

POINT DRILLS

🇬🇧 COST REDUCTION / HIGH PRECISION DOUBLE FUNCTION / SAFETY

Thanks to double edge POINT DRILLS enable tool cost reduction.

New POINT DRILLS geometry enables high precision centering and chamfering.

Point angle: 125° - chamfering angle 90°/60°.

Thanks to the double angle POINT DRILLS enable both centering and chamfering process.

POINT DRILLS available on request with extended shank enable smooth and safety chips ejection.

🇮🇹 RIDUZIONE COSTI / ALTA PRECISIONE DOPPIA FUNZIONE / SICUREZZA

Grazie al doppio tagliente POINT DRILLS garantiscono una riduzione del costo utensile.

L'innovativa geometria di POINT DRILLS garantisce massima precisione.

Angolo punte: 125° - angolo svasatura 90°/60°.

Grazie al doppio angolo POINT DRILLS sono adatte sia al centraggio che alla svasatura.

POINT DRILLS, disponibili anche nella serie lunga ed extra lunga, garantiscono ottima evacuazione dei trucioli.

🇩🇪 KOSTENSENKUNG / HOHE PRÄZISION DOPPELFUNKTION / SICHERHEIT

Dank der Doppelschneide, garantieren POINT DRILLS die Werkzeugkostensenkung.

Dank der innovativen Geometrie garantieren Point Drills die größte Präzision.

Spitzwinkel: 125° - Senkungswinkel 90°/60°.

Dank dem Doppelwinkel, sind Point Drills sowohl für die Zentrierung als auch für die Senkung geeignet.

Point Drills, auch mit langem und extra-langem Schaft lieferbar, erlauben sehr gute Späneentsorgung.

🇫🇷 RÉDUCTION DES COÛTS / HAUTE PRÉCISION DOUBLE FONCTION / SÉCURITÉ

Grâce au double arête, POINT DRILLS garantissent une réduction du coût de l'outil.

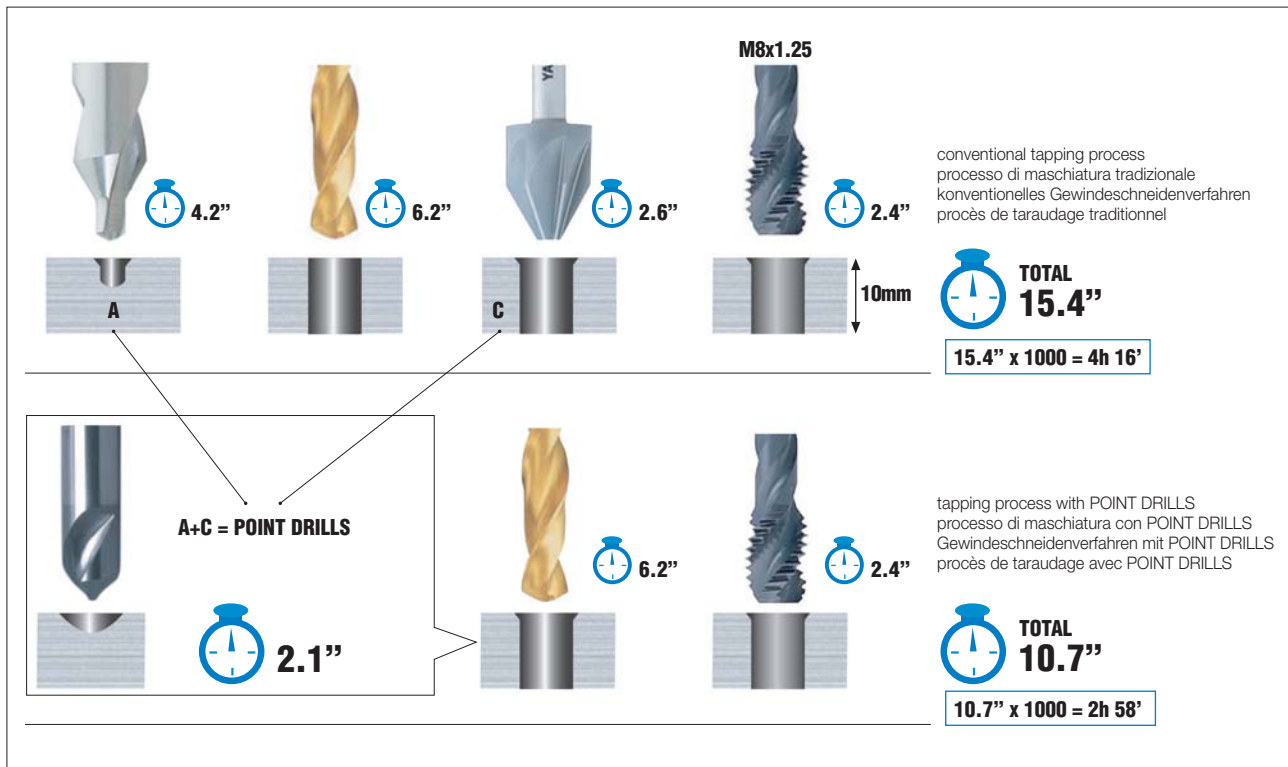
Grâce à l'innovatrice géométrie, point drills garantissent la plus haute précision.

Angle de la pointe: 125° - angle de fraisure 90°/60°.

Grâce au double angle, Point Drills sont des outils indiqués soit au centrage soit au chanfrein.

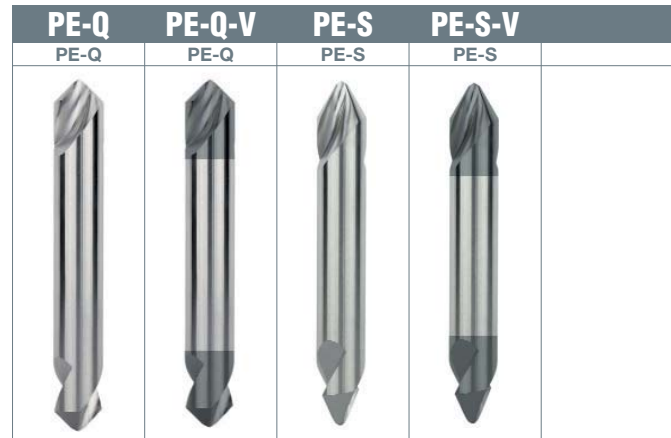
POINT DRILLS, disponibles aussi avec queue longue et extra longue, garantissent un excellent écoulement des copeaux.

APPLICATION-TIME COMPARISON / COMPARAZIONE DEI TEMPI DI LAVORO BEARBEITUNGSZEITEN / COMPARATION DES TEMPS D'USINAGE



60° - 90°

YAMAWA
NORM



MATERIAL GROUPS / GRUPPI MATERIALE WERKSTOFFEGRUPPE / GROUPES MATIÈRE				1-5 9 10 15 16	1-5 9 10 15 16	1-5 9 10 15 16	1-5 9 10 15 16
				 HSS BR	 HSS TICN	 HSS BR	 HSS TICN
				Stock	Stock	Stock	Stock
D	d	L	Stock	Stock	Stock	Stock	Stock
3	0.5	40	○	○	○	○	○
4	1	45	○	○	○	○	○
6	2	55	○	○	○	○	○
8	2.5	65	○	○	○	○	○
10	3	75	○	○	○	○	○
12	3.5	85	○	○	○	○	○
16	4	90	○	○	○	○	○
20	5	100	○	○	○	○	○

● stock standard ○ non-standard stock △ on request EX stock exhaustion

MATERIALE MATERIAL WERKSTOFF MATIERE	1 2	3	4 5	9 10	15 16
N/mm ²	~700	600-900	600-1000		
Vc(m/min)	30-40	22-30	20-25	10-15	70-100
Ø mm.	fn(mm/rev)	fn(mm/rev)	fn(mm/rev)	fn(mm/rev)	fn(mm/rev)
3	0.04 ~ 0.08	0.04 ~ 0.08	0.04 ~ 0.08	0.04 ~ 0.08	0.10 ~ 0.22
4	0.05 ~ 0.10	0.05 ~ 0.10	0.05 ~ 0.10	0.05 ~ 0.10	0.12 ~ 0.26
6	0.06 ~ 0.12	0.06 ~ 0.12	0.06 ~ 0.12	0.06 ~ 0.12	0.15 ~ 0.30
8	0.08 ~ 0.15	0.08 ~ 0.15	0.08 ~ 0.15	0.08 ~ 0.15	0.18 ~ 0.35
10	0.10 ~ 0.18	0.10 ~ 0.18	0.10 ~ 0.18	0.10 ~ 0.18	0.21 ~ 0.40
12	0.12 ~ 0.22	0.12 ~ 0.22	0.12 ~ 0.22	0.12 ~ 0.22	0.25 ~ 0.45
16	0.16 ~ 0.26	0.16 ~ 0.26	0.16 ~ 0.26	0.16 ~ 0.26	0.32 ~ 0.50
20	0.20 ~ 0.35	0.20 ~ 0.35	0.20 ~ 0.35	0.20 ~ 0.35	0.40 ~ 0.60

TICN: Vc = +30% ~ +50%



90° - 125°

YAMAWA
NORM



MATERIAL GROUPS / GRUPPI MATERIALE WERKSTOFFEGRUPPE / GROUPES MATIÈRE					1-5 9 10 13 14 15-19	1-5 9 10 13 14 15-19	1-5 9 10 13 14 15-19	1-5 9 10 13 14 15-19
					 HSS/Co BR	 HSS/Co TiCN	 HSS/Co BR	 HSS/Co TiCN
					Stock	Stock	Stock	Stock
D	d	L	l					
3	3	46	12	○	○	○	○	
4	4	55	15	○	○	○	○	
5	5	62	18	○	○	○	○	
6	6	66	20	●	●	●	●	
8	8	79	26	●	●	●	●	
10	10	89	30	●	●	●	●	
12	12	102	36	●	●	●	●	
16	16	115	41	●	●	●	●	
20	20	131	46	●	●	○	○	
25	25	151	52	○	○	○	○	

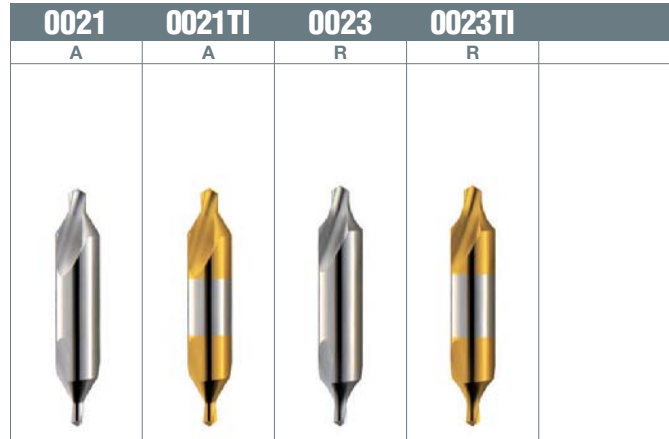
● stock standard ○ non-standard stock △ on request EX stock exhaustion

MATERIALE MATERIAL WERKSTOFF MATIÈRE	1	2	3	4	5	9 10	13 14	15 16	18 19
N/mm ²	~700	450~700	600~900	600~1000	700~1000				
Vc(m/min)	20~26	15~20	10~15	9~15	5~9	5~15	15~25	50~70	40~60
Ø mm.	fn(mm/rev)	fn(mm/rev)	fn(mm/rev)	fn(mm/rev)	fn(mm/rev)	fn(mm/rev)	fn(mm/rev)	fn(mm/rev)	fn(mm/rev)
1~3	0.03~0.06	0.03~0.06	0.03~0.06	0.03~0.06	0.03~0.06	0.03~0.06	0.03~0.06	0.03~0.06	0.03~0.06
3~4	0.05~0.10	0.05~0.10	0.05~0.10	0.05~0.10	0.05~0.10	0.05~0.10	0.05~0.10	0.05~0.10	0.05~0.10
4~6	0.08~0.15	0.08~0.15	0.08~0.15	0.08~0.15	0.08~0.15	0.08~0.15	0.08~0.15	0.08~0.15	0.08~0.15
6~8	0.10~0.20	0.10~0.20	0.10~0.20	0.10~0.20	0.10~0.20	0.10~0.20	0.10~0.20	0.10~0.20	0.10~0.20
8~11	0.15~0.25	0.15~0.25	0.15~0.25	0.15~0.25	0.15~0.25	0.15~0.25	0.15~0.25	0.15~0.25	0.15~0.25
11~15	0.20~0.30	0.20~0.30	0.20~0.30	0.20~0.30	0.20~0.30	0.20~0.30	0.20~0.30	0.20~0.30	0.20~0.30
15~18	0.23~0.33	0.23~0.33	0.23~0.33	0.23~0.33	0.23~0.33	0.23~0.33	0.23~0.33	0.23~0.33	0.23~0.33
18~21	0.25~0.36	0.25~0.36	0.25~0.36	0.25~0.36	0.25~0.36	0.25~0.36	0.25~0.36	0.25~0.36	0.25~0.36
21~24	0.28~0.38	0.28~0.38	0.28~0.38	0.28~0.38	0.28~0.38	0.28~0.38	0.28~0.38	0.28~0.38	0.28~0.38

TiCN: Vc = +30%~+50%

60° A - R

DIN333



MATERIAL GROUPS / GRUPPI MATERIALE WERKSTOFFEGRUPPE / GROUPES MATIÈRE								1-5 6 13 14 18-20	1-5 6 13 14 18-20	1-5 6 13 14 18-20	1-5 6 13 14 18-20
0021 ~ mm.0.8											
0021 mm.1 ~											
0023											
D	d	L	l	l1	r-max	r-min	Stock	Stock	Stock	Stock	
0.5	3.15	25	0.8				○	○	○	○	
0.8	3.15	25	1.1				○	○	○	○	
1	3.15	31.5	1.3	3	3.15	2.5	●	○	○	○	
1.25	3.15	31.5	1.6	3.35	4	3.15	○	○	○	○	
1.6	4	35.5	2	4.25	5	4	●	○	○	○	
2	5	40	2.5	5.3	6.3	5	●	●	○	○	
2.5	6.3	45	3.1	6.7	8	6.3	●	●	○	○	
3.15	8	50	3.9	8.5	10	8	●	●	●	○	
4	10	56	5	10.6	12.5	10	●	●	●	○	
5	12.5	63	6.3	13.2	16	12.5	●	●	●	○	
6.3	16	71	8	17	20	16	●	○	●	○	
8	20	80	10.1	21.2	25	20	●	○	○	○	
10	25	100	12.8	26.5	31.5	25	●	○	○	○	

● stock standard ○ non-standard stock △ on request EX stock exhaustion

MATERIALE MATERIAL WERKSTOFF MATIERE	1 2	3 4	5	9 10	13 14	18 19	20
N/mm ²	~700	600~1000	700~1000				
Vc(m/min)	15~30	10~25	10~20	5~12	8~15	20~40	20~40
Ø mm.	fn(mm/rev)	fn(mm/rev)	fn(mm/rev)	fn(mm/rev)	fn(mm/rev)	fn(mm/rev)	fn(mm/rev)
1~3	0.02~0.07	0.02~0.07	0.02~0.07	0.02~0.07	0.02~0.07	0.02~0.07	0.02~0.07
3~4	0.04~0.12	0.04~0.12	0.04~0.12	0.04~0.12	0.04~0.12	0.04~0.12	0.04~0.12
4~6	0.06~0.17	0.06~0.17	0.06~0.17	0.06~0.17	0.06~0.17	0.06~0.17	0.06~0.17
6~8	0.10~0.20	0.10~0.20	0.10~0.20	0.10~0.20	0.10~0.20	0.10~0.20	0.10~0.20
8~10	0.14~0.23	0.14~0.23	0.14~0.23	0.14~0.23	0.14~0.23	0.14~0.23	0.14~0.23
10~12	0.18~0.26	0.18~0.26	0.18~0.26	0.18~0.26	0.18~0.26	0.18~0.26	0.18~0.26

TIN: Vc = +30%~+50%

60° A

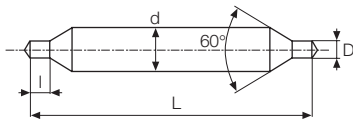
YAMAWA
NORM



MATERIAL GROUPS / GRUPPI MATERIALE
WERKSTOFFEGRUPPE / GROUPES MATIÈRE

1-5 6
13 14 18-20

1-5 6
13 14 18-20



HSS
BR

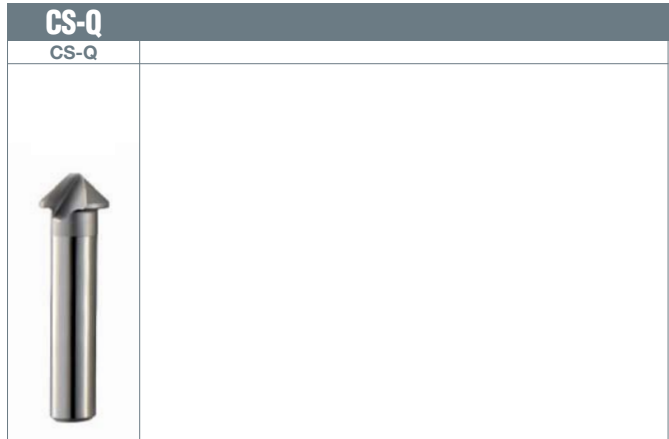


HSS
BR

D	d	L	l	Stock	Stock
1	4	100	1	○	○
1	4	150	1	○	○
1.5	5	100	1.5	○	○
1.5	5	150	1.5	○	○
2	6	100	2	●	○
2	6	150	2	○	○
2.5	8	100	2.5	●	○
2.5	8	150	2.5	○	○
3	8	100	3	●	○
3	8	150	3	○	○
4	10	100	4.5	●	○
4	10	150	4.5	○	○
5	12	100	5.5	●	○
5	12	150	5.5	○	○

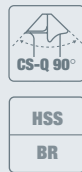
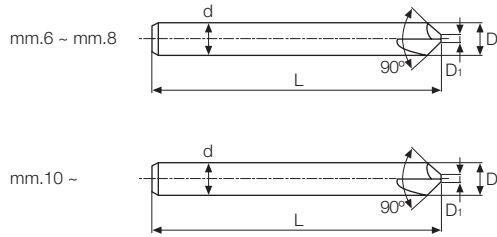
● stock standard ○ non-standard stock △ on request EX stock exhaustion

90°
YAMAWA
NORM



MATERIAL GROUPS / GRUPPI MATERIALE
WERKSTOFFEGRUPPE / GROUPES MATIÈRE

1-5 6 9-12
13 14 15-20



D	d	D1	L	I	Stock
6	6	1	50	-	○
8	8	1.3	50	-	○
10	8	1.6	46	40.5	○
15	10	3.2	56	48.5	○
20	10	4	60	50	○
25	10	7	65	54	○
30	12	9	70	57.5	○
35	12	11	75	60	○
40	12	12.5	80	63	○
45	12	14	85	66.5	○
50	12	16	90	70	○
60	16	20	100	76	○

● stock standard ○ non-standard stock △ on request EX stock exhaustion



mm 6 ~ 60

1



60° - 90°

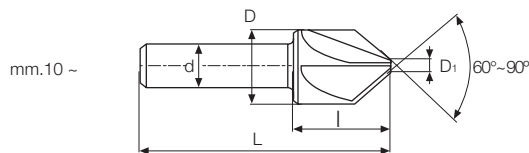
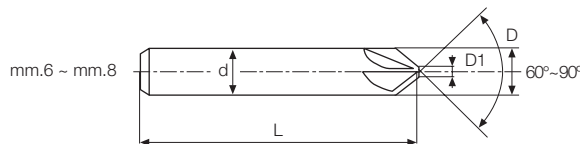
YAMAHA
NORM



MATERIAL GROUPS / GRUPPI MATERIALE
WERKSTOFFEGRUPPE / GROUPES MATIÈRE

1-5 6 9-12
13 14 15-20

1-5 6 9-12
13 14 15-20



D	d	D1	L-90°	I-90°	L-60°	I-60°	Stock	Stock
6	6	1.2	42	-	46	-	○	
8	8	1.6	44	-	48	-	○	○
10	8	2	46	32	50	32	○	
12	8	2.5	48	32	52	32	○	
16	10	3.2	56	36	60	36	○	○
20	10	4	60	36	64	36	○	○
25	10	7	65	36	69	36	○	○
30	12	9	68	36	76	36	○	
35	12	11	70	36	79	36	○	
40	12	12.5	71	36	81	36	○	

● stock standard ○ non-standard stock △ on request EX stock exhaustion



mm 6 ~ 10
12 ~ 20
25 ~ 40

3
5
7

3
5
7