 1170
1180	11.80		142	94	D179 1180
1190	11.90		142	94	D179 1190
1191	11.91	15/32	151	101	D179 1191
1200	12.00		151	101	D179 1200
1210	12.10		151	101	D179 1210

Size Ref.	d ₁ (h8) mm	d ₁ (h8) inch	l ₁	l ₂	Item #
1220	12.20		151	101	D179 1220
1230	12.30		151	101	D179 1230
1231	12.30	31/64	151	101	D179 1231
1240	12.40		151	101	D179 1240
1250	12.50		151	101	D179 1250
1260	12.60		151	101	D179 1260
1269	12.70	1/2	152	114	D179 1269
1270	12.70		151	101	D179 1270
1280	12.80		151	101	D179 1280
1290	12.90		151	101	D179 1290
1300	13.00		151	101	D179 1300
1310	13.10	33/64	151	101	D179 1310
1349	13.49	17/32	160	108	D179 1349
1350	13.50		160	108	D179 1350
1400	14.00		160	108	D179 1400
1429	14.29	9/16	169	114	D179 1429
1450	14.50		169	114	D179 1450
1500	15.00		169	114	D179 1500
1550	15.50		178	120	D179 1550
1588	15.88	5/8	178	120	D179 1588
1600	16.00		178	120	D179 1600



Catalogue Code	D179
Discount Group	A0402
Material	HSS
Surface Finish	TiAIN Tip
Sutton Designation	N
Geometry	R30
Point Type	118° Form C
Order Quantity	Bulk 5 (1 > 13mm)

ISO	P										M					K					N										S					H																	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41				
D179	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective

[†] Available on request as special manufacture. Subject to lead time. [†] Web thinning only applies to metric sizes

Drills Jobber, R40, InOx



watch the video



- Short flute length jobber drill
- Cost effective solution for austenitic stainless steels and soft materials
- Unique stepped core for excellent penetration
- TiAlN tip for good wear resistance



Forets queue cylindrique, Hélice 40°, Inox

- Courte longueur taillée
- Solution économique et performante pour les inox et matériaux tendres
- Affûtage et design pour une pénétration facile
- Revêtement TiAlN tip en bout pour une meilleure résistance



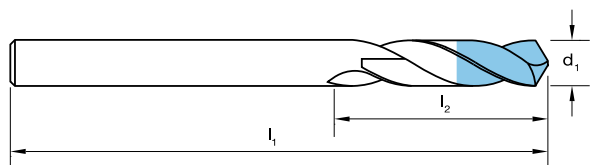
Punte da trapano, R40, InOx

- Punta dal tagliente corto
- Soluzione economica per acciai inossidabili, austenitici e materiali morbidi
- Formazione del nocciolo a gradini che la rende unica con prestazioni eccellenti
- TiAlN per garantire un'ottima resistenza all'usura



Brocas Jobber, R40 UNI, InOx

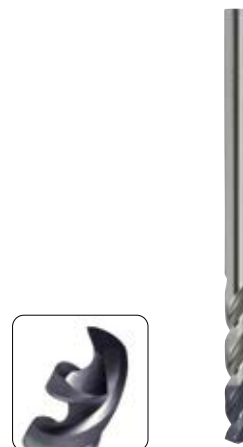
- Longitud jobber de hélice corta
- Solución rentable para aceros inoxidable austeníticos y materiales blandos
- Núcleo escalonado para una excelente penetración
- Punta TiAlN para mayor resistencia al desgaste



Vc Page #: 414 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #	
0100	1.0	34	7	D180 0100	
0150	1.5	40	10	D180 0150	
0200	2.0	49	13	D180 0200	
0250	2.5	57	16	D180 0250	
0300	3.0	61	18	D180 0300	
0310	3.1	65	20	D180 0310	
0318	3.18	1/8	65	20	•
0320	3.2	65	20	D180 0320	
0330	3.3	65	20	D180 0330	
0340	3.4	70	22	D180 0340	
0350	3.5	70	22	D180 0350	
0357	3.57	9/64	70	22	•
0360	3.6	70	22	D180 0360	
0370	3.7	70	22	D180 0370	
0380	3.8	75	25	D180 0380	
0390	3.9	75	25	D180 0390	
0397	3.97	5/32	75	25	•
0400	4.0	75	25	D180 0400	
0410	4.1	75	25	D180 0410	
0420	4.2	75	25	D180 0420	
0425	4.25	75	25	D180 0425	
0430	4.3	80	28	D180 0430	
0437	4.37	11/64	80	28	•
0440	4.4	80	28	D180 0440	
0450	4.5	80	28	D180 0450	
0460	4.6	80	28	D180 0460	
0470	4.7	80	28	D180 0470	
0476	4.76	3/16	86	32	•
0480	4.8	86	32	D180 0480	
0490	4.9	86	32	D180 0490	

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #	
0500	5.0	86	32	D180 0500	
0510	5.1	86	32	D180 0510	
0516	5.16	13/64	86	32	•
0520	5.2	86	32	D180 0520	
0530	5.3	86	32	D180 0530	
0540	5.4	93	36	D180 0540	
0550	5.5	93	36	D180 0550	
0556	5.56	7/32	93	36	•
0560	5.6	93	36	D180 0560	
0570	5.7	93	36	D180 0570	
0580	5.8	93	36	D180 0580	
0590	5.9	93	36	D180 0590	
0595	5.95	15/64	93	36	•
0600	6.0	93	36	D180 0600	
0610	6.1	101	40	D180 0610	
0620	6.2	101	40	D180 0620	
0630	6.3	101	40	D180 0630	
0635	6.35	1/4	101	40	•
0640	6.4	101	40	D180 0640	
0650	6.5	101	40	D180 0650	
0660	6.6	101	40	D180 0660	
0670	6.7	101	40	D180 0670	
0680	6.8	109	45	D180 0680	
0690	6.9	109	45	D180 0690	
0700	7.0	109	45	D180 0700	
0710	7.1	109	45	D180 0710	
0714	7.14	9/32	109	45	•
0720	7.2	109	45	D180 0720	
0730	7.3	109	45	D180 0730	
0740	7.4	109	45	D180 0740	



Catalogue Code	D180
Discount Group	A0402
Material	HSS
Surface Finish	TiAlN Tip
Sutton Designation	VA
Geometry	R40
Point Type	130°
Order Quantity	Bulk 10

ISO	P										M			K			N							S							H																								
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41						
D180	●	●	○	○										○	○	○							●	●	●	●	○	○	○																										

P Steel
 M Stainless Steel
 K Cast Iron
 N Non-Ferrous Metals
 S Titanium & Super Alloys
 H Hard Materials

● Optimal ○ Effective

Drills Jobber, R40, InOx



watch the video



- Short flute length jobber drill
- Cost effective solution for austenitic stainless steels and soft materials
- Unique stepped core for excellent penetration
- TiAlN tip for good wear resistance



Forets queue cylindrique, Hélice 40°, Inox

- Courte longueur taillée
- Solution économique et performante pour les inox et matériaux tendres
- Affûtage et design pour une pénétration facile
- Revêtement TiAlN tip en bout pour une meilleure résistance



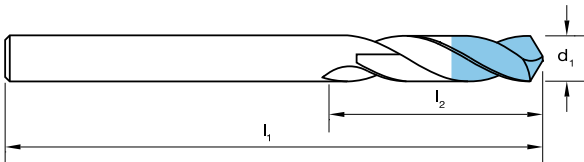
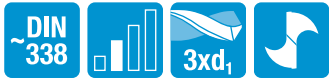
Punte da trapano, R40, InOx

- Punta dal tagliante corto
- Soluzione economica per acciai inossidabili, austenitici e materiali morbidi
- Formazione del nocciolo a gradini che la rende unica con prestazioni eccellenti
- TiAlN per garantire un'ottima resistenza all'usura



Brocas Jobber, R40 UNI, InOx

- Longitud jobber de hélice corta
- Solución rentable para aceros inoxidable austeníticos y materiales blandos
- Núcleo escalonado para una excelente penetración
- Punta TiAlN para mayor resistencia al desgaste



Vc Page #: 414 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
0750	7.5	109	45	D180 0750
0754	7.54	19/64	117	•
0760	7.6	117	51	D180 0760
0770	7.7	117	51	D180 0770
0780	7.8	117	51	D180 0780
0790	7.9	117	51	D180 0790
0794	7.94	5/16	117	•
0800	8.0	117	51	D180 0800
0810	8.1	117	51	D180 0810
0820	8.2	117	51	D180 0820
0830	8.3	117	51	D180 0830
0833	8.33	21/64	117	•
0840	8.4	117	51	D180 0840
0850	8.5	117	51	D180 0850
0860	8.6	125	51	D180 0860
0870	8.7	125	57	D180 0870
0873	8.73	11/32	125	•
0880	8.8	125	57	D180 0880
0890	8.9	125	57	D180 0890
0900	9.0	125	57	D180 0900
0910	9.1	125	57	D180 0910
0913	9.13	23/64	125	•
0920	9.2	125	57	D180 0920
0930	9.3	125	57	D180 0930
0940	9.4	125	57	D180 0940
0950	9.5	125	57	D180 0950
0953	9.53	3/8	133	•
0960	9.6	133	63	D180 0960
0970	9.7	133	63	D180 0970
0980	9.8	133	63	D180 0980

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
0990	9.9	133	63	D180 0990
0992	9.92	25/64	133	•
1000	10.0	133	63	D180 1000
1010	10.1	133	63	D180 1010
1020	10.2	133	63	D180 1020
1030	10.3	133	63	D180 1030
1032	10.32	13/32	133	•
1040	10.4	133	63	D180 1040
1050	10.5	133	63	D180 1050
1060	10.6	133	63	D180 1060
1070	10.7	142	71	D180 1070
1072	10.72	27/64	142	•
1080	10.8	142	71	D180 1080
1090	10.9	142	71	D180 1090
1100	11.0	142	71	D180 1100
1110	11.1	142	71	D180 1110
1111	11.11	7/16	142	•
1120	11.2	142	71	D180 1120
1130	11.3	142	71	D180 1130
1140	11.4	142	71	D180 1140
1150	11.5	142	71	D180 1150
1151	11.51	29/64	142	•
1160	11.6	142	71	D180 1160
1170	11.7	142	71	D180 1170
1180	11.8	142	71	D180 1180
1190	11.9	142	78	D180 1190
1191	11.91	15/32	151	•
1200	12.0	151	78	D180 1200
1210	12.1	151	78	D180 1210
1220	12.2	151	78	D180 1220



Catalogue Code **D180**
 Discount Group **A0402**
 Material **HSS**
 Surface Finish **TiAlN Tip**
 Sutton Designation **VA**
 Geometry **R40**
 Point Type **130°**
 Order Quantity **Bulk 10 (5>7.5mm)**

ISO	P					M					K					N					S					H																							
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41
D180	●	●	○	○	○																			●	●	●	○																						

P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials ● Optimal ○ Effective

• Available on request as special manufacture. Subject to lead time.



watch the video



- Short flute length jobber drill
- Cost effective solution for austenitic stainless steels and soft materials
- Unique stepped core for excellent penetration
- TiAlN tip for good wear resistance



Forets queue cylindrique, Hélice 40°, Inox

- Courte longueur taillée
- Solution économique et performante pour les inox et matériaux tendres
- Affûtage et design pour une pénétration facile
- Revêtement TiAlN tip en bout pour une meilleure résistance



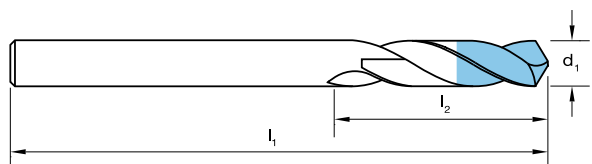
Punte da trapano, R40, InOx

- Punta dal tagliente corto
- Soluzione economica per acciai inossidabili, austenitici e materiali morbidi
- Formazione del nocciolo a gradini che la rende unica con prestazioni eccellenti
- TiAlN per garantire un'ottima resistenza all'usura



Brocas Jobber, R40 UNI, InOx

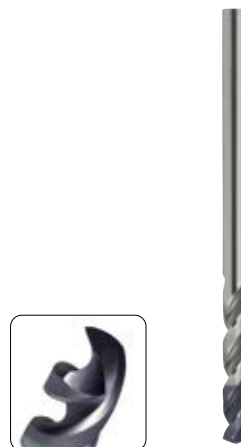
- Longitud jobber de hélice corta
- Solución rentable para aceros inoxidable austeníticos y materiales blandos
- Núcleo escalonado para una excelente penetración
- Punta TiAlN para mayor resistencia al desgaste



Vc Page #: 414 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
1230	12.3	151	78	D180 1230
1230	12.3	31/64	78	•
1240	12.4	151	78	D180 1240
1250	12.5	151	78	D180 1250
1260	12.6	151	78	D180 1260
1270	12.7	151	78	D180 1270
1270	12.7	1/2	78	•
1280	12.8	151	78	D180 1280
1290	12.9	151	78	D180 1290
1300	13.0	151	78	D180 1300

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
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Catalogue Code	D180
Discount Group	A0402
Material	HSS
Surface Finish	TiAlN Tip
Sutton Designation	VA
Geometry	R40
Point Type	130°
Order Quantity	Bulk 5

ISO	P										M			K								N										S										H										
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41			
D180	●	●	○	○		●	○					○	○	○	○	○							○	○	○	○	○	○	○																							

P Steel
 M Stainless Steel
 K Cast Iron
 N Non-Ferrous Metals
 S Titanium & Super Alloys
 H Hard Materials
 ● Optimal ○ Effective



- Heavy duty design
- Cobalt content ensures high abrasion resistance
- Suitable for hard materials up to 850N/mm²
- Self centring 135° split point



Forets queue cylindrique haute résistance

- Outils pour haute résistance
- HSS-Cobalt pour les aciers à haute résistance, résistance à l'abrasion
- Utilisable dans les aciers jusqu'à 850N/mm²
- Auto centrant avec sa pointe et son affûtage 135°



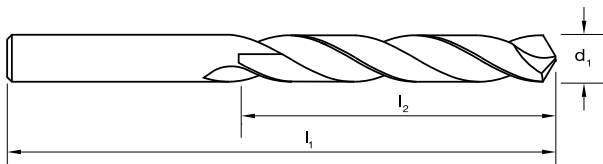
Punte da trapano, Heavy Duty

- Design resistente
- Contiene Cobalto per assicurare alta resistenza all'abrasione
- Ideale per materiali duri fino a 850N/mm²
- Auto centraggio con elica a 135°



Brocas Jobber, Trabajos Pesados

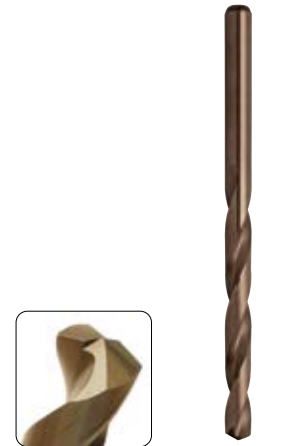
- Diseño robusto
- Contenido en cobalto, que garantiza una alta resistencia a la abrasión
- Adecuado para materiales duros de hasta 850N/mm²
- Punta autocentrante de 135°



Vc Page #: 414 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
	mm			
0100	1.00*	34	12	D109 0100
0110	1.10*	36	14	D109 0110
0120	1.20*	38	16	D109 0120
0130	1.30*	38	16	D109 0130
0140	1.40*	40	18	D109 0140
0150	1.50*	40	18	D109 0150
0159	1.59*	43	20	D109 0159
0160	1.60*	43	20	D109 0160
0170	1.70*	43	20	D109 0170
0180	1.80*	46	22	D109 0180
0190	1.90*	46	22	D109 0190
0200	2.00*	49	24	D109 0200
0210	2.10*	49	24	D109 0210
0220	2.20*	53	27	D109 0220
0230	2.30*	53	27	D109 0230
0238	2.38*	57	30	D109 0238
0240	2.40*	57	30	D109 0240
0250	2.50	57	30	D109 0250
0260	2.60	57	30	D109 0260
0270	2.70	61	33	D109 0270
0280	2.80	61	33	D109 0280
0290	2.90	61	33	D109 0290
0300	3.00	61	33	D109 0300
0310	3.10	65	36	D109 0310
0318	3.18	65	36	D109 0318
0320	3.20	65	36	D109 0320
0330	3.30	65	36	D109 0330
0340	3.40	70	39	D109 0340

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
	mm			
0350	3.50	70	39	D109 0350
0357	3.57	70	39	D109 0357
0360	3.60	70	39	D109 0360
0370	3.70	70	39	D109 0370
0380	3.80	75	43	D109 0380
0390	3.90	75	43	D109 0390
0397	3.97	75	43	D109 0397
0400	4.00	75	43	D109 0400
0410	4.10	75	43	D109 0410
0420	4.20	75	43	D109 0420
0430	4.30	80	47	D109 0430
0437	4.37	80	47	D109 0437
0440	4.40	80	47	D109 0440
0450	4.50	80	47	D109 0450
0460	4.60	80	47	D109 0460
0470	4.70	80	47	D109 0470
0476	4.76	86	52	D109 0476
0480	4.80	86	52	D109 0480
0490	4.90	86	52	D109 0490
0500	5.00	86	52	D109 0500
0510	5.10	86	52	D109 0510
0516	5.16	86	52	D109 0516
0520	5.20	86	52	D109 0520
0530	5.30	86	52	D109 0530
0540	5.40	93	57	D109 0540
0550	5.50	93	57	D109 0550
0556	5.56	93	57	D109 0556
0560	5.60	93	57	D109 0560



Catalogue Code D109
Discount Group A0404
Material HSS Co
Surface Finish Colour Temp
Sutton Designation Hard Materials
Geometry R25
Point Type 135° Form C > 3/32*
Order Quantity Bulk 10

ISO	P						M				K				N						S						H																							
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41	
D109							●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel
 M Stainless Steel
 K Cast Iron
 N Non-Ferrous Metals
 S Titanium & Super Alloys
 H Hard Materials

● Optimal ○ Effective

* Standard 135° point below 3/32"

Drills Jobber, R25, Heavy Duty, Cobalt

sutton

COBALT



- Heavy duty design
- Cobalt content ensures high abrasion resistance
- Suitable for hard materials up to 850N/mm²
- Self centring 135° split point



Foretts queue cylindrique haute résistance

- Outils pour haute résistance
- HSS-Cobalt pour les aciers à haute résistance, résistance à l'abrasion
- Utilisable dans les aciers jusqu'à 850N/mm²
- Auto centrante avec sa pointe et son affûtage 135°



Punte da trapano, Heavy Duty

- Design resistente
- Contiene Cobalto per assicurare alta resistenza all'abrasione
- Ideale per materiali duri fino a 850N/mm²
- Auto centraggio con elica a 135°

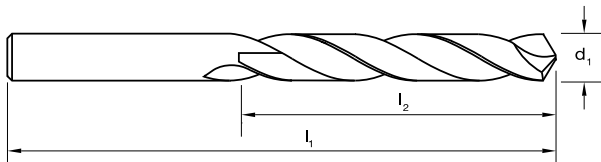


Brocas Jobber, Trabajos Pesados

- Diseño robusto
- Contenido en cobalto, que garantiza una alta resistencia a la abrasión
- Adecuado para materiales duros de hasta 850N/mm²
- Punta autocentrante de 135°

DIN 338

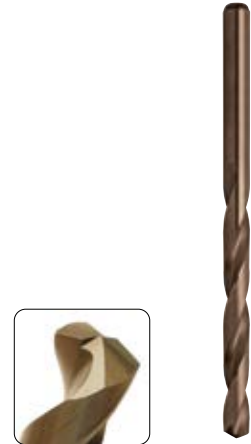
ANSI B94-11



Vc Page #: 414 →

Size Ref.	d ₁ (h8)		l ₁	l ₂	Item #
	mm	inch			
0570	5.70		93	57	D109 0570
0580	5.80		93	57	D109 0580
0590	5.90		93	57	D109 0590
0595	5.95	15/64	93	57	D109 0595
0600	6.00		93	57	D109 0600
0610	6.10		101	63	D109 0610
0620	6.20		101	63	D109 0620
0630	6.30		101	63	D109 0630
0635	6.35	1/4	101	63	D109 0635
0640	6.40		101	63	D109 0640
0650	6.50		101	63	D109 0650
0660	6.60		101	63	D109 0660
0670	6.70		101	63	D109 0670
0676	6.75	17/64	109	69	D109 0676
0680	6.80		109	69	D109 0680
0690	6.90		109	69	D109 0690
0700	7.00		109	69	D109 0700
0710	7.10		109	69	D109 0710
0714	7.14	9/32	109	69	D109 0714
0720	7.20		109	69	D109 0720
0730	7.30		109	69	D109 0730
0740	7.40		109	69	D109 0740
0750	7.50		109	69	D109 0750
0754	7.54	19/64	117	75	D109 0754
0760	7.60		117	75	D109 0760
0770	7.70		117	75	D109 0770
0780	7.80		117	75	D109 0780
0790	7.90		117	75	D109 0790

Size Ref.	d ₁ (h8)		l ₁	l ₂	Item #
	mm	inch			
0794	7.94	5/16	117	75	D109 0794
0800	8.00		117	75	D109 0800
0810	8.10		117	75	D109 0810
0820	8.20		117	75	D109 0820
0830	8.30		117	75	D109 0830
0833	8.33	21/64	117	75	D109 0833
0840	8.40		117	75	D109 0840
0850	8.50		117	75	D109 0850
0860	8.60		125	81	D109 0860
0870	8.70		125	81	D109 0870
0873	8.73	11/32	125	81	D109 0873
0880	8.80		125	81	D109 0880
0890	8.90		125	81	D109 0890
0900	9.00		125	81	D109 0900
0910	9.10		125	81	D109 0910
0913	9.13	23/64	125	81	D109 0913
0920	9.20		125	81	D109 0920
0930	9.30		125	81	D109 0930
0940	9.40		125	81	D109 0940
0950	9.50		125	81	D109 0950
0953	9.52	3/8	133	87	D109 0953
0960	9.60		133	87	D109 0960
0970	9.70		133	87	D109 0970
0980	9.80		133	87	D109 0980
0990	9.90		133	87	D109 0990
0992	9.92	25/64	133	87	D109 0992
1000	10.00		133	87	D109 1000
1010	10.10		133	87	D109 1010



Catalogue Code **D109**
 Discount Group **A0404**
 Material **HSS Co**
 Surface Finish **Colour Temp**
 Sutton Designation **Hard Materials**
 Geometry **R25**
 Point Type **135° Form C**
 Order Quantity **Bulk 10 (5>7.5mm)**

ISO	P										M			K							N										S										H								
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41
D109																																																	

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective

Drills Jobber, R25, Heavy Duty, Cobalt

sutton

CO3ALT



- Heavy duty design
- Cobalt content ensures high abrasion resistance
- Suitable for hard materials up to 850N/mm²
- Self centring 135° split point



Forets queue cylindrique haute résistance

- Outils pour haute résistance
- HSS-Cobalt pour les aciers à haute résistance, résistance à l'abrasion
- Utilisable dans les aciers jusqu'à 850N/mm²
- Auto centrante avec sa pointe et son affûtage 135°



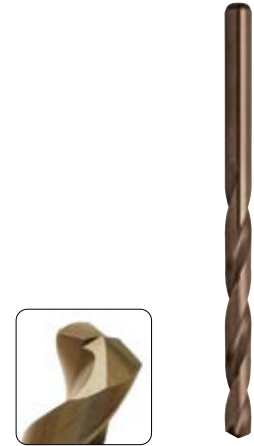
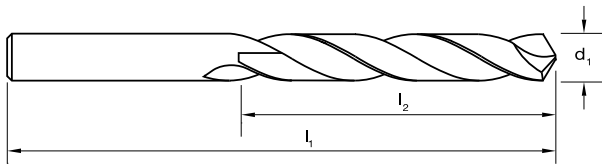
Punte da trapano, Heavy Duty

- Design resistente
- Contiene Cobalto per assicurare alta resistenza all'abrasione
- Ideale per materiali duri fino a 850N/mm²
- Auto centraggio con elica a 135°



Brocas Jobber, Trabajos Pesados

- Diseño robusto
- Contenido en cobalto, que garantiza una alta resistencia a la abrasión
- Adecuado para materiales duros de hasta 850N/mm²
- Punta autocentrante de 135°



Catalogue Code	D109
Discount Group	A0404
Material	HSS Co
Surface Finish	Colour Temp
Sutton Designation	Hard Materials
Geometry	R25
Point Type	135° Form C
Order Quantity	Bulk 5

Vc Page #: 414 →

Size Ref.	d ₁ (h8) mm inch	l ₁	l ₂	Item #
1020	10.20	133	87	D109 1020
1030	10.30	133	87	D109 1030
1032	10.32 13/32	133	87	D109 1032
1040	10.40	133	87	D109 1040
1050	10.50	133	87	D109 1050
1060	10.60	133	87	D109 1060
1070	10.70	142	94	D109 1070
1072	10.72 27/64	142	94	D109 1072
1080	10.80	142	94	D109 1080
1090	10.90	142	94	D109 1090
1100	11.00	142	94	D109 1100
1111	11.11 7/16	142	94	D109 1111
1110	11.10	142	94	D109 1110
1120	11.20	142	94	D109 1120
1130	11.30	142	94	D109 1130
1140	11.40	142	94	D109 1140
1150	11.50	142	94	D109 1150
1151	11.51 29/64	142	94	D109 1151
1160	11.60	142	94	D109 1160
1170	11.70	142	94	D109 1170
1180	11.80	142	94	D109 1180
1190	11.90	142	94	D109 1190
1191	11.91 15/32	151	101	D109 1191
1200	12.00	151	101	D109 1200
1210	12.10	151	101	D109 1210
1220	12.20	151	101	D109 1220
1230	12.30	151	101	D109 1230
1231	12.30 31/64	151	101	D109 1231

Size Ref.	d ₁ (h8) mm inch	l ₁	l ₂	Item #
1240	12.40	151	101	D109 1240
1250	12.50	151	101	D109 1250
1260	12.60	151	101	D109 1260
1269	12.70 1/2	151	101	D109 1269
1270	12.70	151	101	D109 1270
1280	12.80	151	101	D109 1280
1290	12.90	151	101	D109 1290
1300	13.00	151	101	D109 1300

ISO	P						M				K				N							S							H																						
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41		
D109																																																			

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective



- Suitable for materials up to 1200N/mm²
- Point geometry ensures high strength
- Parabolic flute design for optimal chip transportation
- TiAlN for longer tool life



Forets queue cylindrique haute performance DHJ

- Utilisable dans les matériaux jusqu'à 1200N/mm²
- Affûtage 130° pour un parfait centrage
- Lèvres parabolique pour une bonne évacuation copeaux
- Revêtement TiAlN pour une meilleure durée de vie



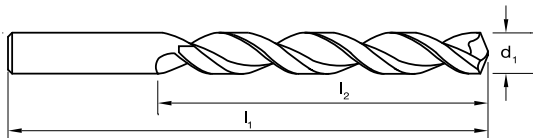
Punte da trapano, DHJ

- Ideale per materiali fino a 1200N/mm²
- Geometria di punta per garantire un'elevata resistenza
- Scanalatura tagliente progettato per ottima evaquazione truciolo
- TiAlN per massimizzare vita utensile



Brocas Jobber, DHJ

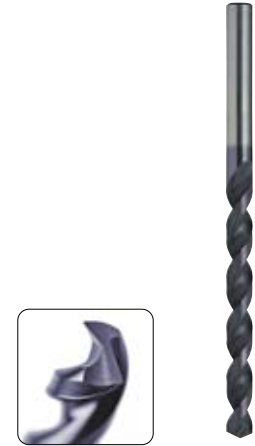
- Adecuado para materiales de hasta 1200N/mm²
- La geometría de la punta garantiza una alta resistencia
- Diseño de hélice parabólica para una evacuación óptima de la viruta
- TiAlN para una mayor vida útil de la herramienta



Vc Page #: 415 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
0660	6.6	101	63	D163 0660
0670	6.7	101	63	D163 0670
0680	6.8	109	69	D163 0680
0690	6.9	109	69	D163 0690
0700	7.0	109	69	D163 0700
0710	7.1	109	69	D163 0710
0720	7.2	109	69	D163 0720
0730	7.3	109	69	D163 0730
0740	7.4	109	69	D163 0740
0750	7.5	109	69	D163 0750
0760	7.6	117	75	D163 0760
0770	7.7	117	75	D163 0770
0780	7.8	117	75	D163 0780
0790	7.9	117	75	D163 0790
0800	8.0	117	75	D163 0800
0810	8.1	117	75	D163 0810
0820	8.2	117	75	D163 0820
0830	8.3	117	75	D163 0830
0840	8.4	117	75	D163 0840
0850	8.5	117	75	D163 0850
0860	8.6	125	81	D163 0860
0870	8.7	125	81	D163 0870
0880	8.8	125	81	D163 0880
0890	8.9	125	81	D163 0890
0900	9.0	125	81	D163 0900
0910	9.1	125	81	D163 0910
0920	9.2	125	81	D163 0920
0930	9.3	125	81	D163 0930

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
0940	9.4	125	81	D163 0940
0950	9.5	125	81	D163 0950
0960	9.6	133	87	D163 0960
0970	9.7	133	87	D163 0970
0980	9.8	133	87	D163 0980
0990	9.9	133	87	D163 0990
1000	10.0	133	87	D163 1000
1010	10.1	133	87	•
1020	10.2	133	87	D163 1020
1030	10.3	133	87	•
1040	10.4	133	87	•
1050	10.5	133	87	D163 1050
1060	10.6	133	87	•
1070	10.7	142	94	•
1080	10.8	142	94	D163 1080
1090	10.9	142	94	•
1100	11.0	142	94	D163 1100
1110	11.1	142	94	D163 1110
1120	11.2	142	94	•
1130	11.3	142	94	•
1140	11.4	142	94	•
1150	11.5	142	94	D163 1150
1160	11.6	142	94	•
1170	11.7	142	94	•
1180	11.8	142	94	D163 1180
1190	11.9	151	101	•
1200	12.0	151	101	D163 1200
1210	12.1	151	101	•



Catalogue Code	D163
Discount Group	A0418
Material	HSS Co
Surface Finish	TiAlN
Sutton Designation	NH
Geometry	R40
Point Type	130° Form B
Shank Tolerance	h9

ISO	P						M						K						N						S						H																			
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41	
D163	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

P Steel
 M Stainless Steel
 K Cast Iron
 N Non-Ferrous Metals
 S Titanium & Super Alloys
 H Hard Materials

● Optimal ○ Effective

• Available on request as special manufacture. Subject to lead time.



- Alternative to carbide where application lacks rigidity
- Coolant fed directly to the cutting edges to help evacuate the swarf from the hole
- For use in CNC machines with through spindle coolant supply
- Endmill shank for greater accuracy
- TiAIN for longer tool life



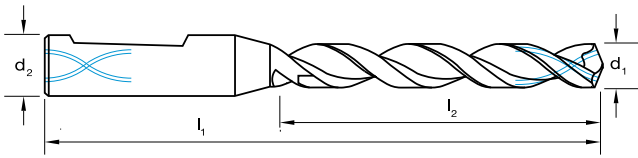
Forets queue cylindrique haute performance Hélice 40° universel, arrosage central

- Alternative au carbure, adapté au manque de stabilité
- Arrosage interne pour une meilleure évacuation copeaux
- Utilisation sur machine CN avec arrosage centre broche
- Queue cylindrique de plus gros diamètre pour une meilleure stabilité
- Revêtement TiAIN pour une meilleure durée de vie



Punte da trapano, R40 UNI, IK

- Alternativa al metallo duro in caso di scarsa rigidità
- Raffrigerazione diretta sul tagliante per aiutare l'evacuazione truciolo
- Usare su CNC su mandrino con passaggio di refrigerazione interna
- Precisione gambo di attacco paritetica a Gambo Frese
- TiAIN per massimizzare vita utensile



Vc Page #: 415 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Item #
0500	5.0	82	44	6	D182 0500
0510	5.1	82	44	6	•
0520	5.2	82	44	6	D182 0520
0530	5.3	82	44	6	•
0540	5.4	82	44	6	•
0550	5.5	82	44	6	D182 0550
0560	5.6	82	44	6	•
0570	5.7	82	44	6	•
0580	5.8	82	44	6	D182 0580
0590	5.9	82	44	6	D182 0590
0600	6.0	82	44	6	D182 0600
0610	6.1	91	53	8	•
0620	6.2	91	53	8	•
0630	6.3	91	53	8	•
0640	6.4	91	53	8	•
0650	6.5	91	53	8	D182 0650
0660	6.6	91	53	8	•
0670	6.7	91	53	8	D182 0670
0680	6.8	91	53	8	D182 0680
0690	6.9	91	53	8	•
0700	7.0	91	53	8	D182 0700
0710	7.1	91	53	8	•
0720	7.2	91	53	8	D182 0720
0730	7.3	91	53	8	•
0740	7.4	91	53	8	•
0750	7.5	91	53	8	D182 0750
0760	7.6	91	53	8	•
0770	7.7	91	53	8	•



Brocas Jobber, R40 UNI, IK

- Alternativa al metal duro, donde la aplicación carece de rigidez
- Refrigeración interior, directamente al filo de corte, para ayudar a evacuar la viruta del agujero
- Para uso en máquinas CNC con suministro de refrigeración a través del husillo
- Mango de mayor precisión
- TiAIN para una mayor vida útil de la herramienta



Catalogue Code	D182
Discount Group	A1502
Material	HSS Co
Surface Finish	TiAIN
Sutton Designation	NH
Geometry	R40 IK
Point Type	130° 4 Facet Form B
Shank Form	DIN835-E

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Item #
0780	7.8	91	53	8	D182 0780
0790	7.9	91	53	8	•
0800	8.0	91	53	8	D182 0800
0810	8.1	103	61	10	D182 0810
0820	8.2	103	61	10	D182 0820
0830	8.3	103	61	10	•
0840	8.4	103	61	10	•
0850	8.5	103	61	10	D182 0850
0860	8.6	103	61	10	D182 0860
0870	8.7	103	61	10	D182 0870
0880	8.8	103	61	10	D182 0880
0890	8.9	103	61	10	•
0900	9.0	103	61	10	D182 0900
0910	9.1	103	61	10	•
0920	9.2	103	61	10	•
0930	9.3	103	61	10	D182 0930
0940	9.4	103	61	10	•
0950	9.5	103	61	10	D182 0950
0960	9.6	103	61	10	D182 0960
0970	9.7	103	61	10	•
0980	9.8	103	61	10	•
0990	9.9	103	61	10	D182 0990
1000	10.0	103	61	10	D182 1000
1020	10.2	122	75	12	D182 1020
1050	10.5	122	75	12	D182 1050
1100	11.0	122	75	12	D182 1100
1150	11.5	122	75	12	D182 1150
1200	12.0	122	75	12	D182 1200

ISO	P										M					K					N					S					H																				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41		
D182	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials ● Optimal ○ Effective

• Available on request as special manufacture. Subject to lead time.



- Alternative to carbide where application lacks rigidity
- Coolant fed directly to the cutting edges to help evacuate the swarf from the hole
- For use in CNC machines with through spindle coolant supply
- Endmill shank for greater accuracy
- TiAIN for longer tool life



Forets quee cylindrique haute performance Hélice 40° universel, arrosage central

- Alternative au carbure, adapté au manque de stabilité
- Arrosage interne pour une meilleure évacuation copeaux
- Utilisation sur machine CN avec arrosage centre broche
- Queue cylindrique de plus gros diamètre pour une meilleure stabilité
- Revêtement TiAIN pour une meilleure durée de vie



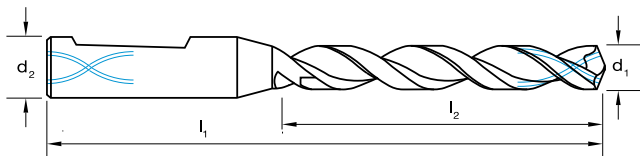
Punte da trapano, R40 UNI, IK

- Alternativa al metallo duro in caso di scarsa rigidità
- Refrigerazione diretta sul tagliente per aiutare l'evacuazione truciolo
- Usare su CNC su mandrino con passaggio di refrigerazione interna
- Precisione gambo di attacco paritetica a Gambo Frese
- TiAIN per massimizzare vita utensile



Brocas Jobber, R40 UNI, IK

- Alternativa al metal duro, donde la aplicación carece de rigidez
- Refrigeración interior, directamente al filo de corte, para ayudar a evacuar la viruta del agujero
- Para uso en máquinas CNC con suministro de refrigeración a través del husillo
- Mango de mayor precisión
- TiAIN para una mayor vida útil de la herramienta



Catalogue Code **D182**
 Discount Group **A1502**
 Material **HSS Co**
 Surface Finish **TiAIN**
 Sutton Designation **NH**
 Geometry **R40 IK**
 Point Type **130° 4 Facet Form B**
 Shank Form **DIN835-E**

Vc Page #: 415 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Item #
1250	12.5	134	87	14	D182 1250
1300	13.0	134	87	14	D182 1300
1350	13.5	134	87	14	D182 1350
1400	14.0	134	87	14	D182 1400
1450	14.5	150	100	16	D182 1450
1500	15.0	150	100	16	D182 1500
1550	15.5	150	100	16	D182 1550
1600	16.0	150	100	16	D182 1600
1650	16.5	162	122	18	D182 1650
1700	17.0	162	122	18	D182 1700
1750	17.5	162	122	18	D182 1750
1800	18.0	162	122	18	D182 1800
1850	18.5	176	124	20	D182 1850
1900	19.0	176	124	20	D182 1900
1950	19.5	176	124	20	D182 1950
2000	20.0	176	124	20	D182 2000
2050	20.5	207	145	25	D182 2050
2100	21.0	207	145	25	D182 2100
2150	21.5	207	145	25	D182 2150
2200	22.0	207	145	25	D182 2200
2250	22.5	207	145	25	D182 2250
2300	23.0	207	145	25	D182 2300
2350	23.5	207	145	25	D182 2350
2400	24.0	207	145	25	D182 2400

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Item #

ISO	P										M					K					N										S										H																
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41								
D182	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○



- Suitable for materials up to 850N/mm²
- Special point geometry with radius cutting lips
- Produces short chips
- TiAlN for longer tool life



Forets queue cylindrique haute performance DXJ

- Utilisable dans les matériaux jusqu'à 850N/mm²
- Affûtage spécial avec rayon de coupe en bout
- Produit des copeaux courts
- Revêtement TiAlN pour une meilleure durée de vie



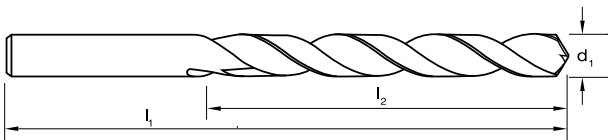
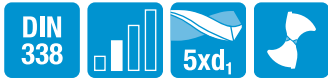
Punte da trapano, DXJ

- Ideale per materiali fino a 850N/mm²
- Geometria di punta speciale con labbro di rinforzo tagliente
- Produce trucioli piccoli
- TiAlN per massimizzare vita utensile



Brocas Jobber, DXJ

- Adecuado para materiales de hasta 800N/mm²
- Geometría de punta especial con labios de corte radial
- Produce virutas cortas
- TiAlN para una mayor vida útil de la herramienta



Vc Page #: 415 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
0100	1.0	34	13	•
0150	1.5	40	19	•
0200	2.0	49	25	•
0250	2.5	57	31	•
0300	3.0	61	33	D165 0300
0310	3.1	65	36	D165 0310
0320	3.2	65	36	D165 0320
0330	3.3	65	36	D165 0330
0340	3.4	70	39	D165 0340
0350	3.5	70	39	D165 0350
0360	3.6	70	39	D165 0360
0370	3.7	70	39	D165 0370
0380	3.8	75	43	D165 0380
0390	3.9	75	43	D165 0390
0400	4.0	75	43	D165 0400
0410	4.1	75	43	D165 0410
0420	4.2	75	43	D165 0420
0430	4.3	80	47	D165 0430
0440	4.4	80	47	D165 0440
0450	4.5	80	47	D165 0450
0460	4.6	80	47	D165 0460
0470	4.7	80	47	D165 0470
0480	4.8	86	52	D165 0480
0490	4.9	86	52	D165 0490
0500	5.0	86	52	D165 0500
0510	5.1	86	52	D165 0510
0520	5.2	86	52	D165 0520
0530	5.3	86	52	D165 0530

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
0540	5.4	93	57	D165 0540
0550	5.5	93	57	D165 0550
0560	5.6	93	57	D165 0560
0570	5.7	93	57	D165 0570
0580	5.8	93	57	D165 0580
0590	5.9	93	57	D165 0590
0600	6.0	93	57	D165 0600
0610	6.1	101	63	D165 0610
0620	6.2	101	63	D165 0620
0630	6.3	101	63	D165 0630
0640	6.4	101	63	D165 0640
0650	6.5	101	63	D165 0650
0660	6.6	101	63	D165 0660
0670	6.7	101	63	D165 0670
0680	6.8	109	69	D165 0680
0690	6.9	109	69	D165 0690
0700	7.0	109	69	D165 0700
0710	7.1	109	69	D165 0710
0720	7.2	109	69	D165 0720
0730	7.3	109	69	D165 0730
0740	7.4	109	69	D165 0740
0750	7.5	109	69	D165 0750
0760	7.6	117	75	D165 0760
0770	7.7	117	75	D165 0770
0780	7.8	117	75	D165 0780
0790	7.9	117	75	D165 0790
0800	8.0	117	75	D165 0800
0810	8.1	117	75	D165 0810



Catalogue Code	D165
Discount Group	A0418
Material	HSS Co
Surface Finish	TiAlN
Sutton Designation	WN
Geometry	R35
Point Type	130° Form A
Shank Tolerance	h9

ISO	P													M					K					N										S										H														
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41									
D165	●	●	●	●	●	●	●	●	●	○				○	○								●	●	●	●	○	●	●	○																												

P Steel
 M Stainless Steel
 K Cast Iron
 N Non-Ferrous Metals
 S Titanium & Super Alloys
 H Hard Materials
 ● Optimal ○ Effective



- Suitable for materials up to 850N/mm²
- Special point geometry with radius cutting lips
- Produces short chips
- TiAlN for longer tool life



Forets queue cylindrique haute performance DXJ

- Utilisable dans les matériaux jusqu'à 850N/mm²
- Affûtage spécial avec rayon de coupe en bout
- Produit des copeaux courts
- Revêtement TiAlN pour une meilleure durée de vie



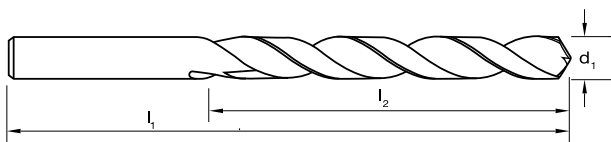
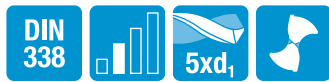
Punte da trapano, DXJ

- Ideale per materiali fino a 850N/mm²
- Geometria di punta speciale con labbro di rinforzo tagliente
- Produce trucioli piccoli
- TiAlN per massimizzare vita utensile



Brocas Jobber, DXJ

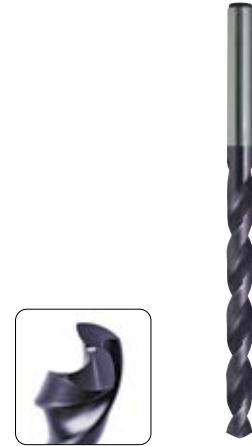
- Adecuado para materiales de hasta 800N/mm²
- Geometría de punta especial con labios de corte radial
- Produce virutas cortas
- TiAlN para una mayor vida útil de la herramienta



Vc Page #: 415 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
0820	8.2	117	75	D165 0820
0830	8.3	117	75	D165 0830
0840	8.4	117	75	D165 0840
0850	8.5	117	75	D165 0850
0860	8.6	125	81	D165 0860
0870	8.7	125	81	D165 0870
0880	8.8	125	81	D165 0880
0890	8.9	125	81	D165 0890
0900	9.0	125	81	D165 0900
0910	9.1	125	81	D165 0910
0920	9.2	125	81	D165 0920
0930	9.3	125	81	D165 0930
0940	9.4	125	81	D165 0940
0950	9.5	125	81	D165 0950
0960	9.6	133	87	D165 0960
0970	9.7	133	87	D165 0970
0980	9.8	133	87	D165 0980
0990	9.9	133	87	D165 0990
1000	10.0	133	87	D165 1000
1010	10.1	133	87	D165 1010
1020	10.2	133	87	D165 1020
1050	10.5	133	87	D165 1050
1080	10.8	133	87	D165 1080
1100	11.0	142	94	D165 1100
1110	11.1	142	94	D165 1110
1120	11.2	142	94	D165 1120
1150	11.5	142	94	D165 1150
1180	11.8	142	94	D165 1180

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
1200	12.0	151	101	D165 1200
1220	12.2	151	101	D165 1220
1250	12.5	151	101	D165 1250
1280	12.8	151	101	D165 1280
1300	13.0	151	101	D165 1300



Catalogue Code	D165
Discount Group	A0418
Material	HSS Co
Surface Finish	TiAlN
Sutton Designation	WN
Geometry	R35
Point Type	130° Form A
Shank Tolerance	h9

ISO	P										M			K			N										S										H																	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41					
D165	●	●	●	●	○	○	○	○	○	○													●	●	●	●	○	○	○	○	○	○																						

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective



- SPM offers superior performance
- Suitable for production drilling as an alternative to carbide drills
- Suitable for materials up to 1500N/mm²
- Point geometry ensures high strength & short chips
- Endmill shank for greater accuracy
- TiAlN for longer tool life



Forets queue cylindrique haute performance Hélice 40° universel

- Substrat SPM pour une meilleure performance
- Adapté à la production de masse, une alternative au foret carbure
- Utilisable dans les matériaux jusqu'à 1500N/mm² et les
- Super Alliages
- Affûtage 4 faces, pour un meilleur centrage, produit des copeaux courts
- Queue cylindrique de plus gros diamètre pour une meilleure stabilité
- Revêtement TiAlN pour une meilleure durée de vie



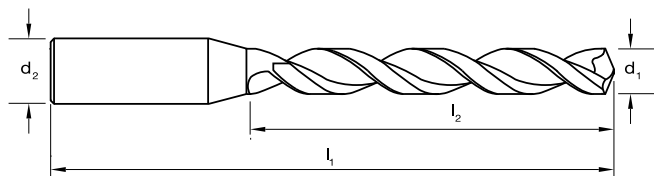
Punta da trapano, R40 UNI

- SPM offre una prestazione superiore
- Ideale per foratura di produzione come alternativa al metallo duro
- Ideale per materiali fino a 1500N/mm²
- Geometria di punta per garantire un'elevata resistenza e trucioli corti
- Precisione gambo di attacco paritetica a Gambo Frese
- TiAlN per massimizzare vita utensile



Brocas Jobber, R40 UNI

- SPM ofrece un rendimiento superior
- Adecuado para taladrado de producción como alternativa a las brocas de metal duro
- Adecuado para materiales de hasta 1500N/mm²
- La geometría de la punta garantiza alta resistencia y virutas cortas
- Mango de mayor precisión
- TiAlN para una mayor vida útil de la herramienta



Vc Page #: 415 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Item #
0100	1.0	41	12	3	D168 0100
0110	1.1	43	14	3	D168 0110
0120	1.2	44	16	3	D168 0120
0130	1.3	44	16	3	D168 0130
0140	1.4	46	18	3	D168 0140
0150	1.5	46	18	3	D168 0150
0160	1.6	47	20	3	D168 0160
0170	1.7	47	20	3	D168 0170
0180	1.8	49	22	3	D168 0180
0190	1.9	49	22	3	D168 0190
0200	2.0	49	24	3	D168 0200
0210	2.1	49	24	3	D168 0210
0220	2.2	53	28	3	D168 0220
0230	2.3	53	28	3	D168 0230
0240	2.4	57	31	3	D168 0240
0250	2.5	57	31	3	D168 0250
0260	2.6	57	31	3	D168 0260
0270	2.7	61	34	3	D168 0270
0280	2.8	61	34	3	D168 0280
0290	2.9	61	34	3	D168 0290
0300	3.0	61	33	3	D168 0300
0310	3.1	65	36	4	D168 0310
0320	3.2	65	36	4	D168 0320
0330	3.3	65	36	4	D168 0330
0340	3.4	70	39	4	D168 0340
0350	3.5	70	39	4	D168 0350
0360	3.6	70	39	4	D168 0360
0370	3.7	70	39	4	D168 0370

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Item #
0380	3.8	75	43	4	D168 0380
0390	3.9	75	43	4	D168 0390
0400	4.0	75	43	4	D168 0400
0410	4.1	75	43	6	D168 0410
0420	4.2	75	43	6	D168 0420
0430	4.3	80	47	6	D168 0430
0440	4.4	80	47	6	D168 0440
0450	4.5	80	47	6	D168 0450
0460	4.6	80	47	6	D168 0460
0465	4.65	80	47	6	D168 0465
0470	4.7	80	47	6	D168 0470
0480	4.8	86	52	6	D168 0480
0490	4.9	86	52	6	D168 0490
0500	5.0	86	52	6	D168 0500
0510	5.1	86	52	6	D168 0510
0520	5.2	86	52	6	D168 0520
0530	5.3	86	52	6	D168 0530
0540	5.4	93	57	6	D168 0540
0550	5.5	93	57	6	D168 0550
0555	5.55	93	57	6	D168 0555
0560	5.6	93	57	6	D168 0560
0570	5.7	93	57	6	D168 0570
0580	5.8	93	57	6	D168 0580
0590	5.9	93	57	6	D168 0590
0600	6.0	93	57	6	D168 0600
0610	6.1	101	63	8	D168 0610
0620	6.2	101	63	8	D168 0620
0630	6.3	101	63	8	D168 0630



Catalogue Code	D168
Discount Group	A1502
Material	SPM
Surface Finish	TiAlN
Sutton Designation	UNI
Geometry	R40
Point Type	130° 4 Facet Form B
Shank Tolerance	h7

ISO	P										M					K					N					S					H																		
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41
D168	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective



- SPM offers superior performance
- Suitable for production drilling as an alternative to carbide drills
- Suitable for materials up to 1500N/mm²
- Point geometry ensures high strength & short chips
- Endmill shank for greater accuracy
- TiAlN for longer tool life



Forets queue cylindrique haute performance Hélice 40° universel

- Substrat SPM pour une meilleure performance
- Adapté à la production de masse, une alternative au foret carbure
- Utilisable dans les matériaux jusqu'à 1500N/mm² et les
- Super Alliages
- Affûtage 4 faces, pour un meilleur centrage, produit des copeaux courts
- Queue cylindrique de plus gros diamètre pour une meilleure stabilité
- Revêtement TiAlN pour une meilleure durée de vie



Punta da trapano, R40 UNI

- SPM offre una prestazione superiore
- Ideale per foratura di produzione come alternativa al metallo duro
- Ideale per materiali fino a 1500N/mm²
- Geometria di punta per garantire un'elevata resistenza e trucioli corti
- Precisione gambo di attacco paritetica a Gambo Frese
- TiAlN per massimizzare vita utensile

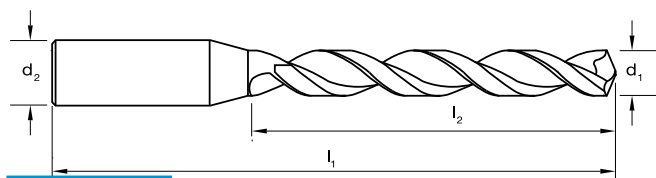


Brocas Jobber, R40 UNI

- SPM ofrece un rendimiento superior
- Adecuado para taladrado de producción como alternativa a las brocas de metal duro
- Adecuado para materiales de hasta 1500N/mm²
- La geometría de la punta garantiza alta resistencia y virutas cortas
- Mango de mayor precisión
- TiAlN para una mayor vida útil de la herramienta



Catalogue Code	D168
Discount Group	A1502
Material	SPM
Surface Finish	TiAlN
Sutton Designation	UNI
Geometry	R40
Point Type	130° 4 Facet Form B
Shank Tolerance	h7



Vc Page #: 415 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Item #
0640	6.4	101	63	8	D168 0640
0650	6.5	101	63	8	D168 0650
0660	6.6	101	63	8	D168 0660
0670	6.7	101	63	8	D168 0670
0680	6.8	109	69	8	D168 0680
0690	6.9	109	69	8	D168 0690
0700	7.0	109	69	8	D168 0700
0710	7.1	109	69	8	D168 0710
0720	7.2	109	69	8	D168 0720
0730	7.3	109	69	8	D168 0730
0740	7.4	109	69	8	D168 0740
0750	7.5	109	69	8	D168 0750
0760	7.6	117	75	8	D168 0760
0770	7.7	117	75	8	D168 0770
0780	7.8	117	75	8	D168 0780
0790	7.9	117	75	8	D168 0790
0800	8.0	117	75	8	D168 0800
0810	8.1	117	75	10	D168 0810
0820	8.2	117	75	10	D168 0820
0830	8.3	117	75	10	D168 0830
0840	8.4	117	75	10	D168 0840
0850	8.5	117	75	10	D168 0850
0860	8.6	125	81	10	D168 0860
0870	8.7	125	81	10	D168 0870
0880	8.8	125	81	10	D168 0880
0890	8.9	125	81	10	D168 0890
0900	9.0	125	81	10	D168 0900
0910	9.1	125	81	10	D168 0910

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Item #
0920	9.2	125	81	10	D168 0920
0930	9.3	125	81	10	D168 0930
0940	9.4	125	81	10	D168 0940
0950	9.5	125	81	10	D168 0950
0955	9.55	133	87	10	D168 0955
0960	9.6	133	87	10	D168 0960
0970	9.7	133	87	10	D168 0970
0980	9.8	133	87	10	D168 0980
0990	9.9	133	87	10	D168 0990
1000	10.0	133	87	10	D168 1000
1010	10.1	133	87	10	D168 1010
1020	10.2	133	87	10	D168 1020
1030	10.3	133	87	10	D168 1030
1040	10.4	133	87	10	D168 1040
1050	10.5	133	87	10	D168 1050
1060	10.6	133	87	12	D168 1060
1070	10.7	142	94	12	D168 1070
1080	10.8	142	94	12	D168 1080
1090	10.9	142	94	12	D168 1090
1100	11.0	142	94	12	D168 1100
1110	11.1	142	94	12	D168 1110
1120	11.2	142	94	12	D168 1120
1130	11.3	142	94	12	D168 1130
1140	11.4	142	94	12	D168 1140
1150	11.5	142	94	12	D168 1150
1160	11.6	142	94	12	D168 1160
1170	11.7	142	94	12	D168 1170
1180	11.8	142	94	12	D168 1180

ISO	P										M					K					N										S										H								
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41
D168	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

P Steel
 M Stainless Steel
 K Cast Iron
 N Non-Ferrous Metals
 S Titanium & Super Alloys
 H Hard Materials

● Optimal ○ Effective

Drills Jobber, R40 VA, Black Magic



watch the video



- Excellent solution for austenitic stainless steels and most long chipping materials
- Optimised geometry ensures no work hardening and high productivity
- Endmill shank for greater accuracy
- TiAlN for longer tool life



Forets queue cylindrique haute performance Hélice 40° VA, Black Magic

- Excellente solution pour les Inox et matériaux à copeaux longs
- Géométrie optimisée pour réduire les efforts
- Queue cylindrique de plus gros diamètre pour une meilleure stabilité
- TiAlN for longer tool life



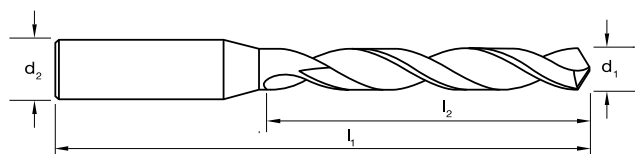
Punte da trapano, R40 VA, Black Magic

- eccellente soluzione per acciai inossidabili e materiale di scarsa truciolabilità
- Geometria ottimizzata per lavorare intensamente ad alta produttività
- Precisione gambo di attacco paritetica a Gambo Frese
- TiAlN per massimizzare vita utensile



Brocas Jobber, R40 UNI, VA, Black Magic

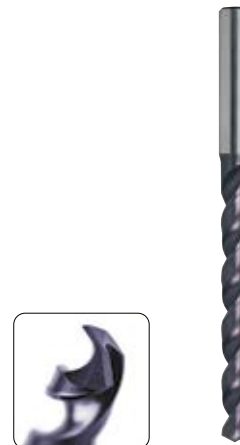
- Excelente solución para aceros inoxidable austeníticos y la mayoría de los materiales de viruta larga
- La geometría optimizada que garantiza una alta productividad
- Mango de mayor precisión
- TiAlN para una mayor vida útil de la herramienta



Vc Page #: 415 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Point Angle	Item #	
0200	2.0	49	24	3	130°	D169 0200	
0210	2.1	49	24	3	130°	D169 0210	
0220	2.2	53	28	3	130°	D169 0220	
0230	2.3	53	28	3	130°	D169 0230	
0240	2.4	57	31	3	130°	D169 0240	
0250	2.5	57	31	3	130°	D169 0250	
0260	2.6	57	31	3	130°	D169 0260	
0270	2.7	61	34	3	130°	D169 0270	
0280	2.8	61	34	3	130°	D169 0280	
0290	2.9	61	34	3	130°	D169 0290	
0300	3.0	61	33	3	130°	D169 0300	
0310	3.1	65	36	4	130°	D169 0310	
0318	3.18	1/8	65	36	4	130°	D169 0318
0320	3.2	65	36	4	130°	D169 0320	
0330	3.3	65	36	4	130°	D169 0330	
0340	3.4	70	39	4	130°	D169 0340	
0350	3.5	70	39	4	130°	D169 0350	
0357	3.57	9/64	70	39	4	130°	D169 0357
0360	3.6	70	39	4	130°	D169 0360	
0370	3.7	70	39	4	130°	D169 0370	
0380	3.8	75	43	4	130°	D169 0380	
0390	3.9	75	43	4	130°	D169 0390	
0397	3.97	5/32	75	43	4	130°	D169 0397
0400	4.0	75	43	4	130°	D169 0400	
0410	4.1	75	43	6	120°	D169 0410	
0420	4.2	75	43	6	120°	D169 0420	
0430	4.3	80	47	6	120°	D169 0430	
0437	4.37	11/64	80	47	6	120°	D169 0437

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Point Angle	Item #	
0440	4.4	80	47	6	120°	D169 0440	
0450	4.5	80	47	6	120°	D169 0450	
0460	4.6	80	47	6	120°	D169 0460	
0465	4.65	80	47	6	120°	D169 0465	
0470	4.7	80	47	6	120°	D169 0470	
0476	4.76	3/16	86	52	6	120°	D169 0476
0480	4.8	86	52	6	120°	D169 0480	
0490	4.9	86	52	6	120°	D169 0490	
0500	5.0	86	52	6	120°	D169 0500	
0510	5.1	86	52	6	120°	D169 0510	
0516	5.16	13/64	86	52	6	120°	D169 0516
0520	5.2	86	52	6	120°	D169 0520	
0530	5.3	86	52	6	120°	D169 0530	
0540	5.4	93	57	6	120°	D169 0540	
0550	5.5	93	57	6	120°	D169 0550	
0555	5.55	93	57	6	120°	D169 0555	
0556	5.56	7/32	93	57	6	120°	D169 0556
0560	5.6	93	57	6	120°	D169 0560	
0570	5.7	93	57	6	120°	D169 0570	
0580	5.8	93	57	6	120°	D169 0580	
0590	5.9	93	57	6	120°	D169 0590	
0595	5.95	15/64	93	57	6	120°	D169 0595
0600	6.0	93	57	6	120°	D169 0600	
0610	6.1	101	63	8	120°	D169 0610	
0620	6.2	101	63	8	120°	D169 0620	
0630	6.3	101	63	8	120°	D169 0630	
0635	6.35	1/4	101	63	8	120°	D169 0635
0640	6.4	101	63	8	120°	D169 0640	



Catalogue Code	D169
Discount Group	A1502
Material	HSS Co
Surface Finish	TiAlN
Sutton Designation	VA
Geometry	R40
Point Type	4 Facet Form C
Shank Tolerance	h7

ISO	P										M					K					N										S										H													
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41					
D169	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective

Drills Jobber, R40 VA, Black Magic



watch the video

sutton
BLACKMAGIC



- Excellent solution for austenitic stainless steels and most long chipping materials
- Optimised geometry ensures no work hardening and high productivity
- Endmill shank for greater accuracy
- TiAlN for longer tool life



Forets queue cylindrique haute performance Hélice 40° VA, Black Magic

- Excellente solution pour les Inox et matériaux à copeaux longs
- Géométrie optimisée pour réduire les efforts
- Queue cylindrique de plus gros diamètre pour une meilleure stabilité
- TiAlN for longer tool life



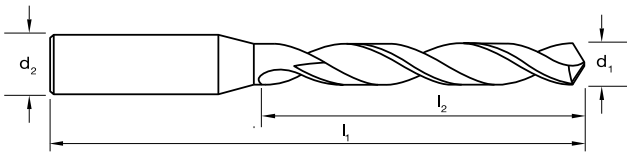
Punte da trapano, R40 VA, Black Magic

- eccellente soluzione per acciai inossidabili e materiale di scarsa truciolabilità
- Geometria ottimizzata per lavorare intensamente ad alta produttività
- Precisione gambo di attacco paritetica a Gambo Frese
- TiAlN per massimizzare vita utensile



Brocas Jobber, R40 UNI, VA, Black Magic

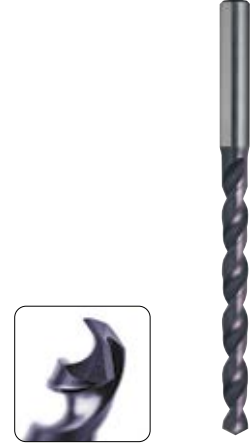
- Excelente solución para aceros inoxidables austeníticos y la mayoría de los materiales de viruta larga
- La geometría optimizada que garantiza una alta productividad
- Mango de mayor precisión
- TiAlN para una mayor vida útil de la herramienta



Vc Page #: 415 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Point Angle	Item #
0650	6.5	101	63	8	120°	D169 0650
0660	6.6	101	63	8	120°	D169 0660
0670	6.7	101	63	8	120°	D169 0670
0676	6.75	109	69	8	120°	D169 0676
0680	6.8	109	69	8	120°	D169 0680
0690	6.9	109	69	8	120°	D169 0690
0700	7.0	109	69	8	120°	D169 0700
0710	7.1	109	69	8	120°	D169 0710
0714	7.14	109	69	8	120°	D169 0714
0720	7.2	109	69	8	120°	D169 0720
0730	7.3	109	69	8	120°	D169 0730
0740	7.4	109	69	8	120°	D169 0740
0750	7.5	109	69	8	120°	D169 0750
0754	7.54	117	75	8	120°	D169 0754
0755	7.55	117	75	8	120°	D169 0755
0760	7.6	117	75	8	120°	D169 0760
0770	7.7	117	75	8	120°	D169 0770
0780	7.8	117	75	8	120°	D169 0780
0790	7.9	117	75	8	120°	D169 0790
0794	7.94	117	75	8	120°	D169 0794
0800	8.0	117	75	8	120°	D169 0800
0810	8.1	117	75	10	120°	D169 0810
0820	8.2	117	75	10	120°	D169 0820
0830	8.3	117	75	10	120°	D169 0830
0833	8.33	117	75	10	120°	D169 0833
0840	8.4	117	75	10	120°	D169 0840
0850	8.5	117	75	10	120°	D169 0850
0860	8.6	125	81	10	120°	D169 0860

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Point Angle	Item #
0870	8.7	125	81	10	120°	D169 0870
0873	8.73	125	81	10	120°	D169 0873
0880	8.8	125	81	10	120°	D169 0880
0890	8.9	125	81	10	120°	D169 0890
0900	9.0	125	81	10	120°	D169 0900
0910	9.1	125	81	10	120°	D169 0910
0913	9.13	125	81	10	120°	D169 0913
0920	9.2	125	81	10	120°	D169 0920
0930	9.3	125	81	10	120°	D169 0930
0940	9.4	125	81	10	120°	D169 0940
0950	9.5	125	81	10	120°	D169 0950
0953	9.52	133	87	10	120°	D169 0953
0955	9.55	133	87	10	120°	D169 0955
0960	9.6	133	87	10	120°	D169 0960
0970	9.7	133	87	10	120°	D169 0970
0980	9.8	133	87	10	120°	D169 0980
0990	9.9	133	87	10	120°	D169 0990
0992	9.92	133	87	10	120°	D169 0992
1000	10.0	133	87	10	120°	D169 1000
1010	10.1	133	87	10	120°	D169 1010
1020	10.2	133	87	10	120°	D169 1020
1030	10.3	133	87	10	120°	D169 1030
1032	10.32	133	87	10	120°	D169 1032
1040	10.4	133	87	10	120°	D169 1040
1050	10.5	133	87	10	120°	D169 1050
1060	10.6	133	87	12	120°	D169 1060
1070	10.7	142	94	12	120°	D169 1070
1072	10.72	142	94	12	120°	D169 1072



Catalogue Code	D169
Discount Group	A1502
Material	HSS Co
Surface Finish	TiAlN
Sutton Designation	VA
Geometry	R40
Point Type	4 Facet Form C
Shank Tolerance	h7

ISO	P										M					K					N					S					H																						
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41				
D169	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective

Drills Jobber, R40 VA, Black Magic



watch the video



- Excellent solution for austenitic stainless steels and most long chipping materials
- Optimised geometry ensures no work hardening and high productivity
- Endmill shank for greater accuracy
- TiAlN for longer tool life



Forets queue cylindrique haute performance Hélice 40° VA, Black Magic

- Excellente solution pour les Inox et matériaux à copeaux longs
- Géométrie optimisée pour réduire les efforts
- Queue cylindrique de plus gros diamètre pour une meilleure stabilité
- TiAlN for longer tool life



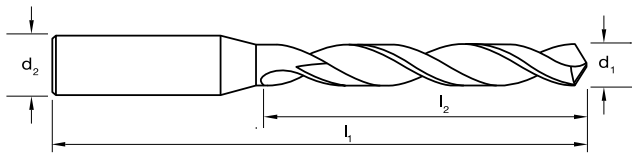
Punte da trapano, R40 VA, Black Magic

- eccellente soluzione per acciai inossidabili e materiale di scarsa truciolabilità
- Geometria ottimizzata per lavorare intensamente ad alta produttività
- Precisione gambo di attacco paritetica a Gambo Frese
- TiAlN per massimizzare vita utensile



Brocas Jobber, R40 UNI, VA, Black Magic

- Excelente solución para aceros inoxidable austeníticos y la mayoría de los materiales de viruta larga
- La geometría optimizada que garantiza una alta productividad
- Mango de mayor precisión
- TiAlN para una mayor vida útil de la herramienta



Catalogue Code	D169
Discount Group	A1502
Material	HSS Co
Surface Finish	TiAlN
Sutton Designation	VA
Geometry	R40
Point Type	4 Facet Form C
Shank Tolerance	h7

Vc Page #: 415 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Point Angle	Form	Item #
1080	10.8	142	94	12	120°		D169 1080
1090	10.9	142	94	12	120°		D169 1090
1100	11.0	142	94	12	120°		D169 1100
1110	11.1	142	94	12	120°		D169 1110
1111	11.11	7/16	142	94	12	120°	D169 1111
1120	11.2	142	94	12	120°		D169 1120
1130	11.3	142	94	12	120°		D169 1130
1140	11.4	142	94	12	120°		D169 1140
1150	11.5	142	94	12	120°		D169 1150
1151	11.51	29/64	142	94	12	120°	D169 1151
1160	11.6	142	94	12	120°		D169 1160
1170	11.7	142	94	12	120°		D169 1170
1180	11.8	142	94	12	120°		D169 1180
1190	11.9	151	94	12	120°		D169 1190
1191	11.91	15/32	151	101	12	120°	D169 1191
1200	12.0	151	101	12	120°		D169 1200
1210	12.1	151	101	12	120°		D169 1210
1220	12.2	151	101	12	120°		D169 1220
1230	12.3	151	101	12	120°		D169 1230
1231	12.3	31/64	151	101	12	120°	D169 1231
1240	12.4	151	101	12	120°	C	D169 1240
1250	12.5	151	101	12	120°	C	D169 1250
1260	12.6	151	101	12	120°	C	D169 1260
1270	12.7	151	101	12	120°	C	D169 1270
1269	12.7	1/2	151	101	12	120°	D169 1269
1280	12.8	151	101	12	120°	C	D169 1280
1290	12.9	151	101	12	120°	C	D169 1290
1300	13.0	151	101	12	120°	C	D169 1300

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Point Angle	Form	Item #
1350	13.5	160	108	16	120°	A	D169 1350
1400	14.0	160	108	16	120°	A	D169 1400
1450	14.5	169	114	16	120°	A	D169 1450
1500	15.0	169	114	16	120°	A	D169 1500
1550	15.5	178	120	16	120°	A	D169 1550
1600	16.0	178	120	16	120°	A	D169 1600
1650	16.5	184	125	20	120°	A	D169 1650
1700	17.0	184	125	20	120°	A	D169 1700
1750	17.5	191	130	20	120°	A	D169 1750
1800	18.0	191	130	20	120°	A	D169 1800
1850	18.5	198	135	20	120°	A	D169 1850
1900	19.0	198	135	20	120°	A	D169 1900
1950	19.5	205	140	20	120°	A	D169 1950
2000	20.0	205	140	20	120°	A	D169 2000

ISO	P										M			K			N							S							H																			
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41	
D169	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective



- Point geometry ensures high strength
- Parabolic flute design for optimal chip transportation
- Less pecking required over standard drills
- TiAlN for longer tool life



Forets queue cylindrique long, DHL

- Affûtage 130° et géométrie de pointe pour un meilleur centrage
- Taillage parabolique pour une meilleure évacuation copeaux
- Perçage par pecking recommandé
- Revêtement TiAlN pour une meilleure durée de vie



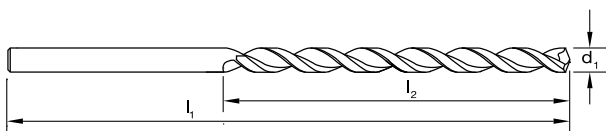
Punte Serie Lunga, DHL

- Geometria di punta per garantire un'elevata resistenza
- Scanatura tagliente progettato per ottima evacuazione truciolo
- Non richiede scarico trucioli su fori standard
- TiAlN per massimizzare vita utensile



Brocas serie larga, DHL

- La geometría de la punta garantiza una alta resistencia
- Diseño de hélice parabólica para una evacuación óptima de la viruta
- Menos picoteos requeridos, en los taladros estándar
- TiAlN para una mayor vida útil de la herramienta



Vc Page #: 415 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	Point Form	Item #
0100†	1.0	56	33	A	D171 0100
0110†	1.1	60	37	A	D171 0110
0120†	1.2	65	41	A	D171 0120
0130†	1.3	65	41	A	D171 0130
0140†	1.4	70	45	A	D171 0140
0150†	1.5	70	45	A	D171 0150
0160†	1.6	76	50	A	D171 0160
0170†	1.7	76	50	A	D171 0170
0180†	1.8	80	53	A	D171 0180
0190†	1.9	80	53	A	D171 0190
0200†	2.0	85	56	B	D171 0200
0210†	2.1	85	56	B	D171 0210
0220†	2.2	90	59	B	D171 0220
0230†	2.3	90	59	B	D171 0230
0240†	2.4	95	62	B	D171 0240
0250†	2.5	95	62	B	D171 0250
0260†	2.6	95	62	B	D171 0260
0270†	2.7	100	66	B	D171 0270
0280†	2.8	100	66	B	D171 0280
0290†	2.9	100	66	B	D171 0290
0300	3.0	100	66		D171 0300
0310	3.1	106	69		D171 0310
0320	3.2	106	69		D171 0320
0330	3.3	106	69		D171 0330
0340	3.4	112	73		D171 0340
0350	3.5	112	73		D171 0350
0360	3.6	112	73		D171 0360
0370	3.7	112	73		D171 0370

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
0380	3.8	119	78	D171 0380
0390	3.9	119	78	D171 0390
0400	4.0	119	78	D171 0400
0410	4.1	119	78	D171 0410
0420	4.2	119	78	D171 0420
0430	4.3	126	82	D171 0430
0440	4.4	126	82	D171 0440
0450	4.5	126	82	D171 0450
0460	4.6	126	82	D171 0460
0470	4.7	126	82	D171 0470
0480	4.8	132	87	D171 0480
0490	4.9	132	87	D171 0490
0500	5.0	132	87	D171 0500
0510	5.1	132	87	D171 0510
0520	5.2	132	87	D171 0520
0530	5.3	132	87	D171 0530
0540	5.4	139	91	D171 0540
0550	5.5	139	91	D171 0550
0560	5.6	139	91	D171 0560
0570	5.7	139	91	D171 0570
0580	5.8	139	91	D171 0580
0590	5.9	139	91	D171 0590
0600	6.0	139	91	D171 0600
0610	6.1	148	97	D171 0610
0620	6.2	148	97	D171 0620
0630	6.3	148	97	D171 0630
0640	6.4	148	97	D171 0640
0650	6.5	148	97	D171 0650



Catalogue Code	D171
Discount Group	A0508
Material	HSS Co
Surface Finish	TiAlN
Sutton Designation	NH
Geometry	R40
Point Type	130° Form B
Shank Tolerance	h9

ISO	P										M					K					N					S					H																										
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41								
D171	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

● Optimal ○ Effective

† Sizes <3.0 point type: 130° 4 Facet



- Suitable for materials up to 1200N/mm²
- Point geometry ensures high strength
- Parabolic flute design for optimal chip transportation
- Less pecking required over standard drills
- TiAIN for longer tool life



Forets queue cylindrique long, DHXL-1

- Adaptés au matériaux jusqu'à 1200N/mm²
- Affûtage 130° et géométrie de pointe pour un meilleur centrage
- Taillage parabolique pour une meilleure évacuation copeaux
- Perçage par pecking recommandé
- Revêtement TiAIN pour une meilleure durée de vie



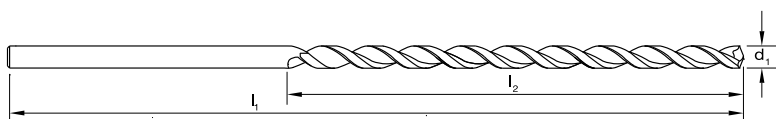
Punte Extra Lunghe, DHXL-1

- Ideale per materiali fino a 1200N/mm²
- Geometria di punta per garantire un'elevata resistenza
- Scalanatura tagliente progettato per ottima evaquazione truciolo
- Non richiede scarico trucioli su fori standard
- TiAIN per massimizzare vita utensile



Brocas Extra Largas, D, DHXL-1

- Adecuado para materiales de hasta 1200N/mm²
- La geometría de la punta garantiza una alta resistencia
- Diseño de hélice parabólica para una evacuación óptima de la viruta
- Menos picoteos requeridos, en los taladrados estándar
- TiAIN para una mayor vida útil de la herramienta



Vc Page #: 415 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
0200	2.0	125	85	D194 0200
0250	2.5	135	90	D194 0250
0300	3.0	155	105	D194 0300
0350	3.5	165	115	D194 0350
0400	4.0	175	120	D194 0400
0450	4.5	185	125	D194 0450
0500	5.0	195	135	D194 0500
0550	5.5	205	140	D194 0550
0600	6.0	205	140	D194 0600
0650	6.5	215	150	D194 0650
0700	7.0	225	155	D194 0700
0750	7.5	225	155	D194 0750
0800	8.0	240	165	D194 0800
0850	8.5	240	165	D194 0850
0900	9.0	250	175	D194 0900
0950	9.5	250	175	D194 0950
1000	10.0	265	185	D194 1000



Catalogue Code	D194
Discount Group	A0508
Material	HSS Co
Surface Finish	TiAIN
Sutton Designation	NH
Geometry	R40
Point Type	130° Form B
Shank Tolerance	h9

ISO	P													M			K					N							S							H													
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41
D194	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective



- Suitable for materials up to 1200N/mm²
- Point geometry ensures high strength
- Parabolic flute design for optimal chip transportation
- Less pecking required over standard drills
- TiAlN for longer tool life



Forets queue cylindrique long, DHXL-2

- Adaptés au matériaux jusqu'à 1200N/mm²
- Affûtage 130° et géométrie de pointe pour un meilleur centrage
- Taillage parabolique pour une meilleure évacuation copeaux
- Perçage par pecking recommandé
- Revêtement TiAlN pour une meilleure durée de vie



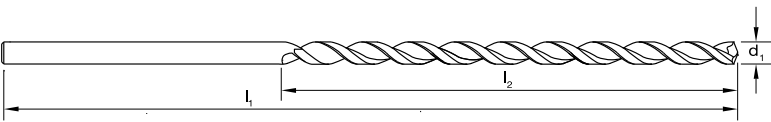
Punte Extra Lunghe, DHXL-2

- Ideale per materiali fino a 1200N/mm²
- Geometria di punta per garantire un'elevata resistenza
- Scalanatura tagliente progettato per ottima evaquazione truciolo
- Non richiede scarico trucioli su fori standard
- TiAlN per massimizzare vita utensile



Brocas Extra Largas, D, DHXL-2

- Adecuado para materiales de hasta 1200N/mm²
- La geometría de la punta garantiza una alta resistencia
- Diseño de hélice parabólica para una evacuación óptima de la viruta
- Menos picoteos requeridos, en los taladrados estándar
- TiAlN para una mayor vida útil de la herramienta



Catalogue Code	D195
Discount Group	A0508
Material	HSS Co
Surface Finish	TiAlN
Sutton Designation	NH
Geometry	R40
Point Type	130° Form B
Shank Tolerance	h9

Vc Page #: 415 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	Item #
0300	3.0	200	135	D195 0300
0350	3.5	210	145	D195 0350
0400	4.0	220	150	D195 0400
0450	4.5	235	160	D195 0450
0500	5.0	245	170	D195 0500
0550	5.5	260	180	D195 0550
0600	6.0	260	180	D195 0600
0650	6.5	275	190	D195 0650
0700	7.0	290	200	D195 0700
0750	7.5	290	200	D195 0750
0800	8.0	305	210	D195 0800
0850	8.5	305	210	D195 0850
0900	9.0	320	220	D195 0900
0950	9.5	320	220	D195 0950
1000	10.0	340	235	D195 1000

ISO	P										M			K						N							S						H																			
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41			
D195	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective



- For drilling 60° centre holes in the end of shafts
- Ensures accurate starting and centring for precision
- Refer to Carbide Drill section for VHM Centre Drills



Forets à centrer

- Foret à centre 60° pour chanfreins et centrage sur arbre
- Voir le chapitre forets carbure pour forets à centrer carbure



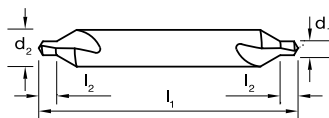
Punte Da Centro

- Usato per generare fori guida a 60° in testa ad alberi che verranno poi sottoposti a lavorazione sui centri
- Permette un accurato centraggio di precisione
- Fare riferimento alla sezione Trapani in metallo duro per trapani a centri VHM



Broca de Centrar

- Para puntear de centros entre ejes de 60°
- Asegura un punteado de precisión
- Consulte la sección Taladro de Metal duro, para las Brocas de centrar VHM



Catalogue Code	D135	D136
Discount Group	A0302	A0302
Material	HSS	HSS
Surface Finish	Brt	Brt
Sutton Designation	N	N
Geometry	A Type	Plain Type
Point Type	60° Stepped	60° Stepped
Standard	DIN 333	ANSI B94-11

Size Ref.	Type	d ₁	l ₁	l ₂	d ₂	Item #	Item #
Type A							
0080	0.80	0.80	25.00	1.10	3.15	D135 0080	
0100	1.00	1.00	31.50	1.30	3.15	D135 0100	
0125	1.25	1.25	31.50	1.60	3.15	D135 0125	
0160	1.60	1.60	35.50	2.00	4.00	D135 0160	
0200	2.00	2.00	40.00	2.50	5.00	D135 0200	
0250	2.50	2.50	45.00	3.10	6.30	D135 0250	
0315	3.15	3.15	50.00	3.90	8.00	D135 0315	
0400	4.00	4.00	56.00	5.00	10.00	D135 0400	
0500	5.00	5.00	63.00	6.30	12.50	D135 0500	
0630	6.30	6.30	71.00	8.00	16.00	D135 0630	
0800	8.00	8.00	80.00	10.10	20.00	D135 0800	
1000	10.00	10.00	100.00	12.80	25.00	D135 1000	
Plain Type							
0001	#1	3/64	1-1/4	3/64	1/8		D136 0001
0002	#2	5/64	1-7/8	5/64	3/16		D136 0002
0003	#3	7/64	2	7/64	1/4		D136 0003
0004	#4	1/8	2-1/8	1/8	5/16		D136 0004
0005	#5	3/16	2-3/4	3/16	7/16		D136 0005
0006	#6	7/32	3	7/32	1/2		D136 0006
0007	#7	1/4	3-1/4	1/4	5/8		D136 0007
0008	#8	5/16	3-1/2	5/16	3/4		D136 0008
Set - 5 Pce							
SCD1	#1, #2, #3, #4 & #5						D136 SCD1



D136 SCD1

ISO	P													M			K							N										S										H											
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41						
D135	●	●	●	●	●									○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
D136	●	●	○	○	○	○								○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective



- Precision drill for machine use
- Rigid design for “seat” position accuracy
- 90° offers hole chamfering & spotting with the one tool
- 120° for spotting, matching a typical drill point
- Only drill to the depth of the point
- Refer to Carbide Drill section for VHM Spotting Drills



Forets NC à pointer

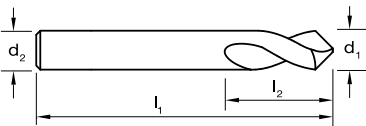
- utilisation sur machine
- forets rigide
- 90° pour les chanfreins
- 120° pour chanfreins et avant trous de perçage pour les forets à 118°
- Voir le chapitre carbure pour les forets NC carbure



Punte Da Centro NC

- Centrino per CNC
- Progettata per accurati centraggi pre-foratura
- 90° offre possibilità di centraggio e smussatura in un unico utensile
- 120° per un centraggio accurato pre-foratura
- Utilizzare solo la profondità della punta
- Fare riferimento alle punte da centro nella sezione Punte Metallo duro

DIN 1897



Vc Page #: 415 →

Size Ref.	d ₁ (h8)	l ₁	l ₂	d ₂	Pieces	Item #	Item #
0300	3.0	49	16	3.0		D175 0300	D176 0300
0400	4.0	55	22	4.0		D175 0400	D176 0400
0500	5.0	62	25	5.0		D175 0500	D176 0500
0600	6.0	66	25	6.0		D175 0600	D176 0600
0800	8.0	79	29	8.0		D175 0800	D176 0800
1000	10.0	89	32	10.0		D175 1000	D176 1000
1200	12.0	102	32	12.0		D175 1200	D176 1200
1600	16.0	115	35	16.0		D175 1600	D176 1600
2000	20.0	131	37	20.0		D175 2000	D176 2000
2500	25.0	151	37	25.0		D175 2500	D176 2500

Sets

0004	6.0, 8.0, 10.0 & 12.0	4	D175 0004	D176 0004
SDT5	6.0, 8.0, 10.0, 12.0 & 16.0	5	D175 SDT5	



Broca de Puntear NC

- Broca de precisión para uso en máquinas
- Diseño rígido para una base de precisión
- 90° permite puntear y avellanar con una única herramienta
- 120° para base coincidiendo con la punta típica de las brocas
- Solo talad্রে hasta la profundidad de la punta
- Consulte la sección de Metal duro, para ver las brocas VHM



90°

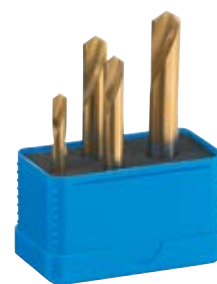


120°

Catalogue Code	D175	D176
Discount Group	A1124	A1124
Material	HSS Co	HSS Co
Surface Finish	TiN	TiN
Sutton Designation	N	N
Geometry	-	-
Point Type	90°	120°
Shank Tolerance	h9	h9



D175 0004



D176 0004



D175 SDT5

ISO	P										M					K					N										S					H															
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41		
D175	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
D176	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective



- Solid pilot style
- 3 flute design
- Right-hand cutting
- Nominal size to suit metric socket head cap screws
- Cobalt High Speed Steel enables counterboring in high alloy steels



Forets à lamer

- Pilote intégré
- 3 dents
- Coupe à droite
- Suivant la norme des têtes de vis métriques
- Multi-matières



Punte svasate

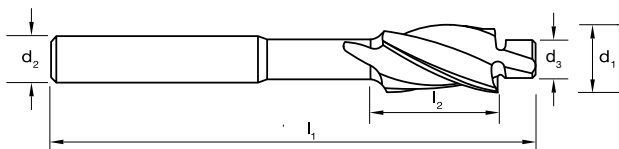
- Diametro pilota
- 3 Taglienti
- Destro
- Allargatore per teste a Brugola di dimensioni metriche nominali
- HSS-Cobalto permette di lavorare acciai altamente legati



Taladros avellanados

- Piloto guía sólido
- Diseño de 3 labios
- Corte a la derecha
- Tamaño nominal para adaptarse a tornillos métricos de cabeza allen
- El acero rápido al cobalto permite el fresado en aceros de alta aleación

DIN 373



Vc Page #: 415 →

Size Ref.	Size	d ₃	d ₁	l ₁	l ₂	d ₂	Item #
0300	3.0	3.2	6.0	71.0	14.0	5.0	C100 0300
0400	4.0	4.3	8.0	71.0	14.0	5.0	C100 0400
0500	5.0	5.3	10.0	80.0	18.0	8.0	C100 0500
0600	6.0	6.4	11.0	80.0	18.0	8.0	C100 0600
0800	8.0	8.4	15.0	100.0	22.0	12.5	C100 0800
1000	10.0	10.5	18.0	100.0	22.0	12.5	C100 1000
1200	12.0	13.0	20.0	100.0	22.0	12.5	C100 1200



Catalogue Code	C100
Discount Group	B0709
Material	HSS Co
Surface Finish	Brt
Sutton Designation	N
Geometry	-
Point Type	-
Shank Tolerance	h6

ISO	P										M					K					N										S										H								
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41
C100	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective