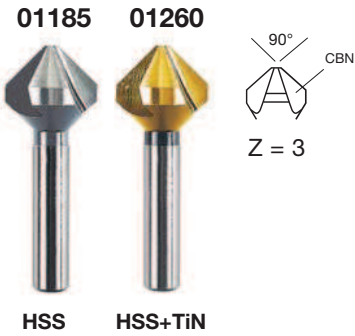
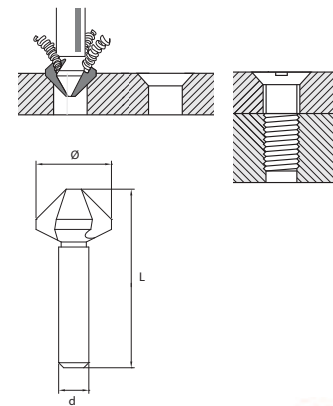
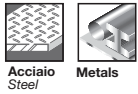


Frese ad incassare e svasare a 3 tagli

Deburring tools with 3 flutes / Fraise conique à ébavurer avec 3 coupes / Fresas de avellanar con 3 cortes / Kegelsenker mit 3 Schneiden



HSS HSS+TiN



Confezione / Packaging



Ø 6,3-8,3-10,4-12,4-16,5-20,5 6pcs
01270107 - HSS €



Ø 6,3-8,3-10,4-12,4-16,5-20,5 6pcs
01270109 - HSS+TiN €



Cod.

Composizione
Description

**01270400
HSS
€**

17 pcs
Ø 4,3 - 5 - 6 - 6,3 - 7 - 8 - 8,3
10 - 10,4 - 11,5 - 12,4 - 15 - 16,5
19 - 20,5 - 23 - 25 mm

DIN 335/C-90°

01185 HSS

01260 HSS+TiN

Ø (mm)	d	L	Per VITI / For screws		cod.	€ cad/each	cod.	€ cad/each
			DIN 74 AF	DIN 74 BF				
4,3	4	40			011850430		012600430	
5	4	40	M 2,5		011850500		012600500	
5,3	4	40			011850530		012600530	
5,8	5	45			011850580		012600580	
6	5	45	M 3		011850600		012600600	
6,3	5	45		M 3	011850630		012600630	
7	6	50	M 3,5		011850700		012600700	
7,3	6	50			011850730		012600730	
8	6	50	M 4		011850800		012600800	
8,3	6	50		M 4	011850830		012600830	
9,4	6	50			011850940		012600940	
10	6	50	M 5		011851000		012601000	
10,4	6	50		M 5	011851040		012601040	
11,5	8	56	M 6		011851150		012601150	
12,4	8	56		M 6	011851240		012601240	
13,4	8	56			011851340		012601340	
15	10	60	M 8		011851500		012601500	
16,5	10	60		M 8	011851650		012601650	
19	10	63	M 10		011851900		012601900	
20,5	10	63		M 10	011852050		012602050	
23	10	67	M 12		011852300		012602300	
25	10	67		M 12	011852500		012602500	
26	12	67	M 14		011852600		012602600	
28	12	71		M 14	011852800		012602800	
30	12	71	M 16		011853000		012603000	
31	12	71		M 16	011853100		012603100	
40	13	80			011854000		012604000	

DIN 335/C-90°

Art. 01261 HSS-CO

Art. 01262 HSS-CO+TiAIN



HSS-CO HSS-CO+TiAIN



Ø (mm)	d	L	Per VITI For screws		cod.	€ cad/each	cod.	€ cad/each
			DIN 74 AF	DIN 74 BF				
6,3	5	45		M 3	012610630		012620630	
8,3	6	50		M 4	012610830		012620830	
10,4	6	50		M 5	012611040		012621040	
12,4	8	56		M 6	012611240		012621240	
15	10	60	M 8		012611500		012621500	
16,5	10	60		M 8	012611650		012621650	
20,5	10	63		M 10	012612050		012622050	
25	10	67		M 12	012612500		012622500	
31	12	71		M 16	012613100		012623100	



Ø 6,3-8,3-10,4-12,4-16,5-20,5 6pcs
**01270110 - HSS-CO
€**



Ø 6,3-8,3-10,4-12,4-16,5-20,5 6pcs
**01270111 - HSS-CO+TiAIN
€**

Frese ad incassare e svasare a 3 tagli in Metallo Duro

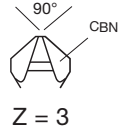
KRINO®

Carbide deburring tools with 3 flutes / Fraise conique à ébavurer carbure avec 3 coupes
Fresas de avellanar metal duro con 3 cortes / Kegelsenker VHM mit 3 Schneiden

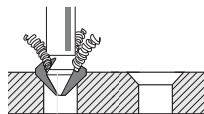
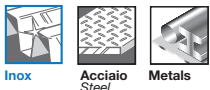
NEW

Metallo Duro / Carbide DIN 335/C-90°				Art. 01263 MD	Art. 01264 MD+TiAIN
Ø h10	d h7	L	Per VITI For screws DIN 74 BF	cod.	€ cad/each
6,3	6	50	M 3	012630630	012640630
8,3	6	50	M 4	012630830	012640830
10,4	6	50	M 5	012631040	012641040
12,4	8	50	M 6	012631240	012641240
16,5	10	60	M 8	012631650	012641650
20,5	10	63	M 10	012632050	012642050
25	10	67	M 12	012632500	012642500

01263 01264



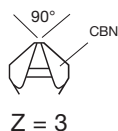
Metallo Duro / Carbide



Svasatori a 90° con attacco esagonale 1/4"

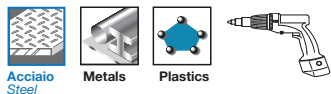
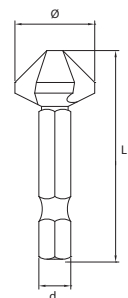
90° countersink with 1/4" hexagon shank / Fraise conique a 90° avec 6 pans de 1/4"
Avellanador a 90° con mango esagonal 1/4" / Kagelsenker-bits 90°, mit 1/4" sechskant-Aufnahme

19003



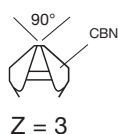
HSS DIN 335/C-90°

Ø	L	d	Per VITI For screws DIN 74 BF	cod.	€ cad/each
6,3	40	1/4	M 3	190030630	
8,3	45	1/4	M 4	190030830	
10,4	47	1/4	M 5	190031040	
12,4	49	1/4	M 6	190031240	
16,5	52	1/4	M 8	190031650	
20,5	55	1/4	M 10	190032050	



HSS DIN 335/C-90°

19001

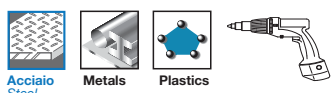


HSS

Ø	L	d	Per VITI For screws DIN 74 BF	cod.	€ cad/each
6,3	31	1/4	M 3	19001063	
8,3	31	1/4	M 4	19001083	
10,4	34	1/4	M 5	19001104	
12,4	35	1/4	M 6	19001124	
16,5	40	1/4	M 8	19001165	
20,5	41	1/4	M 10	19001205	

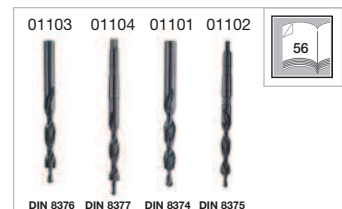


6 pcs
Ø 6,3 - 8,3 - 10,4
12,4 - 16,5 - 20,5
19020214 - HSS-G
€



ØxL	cod.	€ cad/each
33x120	19001000	

Magnetico
Magnetic



DIN 8376 DIN 8377 DIN 8374 DIN 8375



Frese ad incassare e svasare in HSS

HSS deburring tools / Fraise conique à ébavurer en HSS

Fresas de avellanar HSS / Kegelsenker HSS

HSS DIN 335/C-90°

Serie lunga - Long serie

01193

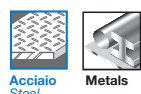


HSS



Z = 3

Applicazioni / Applications



Ø (mm)	d	L	cod.	€ cad/each
6,3	5	104	011930630	
8,3	6	105	011930830	
10,4	6	107	011931040	
12,4	8	108	011931240	
15	10	109	011931500	
16,5	10	111	011931650	
20,5	10	114	011932050	
25	10	118	011932500	



6 pcs
Ø 6,3 - 8,3 - 10,4
12,4 - 16,5 - 20,5
01270207 - HSS
€

HSS DIN 335/D 90°

01196

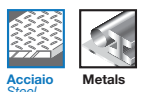


HSS



Z = 3

Applicazioni / Applications



Ø (mm)	MK	L	Per VITI For screws		cod.	€ cad/each
			DIN 74 AF M 8	DIN 74 BF		
15	1	85	M 8		011961500	
16,5	1	85		M 8	011961650	
19	2	100	M 10		011961900	
20,5	2	100		M 10	011962050	
23	2	106	M 12		011962300	
25	2	106		M 12	011962500	
26	2	106	M 14		011962600	
28	2	112		M 14	011962800	
30	2	112	M 16		011963000	
31	2	112		M 16	011963100	
34	2	118	M 18	M 18	011963400	
37	2	118	M 20	M 20	011963700	
40	3	140			011964000	
50	3	150			011965000	

HSS DIN 335/C 90°

01192



HSS



Z = 1

Applicazioni / Applications



Ø (mm)	d	L	cod.	€ cad/each
6	5	45	011920600	
8	6	50	011920800	
10	6	50	011921000	
12	8	56	011921200	
16	10	60	011921600	
20	10	63	011922000	
25	10	67	011922500	
30	12	71	011923000	

HSS DIN 334/C 60°

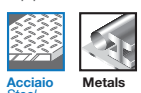
01186



HSS



Applicazioni / Applications



Ø (mm)	d	L	cod.	€ cad/each
6,3	5	45	011860630	
8	6	50	011860800	
10	6	53	011861000	
12,5	8	56	011861250	
16	10	63	011861600	
20	10	67	011862000	
25	10	71	011862500	
31,5	12	76	011863150	

Utensili conici rivestiti al TiN e al TiAlN per forare ed allargare lamiere e tubi



TiN and TiAlN coated conical drill bits / Forets coniques et étages revêtus au TiN et TiAlN

Brocas conicas con recubrimiento de TiN y TiAlN para planchas / Blechsälbohrer TiN und TiAlN beschichtet

HSS-G + TiN

01200



HSS-G+TiN
HV 0,05 = 2300

Gambo antidrucciolo
High grip shank

Gr.	Ø min.-max	d (mm)	l (mm)	L (mm)	cod.	€ cad/each
1	3 ÷ 14	6	21	58	0120001	
2	6 ÷ 20	8	21	70	0120002	
3	16 ÷ 30,5	10	25	79	0120003	
4	26 ÷ 40	10	25	86	0120004	
5	36 ÷ 50	13	25	90	0120005	
6	40 ÷ 61	13	25	97	0120006	
7	3 ÷ 31	10	21	109	0120007	
8	3 ÷ 22,5	8	21	85	0120008	

USO INTENSIVO
INTENSIVE USE
R≤1000 N/mm²



ACCIAIO LEGATO
ALLOY STEEL

Cod.

Composizione
Description

01195110
HSS-G + TiN
€

Gr.1 3÷14 mm
Gr.2 6÷20 mm
Gr.3 16÷30,5 mm



Confezione / Packaging



HSS-G + TiAlN

01206



HSS-G+TiAlN
HV 0,05 = 3300

Gambo antidrucciolo
High grip shank

Gr.	Ø min.-max	d (mm)	l (mm)	L (mm)	cod.	€ cad/each
1	3 ÷ 14	6	21	58	0120601	
2	6 ÷ 20	8	21	70	0120602	
3	16 ÷ 30,5	10	25	79	0120603	
4	26 ÷ 40	10	25	86	0120604	
5	36 ÷ 50	13	25	90	0120605	
6	40 ÷ 61	13	25	97	0120606	
7	3 ÷ 31	10	21	109	0120607	
8	3 ÷ 22,5	8	21	85	0120608	

USO INTENSIVO
INTENSIVE USE
R≤1200 N/mm²



ACCIAIO INOX - ACCIAIO ALTO LEGATO
STAINLESS STEEL - HIGH ALLOY STEEL

Cod.

Composizione
Description

01195111
HSS-G + TiAlN
€

Gr.1 3÷14 mm
Gr.2 6÷20 mm
Gr.3 16÷30,5 mm



Confezione / Packaging



Applicazioni
Applications



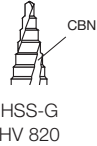
- Per forare lamiere in acciaio, tubi, profilati in acciaio e leghe leggere, plexiglass, plastica sino a 5 mm di spessore.
- For hole-making into metal sheets, pipes, structurals, light alloys sheets, plastics, plexiglass up to 5 mm thickness
- Pour le perçage des trous dans tous matériaux de faible épaisseur (épaisseur max. 5 mm).
- Broca-avellanador para cortar tubo y chapa de hierro y acero, aleaciones ligeras, plexiglass (5 mm de profundidad).
- Zum Bohren größerer Löcher in dünnwandigen Materialien oder zum Aufbohren bereits vorhandener Löcher.

Utensili conici a gradino con taglienti elicoidali ad altissimo rendimento

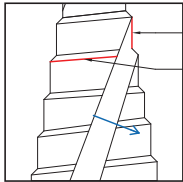
Spiral step drill bits / Forets étages hélicoïdaux
 Brocas escalonadas helicoidale / Stufenbohrer mit Spiralnute

NEW

01240

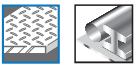


Gambo antistrucchiolo
High grip shank



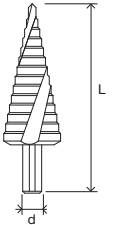
Spoglia assiale
Axial relief
Spoglia radiale
Radial relief
Componente di taglio
Cutting strength
Forza applicata / Strength
Componente estrazione truciolo
Chip removal strength

R ≤ 800 N/mm²

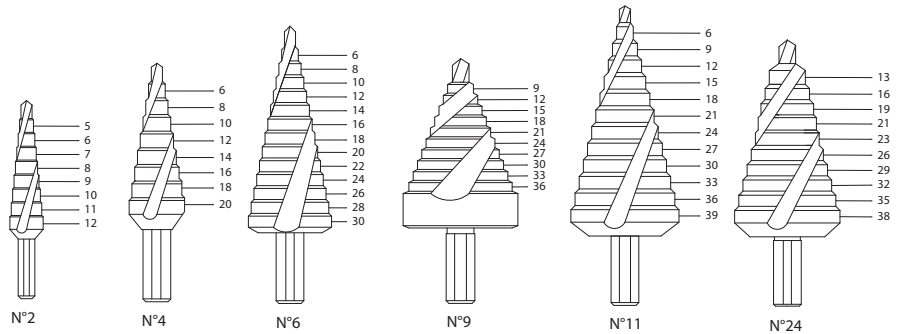
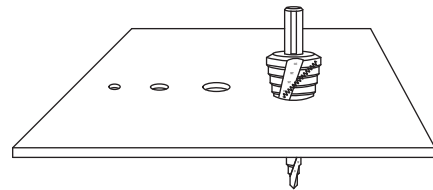


HSS-G

Gr.	∅ min.-max	Progressione Step (mm)	N° Gradini N° Steps	d (mm)	L (mm)	cod.	€ cad/each
2	4 ÷ 12	1	9	6	70	0124002	
4	4 ÷ 20	2	9	10	85	0124004	
6	4 ÷ 30	2	13	10	100	0124006	
9	6 ÷ 36	3	10	10	80	0124009	
11	4 ÷ 39	3	13	10	107	0124011	
24	6 ÷ 38	-	11	10	96	0124024	



Esercitare solo una lieve pressione durante il taglio. L'elicoide è autoalimentante grazie alla componente assiale della forza di taglio.
 Please use a very soft press while drilling. The tool proceeds by itself, due to the axial cutting strength.



01259107

Cod.

Composizione
Description

01259107
HSS-G
€

Gr.2 4÷12 mm
Gr.4 4÷20 mm
Gr.6 4÷30 mm



HSS-G

Utensili conici a gradino rivestiti al TiN e al TiAlN con taglienti elicoidali ad altissimo rendimento


KRINO®

TiN and TiAlN spiral step drill bits / Forets étages hélicoïdaux au TiN et TiAlN
Brocas escalonadas helicoidales con recubrimiento de TiN y TiAlN / Stufenbohrer mit Spiralnute TiN und TiAlN

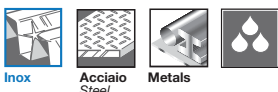
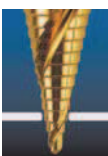
NEW

01244




HSS-G+TiN
HV 0,05=2300
Gambo antisdrucciolo
High grip shank

R ≤ 1000 N/mm²



HSS-G + TiN

Gr.	Ø min.-max	Progressione Step (mm)	N° Gradini N° Steps	d (mm)	L (mm)	cod.	€ cad/each
2	4 ÷ 12	1	9	6	70	0124402	
4	4 ÷ 20	2	9	10	85	0124404	
6	4 ÷ 30	2	13	10	100	0124406	
9	6 ÷ 36	3	10	10	80	0124409	
11	4 ÷ 39	3	13	10	107	0124411	
24	6 ÷ 38	-	11	10	96	0124424	

01259108



HSS-G + TiN

Cod.

01259108
HSS-G + TiN
€


Composizione
Description

Gr.2 4÷12 mm
Gr.4 4÷20 mm
Gr.6 4÷30 mm

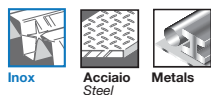
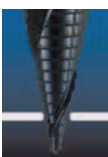
HSS-G + TiAlN

01248




HSS-G+TiAlN
HV 0,05=3300
Gambo antisdrucciolo
High grip shank

R ≤ 1400 N/mm²



Gr.	Ø min.-max	Progressione Step (mm)	N° Gradini N° Steps	d (mm)	L (mm)	cod.	€ cad/each
2	4 ÷ 12	1	9	6	70	0124802	
4	4 ÷ 20	2	9	10	85	0124804	
6	4 ÷ 30	2	13	10	100	0124806	
9	6 ÷ 36	3	10	10	80	0124809	
11	4 ÷ 39	3	13	10	107	0124811	
24	6 ÷ 38	-	11	10	96	0124824	

01259109



HSS-G + TiAlN

Cod.

01259109
HSS-G + TiAlN
€

Composizione
Description

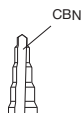
Gr.2 4÷12 mm
Gr.4 4÷20 mm
Gr.6 4÷30 mm

Utensili conici a gradino rivestiti al TiN e a TiAlN

TiN and TiAlN coated step drill bits / Forets étages revêtus au TiN et TiAlN

Brocas escalonadas con recubrimiento de TiN y TiAlN / Stufenbohrer TiN-TiAlN beschichtet

01230



HSS-G + TiN
HV 0,05 = 2300

Gambo
antidrucciolo
High grip shank

Confezione / Packaging



GR. 2-4-6
01259103
HSS-G + TiN
€

HSS-G + TiN

Metric - per costruzione - for construction

Gr.	Ø min.-max	Progressione Step (mm)	N° Gradini N° Steps	d (mm)	L (mm)	cod.	€ cad/each
1	4 ÷ 12	2	5	6	56	0123001	
2	4 ÷ 12	1	9	6	70	0123002	
3	12 ÷ 20	1	9	10	85	0123003	
4	4 ÷ 20	2	9	10	85	0123004	
5	20 ÷ 30	1	11	10	97	0123005	
6	4 ÷ 30	2	13	10	97	0123006	
7	30 ÷ 40	1	11	13	97	0123007	
8	40 ÷ 50	1	11	13	100	0123008	
9	6 ÷ 36	3	10	10	80	0123009	
10	10 ÷ 58	3	12	13	90	0123010	
11	4 ÷ 39	3	13	10	107	0123011	
Pg							
21	6,3 ÷ 26,75	-	7	10	91	0123021	
22	6 ÷ 30,5	-	7	10	80	0123022	
23	6 ÷ 37	-	7	10	85	0123023	
24	6 ÷ 38	-	11	10	96	0123024	



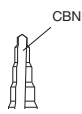
USO INTENSIVO
INTENSIVE USE
R≤1000 N/mm²

Applicazioni / Applications



- Per fori cilindrici e precisi in lamiere di acciaio, tubi, profilati, leghe leggere, plastica, plexiglass sino a 5 mm spessore.
- For parallel and precise holes in metal sheets, pipes, structurals, light alloys, plastics, plexiglass up to 5 mm thickness.
- Perçage precise et haute rendement dans tous matériaux de faible épaisseur (max 5 mm).
- Grande rendimiento y precision para cortar tubo y chapa de acero, aleaciones ligeras, plexiglass (5 mm profundidad).
- Große Präzision und Leistung zum Bohren größerer Löcher in dünnwandige Materialien oder zum Aufbohren bereits vorhandener Löcher

01236



HSS-G + TiAlN
HV 0,05 = 3300

Gambo
antidrucciolo
High grip shank

Confezione / Packaging



GR. 2-4-6
01259104
HSS-G + TiAlN
€

HSS-G + TiAlN

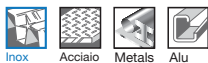
Metric - per costruzione - for construction

Gr.	Ø min.-max	Progressione Step (mm)	N° Gradini N° Steps	d (mm)	L (mm)	cod.	€ cad/each
1	4 ÷ 12	2	5	6	56	0123601	
2	4 ÷ 12	1	9	6	70	0123602	
3	12 ÷ 20	1	9	10	85	0123603	
4	4 ÷ 20	2	9	10	85	0123604	
5	20 ÷ 30	1	11	10	97	0123605	
6	4 ÷ 30	2	13	10	97	0123606	
7	30 ÷ 40	1	11	13	97	0123607	
8	40 ÷ 50	1	11	13	100	0123608	
9	6 ÷ 36	3	10	10	80	0123609	
10	10 ÷ 58	3	12	13	90	0123610	
11	4 ÷ 39	3	13	10	107	0123611	
Pg							
21	6,3 ÷ 26,75	-	7	10	91	0123621	
22	6 ÷ 30,5	-	7	10	80	0123622	
23	6 ÷ 37	-	7	10	85	0123623	
24	6 ÷ 38	-	11	10	96	0123624	



USO INTENSIVO
INTENSIVE USE
R≤1200 N/mm²

Applicazioni / Applications

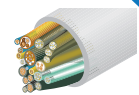


- Per fori cilindrici e precisi in lamiere di acciaio, tubi, profilati, leghe leggere, plastica, plexiglass sino a 5 mm spessore.
- For parallel and precise holes in metal sheets, pipes, structurals, light alloys, plastics, plexiglass up to 5 mm thickness.
- Perçage precise et haute rendement dans tous matériaux de faible épaisseur (max 5 mm).
- Grande rendimiento y precision para cortar tubo y chapa de acero, aleaciones ligeras, plexiglass (5 mm profundidad).
- Große Präzision und Leistung zum Bohren größerer Löcher in dünnwandige Materialien oder zum Aufbohren bereits vorhandener Löcher

Utensili conici universali per prefiori di filettatura di tubi per cavi di conduzione elettrica



Universal step drill bits for cables connections / Forets étages universelles pour tubes avec armature en acier
 Brocas escalonadas universales para tubos de conducción eléctrica / Universal-Stufenbohrer für Kabelverschraubungen



NEW

0125405

0125406

0125407

METRIC - DIN-EN 60423



HSS-G



HSS-G + TiN

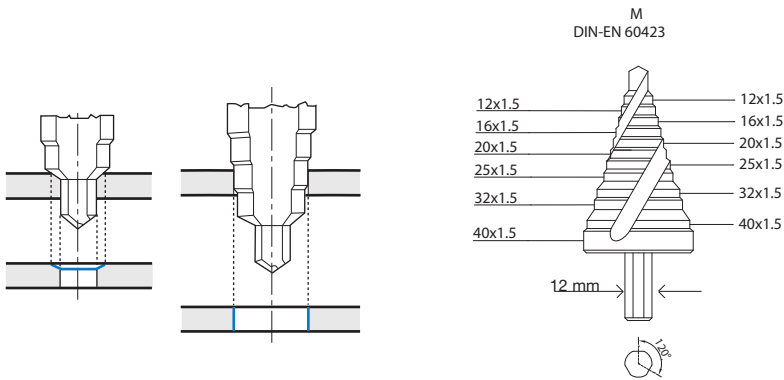


HSS-G + TiAlN

Metric Universal

Cod.	Composizione Description
0125405 HSS-G €	Ø 7÷40,5 mm M 12x1,5÷40x1,5
0125406 HSS-G + TiN €	Ø 7÷40,5 mm M 12x1,5÷40x1,5
0125407 HSS-G + TiAlN €	Ø 7÷40,5 mm M 12x1,5÷40x1,5

COMBINATO UNIVERSALE: per fori nocciolo e fori passanti DIN EN 60423
 COMBINED UNIVERSAL: for core holes and through holes DIN EN 60423



Norma in disuso - Old rule - Norme en désuétude
 Norma en desuso - Veraltete Norme

0125401*

0125402*

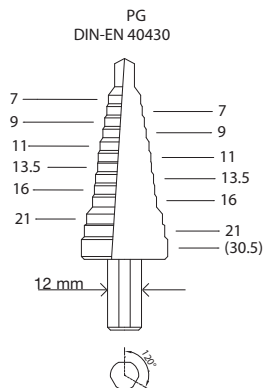
PG - DIN-EN 40430



HSS-G



HSS-G + TiN



PG Drill Universal

Cod.	Composizione Description
0125401 HSS-G €	Ø 6÷30,5 mm Pg 7÷21
0125402 HSS-G + TiN €	Ø 6÷30,5 mm Pg 7÷21

COMBINATO UNIVERSALE: per fori nocciolo e fori passanti DIN EN 40430*
 COMBINED UNIVERSAL: for core holes and through holes DIN EN 40430

*In esaurimento - to be discontinued

Punta fresa in HSS-CO per rimuovere punti di saldatura e per forare lamiere in genere

HSS-CO spot drills / Fraise pour points de soudure
Fresas para puntos de soldaduras / Schweisspunktbohrer

01171 01169



~DIN 1412/E

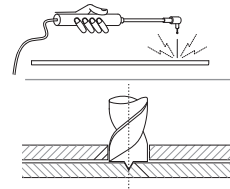
Confezione / Packaging



≈ DIN 1897

**Art. 01171
HSS-CO**

Ø	d	L	cod.	€ cad/each
6	6	66	0117106	
7	7	74	0117107	
8	8	79	0117108	
10	10	89	0117110	



**Art. 01169
HSS-CO+TiN**

Ø	d	L	cod.	€ cad/each
6	6	66	011690600	
7	7	74	011690700	
8	8	79	011690800	
10	10	89	011691000	

Punta fresa per rimuovere punti di saldatura con macchine pneumatiche

Milling drill for removing spot welds with pneumatic tools / Fraise pour enlever les points de soudure avec machines pneumatiques
Fresa para quitar los puntos de soldadura con las máquinas neumáticas / Schweißpunktfräser für pneumatische Maschinen

01172 01173



~DIN 1412/E

**Art. 01172
HSS-CO**

Ø	d	L	cod.	€ cad/each
6,5	6,5	40	011720650	
6,5 vario	8	44	011720650V	
8	8	40	011720800	
8 vario	8	44	011720800V	

**Art. 01173
HSS-CO+TiN**

Ø	d	L	cod.	€ cad/each
6,5	6,5	40	011730650	
6,5 vario	8	44	011730650V	
8	8	40	011730800	
8 vario	8	44	011730800V	

01179

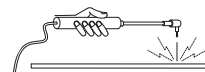


**Art. 01179
Metallo duro - Solid carbide - Carbure - Metal duro**

Ø	d	L	cod.	€ cad/each
6,5	8	40	011790650	
8	8	40	011790800	
10	8	44	011791000	

MD + TiAlN
Solid carbide + TiAlN

Speciale per taglio di acciai molto duri con carico di resistenza fino a 1500N/mm²; grande rendimento grazie all'accoppiamento metallo duro + rivestimento TiAlN multistrato.
Specially designed for cutting very hard metal sheets up to 1500N/mm² tensile strength; great performances due to the combination of solid carbide and TiAlN multilayer coating.

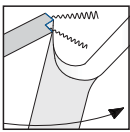
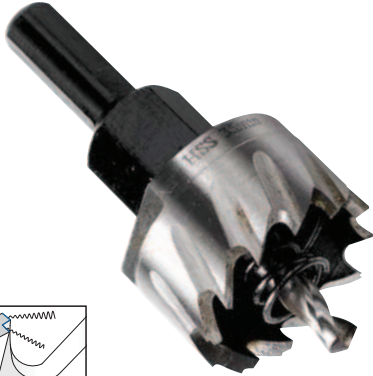


Frese perforatrici a tazza in HSS-G interamente rettificate per forare lamiere in acciaio, ferro, leghe leggere, tutti i materiali metallici, plastica dura

HSSG fully ground hole cutters / Scies tréplans HSSG rectifiées
Coronas perforadoras HSSG rectificadas - HSSG Lochsägen

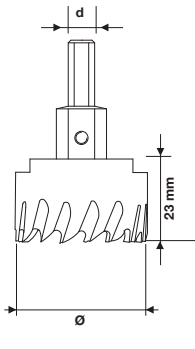
HSS-G

21001



Taglio laterale: miglior estrazione dei trucioli
Side cut: easy chips removal

HSS-G
HRC ≈ 64



- Innovativo disegno dei denti e taglio laterale: migliore scarico dei trucioli con grande rendimento del taglio.
- Upgrade teeth design and side cut: easy chips removal with high cutting performances
- Dessin innovateur de la denture et coup latéral: meilleur extraction des copeaux avec un élevé rendement du coupe
- Diseño innovador de los dientes y corte lateral: mejor extracción de las virutas con un alto rendimiento de corte
- Erneuerungszeichnung der Zahnung und Seitenschnitt: besser Abziehen der Späne mit Hochleistung des Schnitts.

Confezione / Packaging



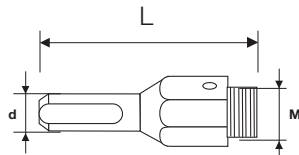
Ø	cod.	€ cad/each	Ø	cod.	€ cad/each
12	2100101200		41	2100104100	
13	2100101300		42	2100104200	
14	2100101400		43	2100104300	
15	2100101500		44	2100104400	
16	2100101600		45	2100104500	
17	2100101700		46	2100104600	
18	2100101800		47	2100104700	
19	2100101900		48	2100104800	
20	2100102000		49	2100104900	
21	2100102100		50	2100105000	
22	2100102200		51	2100105100	
23	2100102300		52	2100105200	
24	2100102400		53	2100105300	
25	2100102500		54	2100105400	
26	2100102600		55	2100105500	
27	2100102700		56	2100105600	
28	2100102800		57	2100105700	
29	2100102900		58	2100105800	
30	2100103000		59	2100105900	
31	2100103100		60	2100106000	
32	2100103200		65	2100106500	
33	2100103300		70	2100107000	
34	2100103400		75	2100107500	
35	2100103500		80	2100108000	
36	2100103600		85	2100108500	
37	2100103700		90	2100109000	
38	2100103800		95	2100109500	
39	2100103900		100	2100110000	
40	2100104000				



Ø ≥ 20mm

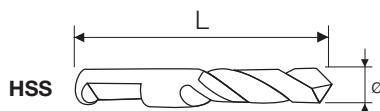
cod. €
21005098 cad/each

Gambo - Arbor



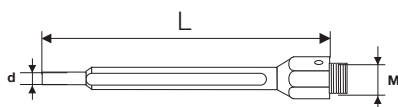
Per frese Fit hole cutters	L	d	M	cod.	€ cad/each
Ø 12 ÷ 14	56	8	10 x 1,25	21005099	
Ø 15 ÷ 34	56	10	12 x 1,25	21005100	
Ø 35 ÷ 50	56	10	14 x 1,5	21005102	
Ø 51 ÷ 100	60	12	16 x 1,5	21005101	

Punta pilota - Pilot drill



Per frese Fit hole cutters	Ø x L	cod.	€ cad/each
Ø 12 ÷ 100	6x50	21005110	

Prolunga 400 mm - Extension

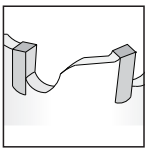
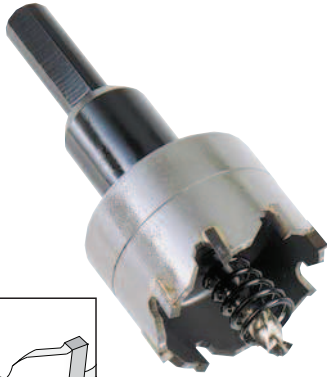


Per frese Fit hole cutters	L mm	d	M	cod.	€ cad/each
Ø 15 ÷ 34	400	13	12 x 1,25	21005120	
Ø 35 ÷ 50	400	13	14 x 1,5	21005122	
Ø 51 ÷ 100	400	13	16 x 1,5	21005121	

Frese a tazza TCT ad albero mobile per forare lamiere in acciaio inox, acciai duri trattati

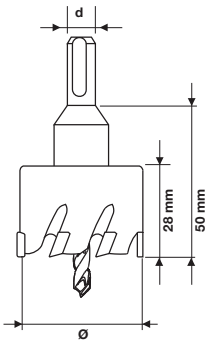
Tungsten carbide tipped hole saws for stainless and hard metal sheets / Scies tréplans au carbure de tungstene pour la tôle en acier inox
Coronas con dientes de metal duro para planchas en acero inoxidable y duro / Hartmetallochsägen für nicht rostenden Stahl

21040



Inserti in metallo duro
Carbide tips

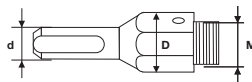
Confezione / Packaging



Ø	d	cod.	€ cad/each	Ø	d	cod.	€ cad/each
15	10	2104001500		44	13	2104004400	
16	10	2104001600		45	13	2104004500	
17	10	2104001700		46	13	2104004600	
18	10	2104001800		47	13	2104004700	
19	10	2104001900		48	13	2104004800	
20	10	2104002000		49	13	2104004900	
21	10	2104002100		50	13	2104005000	
22	10	2104002200		51	13	2104005100	
23	10	2104002300		52	13	2104005200	
24	10	2104002400		53	13	2104005300	
25	10	2104002500		54	13	2104005400	
26	10	2104002600		55	13	2104005500	
27	10	2104002700		56	13	2104005600	
28	10	2104002800		57	13	2104005700	
29	10	2104002900		58	13	2104005800	
30	10	2104003000		59	13	2104005900	
31	10	2104003100		60	13	2104006000	
32	10	2104003200		65	13	2104006500	
33	10	2104003300		70	13	2104007000	
34	10	2104003400		75	13	2104007500	
35	10	2104003500		80	13	2104008000	
36	10	2104003600		85	13	2104008500	
37	10	2104003700		90	13	2104009000	
38	10	2104003800		95	13	2104009500	
39	13	2104003900		100	13	2104010000	
40	13	2104004000		*105	13	2104010500	
41	13	2104004100		*110	13	2104011000	
42	13	2104004200		*115	13	2104011500	
43	13	2104004300		*120	13	2104012000	

*105÷120 Frese integrali One piece

Gambo - Arbor



Per frese Fit hole cutters	d	D	M	cod.	€ cad/each
Ø 15 ÷ 21	10	15	12 x 1,5	21045120	
Ø 22 ÷ 38	10	19	14 x 1,5	21045121	
Ø 39 ÷ 100	13	22	14 x 1,5	21045122	

Punta pilota - Pilot drill



Per frese Fit hole cutters	Ø x L	cod.	€ cad/each
Ø 15 ÷ 100	6x62	21045100	
Ø 105 ÷ 120	8x62	21045101	



Cod.

21055130
28 pcs
Ø 15÷40x1+45-50mm
€

21055131
21 pcs
Ø 18÷35x1+36-38-40mm
€

Cod.

21055300
8 pcs
Ø 16-18-20-22- 25-30-32-35
€

21055301
6 pcs
Ø 16-18-20-22- 25-30
€



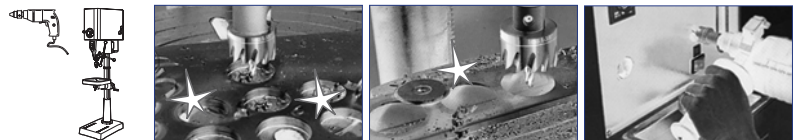
Applicazioni / Applications



R ≤ 1300 N/mm²

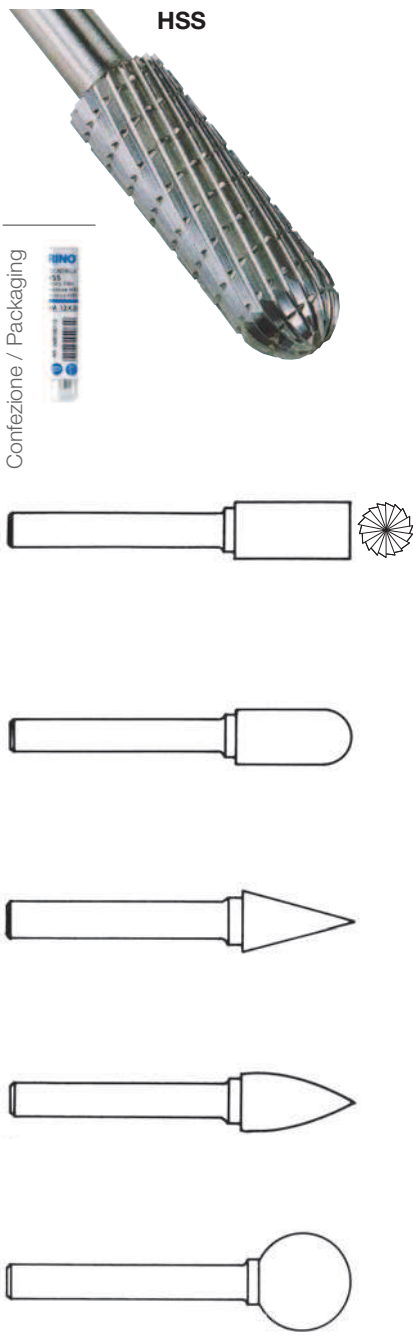


- Denti in metallo duro speciale, affilati e spogliati, processo di brasatura completamente automatico, corpo rigido. Si ottengono fori precisi, con grande rendimento, nel taglio delle lamiere in acciaio inox (anche a secco) e acciai duri in genere. Si consiglia un buon lubrificante, ove possibile. Massima profondità di taglio: 5 mm.
- Special carbide tips sharpened, high temperature brazing, steady body. High performances in hole cutting of stainless and tough steel sheets. Cutting oil is recommended. Maximum cutting depth: 5 mm.
- Tréplans T.C.T. recommandés pour la coupe de matériaux très durs tels que acier traité, acier inox.
- Coronas perforadoras con dientes de metal duro para cortar planchas y tubos de acero inox, acero tratado, etc...
- Lochsägen mit H.M. Zähnen für Bohren in Stahl, nicht rostende Stähle etc.



Frese rotative in HSS

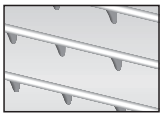
HSS rotary files / Fraises rotatives HSS / Fresas rotativas en HSS / HSS Fräserstifte



Confezione / Packaging

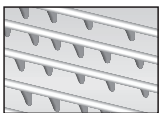
HSS

26001 Z2

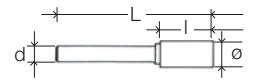


- TAGLIO BASTARDO per leghe leggere, rame, ottone, bronzo, acciaio dolce.
Velocità consigliata: 220÷250 m/min.
- For cutting light alloys, copper, brass, bronze, mild steel.
Cutting speed: 220÷250 m/min.

26003 Z3



- TAGLIO MEZZO DOLCE per acciai, ghisa. Vt 80÷220 m/min
For cutting steel, cast iron. Cutting speed 80÷220 m/min



HRC ≈ 63

Ø	l	L	d	26001 Z2		26003 Z3	
				cod.	€ cad/each	cod.	€ cad/each
6	20	60	6	2600100106		2600300106	
8	30	70	6	2600100108		2600300108	
10	30	70	6	2600100110		2600300110	
12	30	70	6	2600100112		2600300112	
15	30	70	6	2600100115		2600300115	
6	20	60	6	2600100206		2600300206	
8	30	70	6	2600100208		2600300208	
10	30	70	6	2600100210		2600300210	
12	30	70	6	2600100212		2600300212	
15	30	70	6	2600100215		2600300215	
6	20	60	6	2600100306		2600300306	
8	30	70	6	2600100308		2600300308	
10	30	70	6	2600100310		2600300310	
12	30	70	6	2600100312		2600300312	
15	30	70	6	2600100315		2600300315	
6	20	60	6	2600100406		2600300406	
8	30	70	6	2600100408		2600300408	
10	30	70	6	2600100410		2600300410	
12	30	70	6	2600100412		2600300412	
15	30	70	6	2600100415		2600300415	
6	5	50	6	2600100506		2600300506	
8	7	52	6	2600100508		2600300508	
10	9	54	6	2600100510		2600300510	
12	10	55	6	2600100512		2600300512	
15	14	59	6	2600100515		2600300515	



Ø10 Z2 5 pcs
Art. 26008203 €
Ø10 Z3 5 pcs
Art. 26008201 €
Ø12 Z2 5 pcs
Art. 26008204 €
Ø12 Z3 5 pcs
Art. 26008200 €



ABS
Ø10 Z2+Z3 10 pcs
Tutte le forme -
All the shapes
Art. 26008401 €
Ø12 Z2+Z3 10 pcs
Tutte le forme -
All the shapes
Art. 26008402 €



ABS
Ø10 Z3 5 pcs
Tutte le forme -
All the shapes
Art. 26008404 €
Ø12 Z3 5 pcs
Tutte le forme -
All the shapes
Art. 26008405 €



Art. 26008501 50 pcs €
Z2+Z3: Ø 6-8-10-12-15
Tutte le forme - All the shapes

Frese rotative HSS rivestite al TiAIN

HSS TiAIN rotary files / Fraises rotatives HSS revêtues au TiAIN

Fresas rotativas HSS con recubrimiento de TiAIN - HSS Fräserstifte TiAIN-beschichtet



HSS + TiAIN

26031 Z2



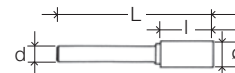
- TAGLIO BASTARDO per leghe leggere, rame, ottone, bronzo, acciaio dolce.
Velocità consigliata: 220÷250 m/min.

- For cutting light alloys, copper, brass, bronze, mild steel.
Cutting speed: 220÷250 m/min.

26032 Z3



- TAGLIO MEZZO DOLCE per acciai, ghisa. Vt 80÷220 m/min
For cutting steel, cast iron. Cutting speed 80÷220 m/min

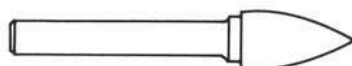
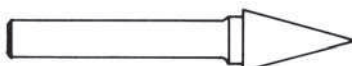
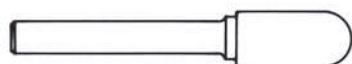
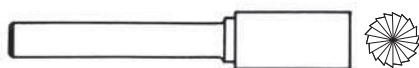


HV 0,05 ~ 3300

26031 Z2

26032 Z3

Ø	l	L	d	26031 Z2		26032 Z3	
				cod.	€ cad/each	cod.	€ cad/each
6	20	60	6	2603100106		2603200106	
8	30	70	6	2603100108		2603200108	
10	30	70	6	2603100110		2603200110	
12	30	70	6	2603100112		2603200112	
15	30	70	6	2603100115		2603200115	
6	20	60	6	2603100206		2603200206	
8	30	70	6	2603100208		2603200208	
10	30	70	6	2603100210		2603200210	
12	30	70	6	2603100212		2603200212	
15	30	70	6	2603100215		2603200215	
6	20	60	6	2603100306		2603200306	
8	30	70	6	2603100308		2603200308	
10	30	70	6	2603100310		2603200310	
12	30	70	6	2603100312		2603200312	
15	30	70	6	2603100315		2603200315	
6	20	60	6	2603100406		2603200406	
8	30	70	6	2603100408		2603200408	
10	30	70	6	2603100410		2603200410	
12	30	70	6	2603100412		2603200412	
15	30	70	6	2603100415		2603200415	
6	5	50	6	2603100506		2603200506	
8	7	52	6	2603100508		2603200508	
10	9	54	6	2603100510		2603200510	
12	10	55	6	2603100512		2603200512	
15	14	59	6	2603100515		2603200515	



Ø10 Z2 5 pcs
Art. 26035203
Ø10 Z3 5 pcs
Art. 26035201

€

€



ABS

Ø10 Z2+Z3 10 pcs
Tutte le forme -
All the shapes
Art. 26035401

€



ABS

Ø10 Z3 5 pcs
Tutte le forme -
All the shapes
Art. 26035404

€



Art. 26035501 50 pcs
Z2+Z3: Ø 6-8-10-12-15
Tutte le forme - All the shapes

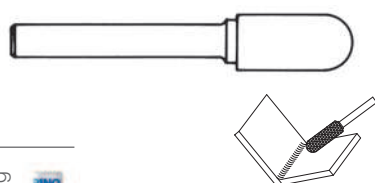
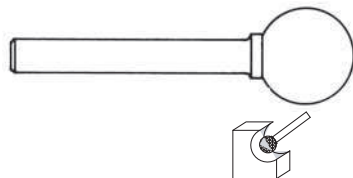
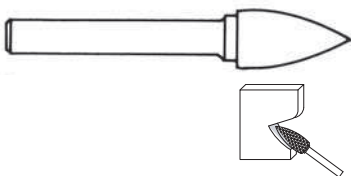
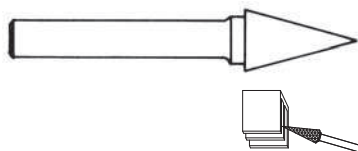
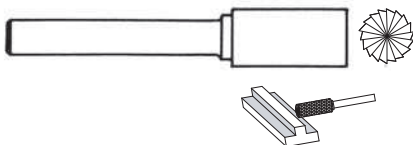
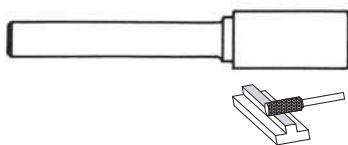
€

Frese rotative in metallo duro

Carbide rotary files - Fraises rotatives carbure
Fresas rotativas de metal duro - Hartmetall Fräserstifte

Metallo duro K20 / Solid carbide K20

Grana fine / Fine grain
Utilizzo universale / Universal uses



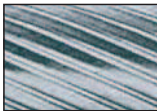
Confezione /
Packaging



Applicazioni / Applications



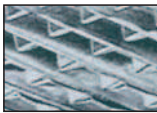
26015 HM3



- TAGLIO STANDARD per acciaio, acciaio temprato, ghisa, cordoni di saldatura, materiali metallici in genere. Buon grado di finitura con ottimi rendimenti. Velocità consigliata: 300÷400 m/min.

- Standard cut in low and high tensile steel, welded points, metals. Cutting speed: 300÷400 m/min.

26020 HM4



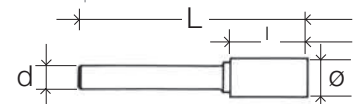
- TAGLIO INCROCIATO per acciaio trattato, acciaio inox, materiali metallici in genere. Vibrazioni ridotte, buona finitura superficiale, ottimi rendimenti. Velocità consigliata: 300÷400 m/min.

- Diamond cut: finish work in high alloy steel, stainless steel, metals, less vibrations, high performances. Cutting speed: 300÷400 m/min.

Ø	l	L	d	26015 HM3		26020 HM4	
				cod.	€ cad/each	cod.	€ cad/each
* 3	16	38	3	2601500103		2602000103	
4	14	50	6	2601500104		2602000104	
6	18	50	6	2601500106		2602000106	
8	18	63	6	2601500108		2602000108	
10	20	65	6	2601500110		2602000110	
12	25	70	6	2601500112		2602000112	
16	25	70	6	2601500116		2602000116	
* 3	16	38	3	2601500203		2602000203	
4	14	50	6	2601500204		2602000204	
6	18	50	6	2601500206		2602000206	
8	18	63	6	2601500208		2602000208	
10	20	65	6	2601500210		2602000210	
12	25	70	6	2601500212		2602000212	
16	25	70	6	2601500216		2602000216	
* 3	16	38	3	2601500303		2602000303	
4	14	50	6	2601500304		2602000304	
6	18	50	6	2601500306		2602000306	
8	18	63	6	2601500308		2602000308	
10	20	65	6	2601500310		2602000310	
12	25	70	6	2601500312		2602000312	
16	25	70	6	2601500316		2602000316	
* 3	16	38	3	2601500403		2602000403	
4	14	50	6	2601500404		2602000404	
6	18	50	6	2601500406		2602000406	
8	18	63	6	2601500408		2602000408	
10	20	65	6	2601500410		2602000410	
12	25	70	6	2601500412		2602000412	
16	25	70	6	2601500416		2602000416	
* 3	3	38	3	2601500503		2602000503	
4	4	50	6	2601500504		2602000504	
6	5	50	6	2601500506		2602000506	
8	7	63	6	2601500508		2602000508	
10	9	65	6	2601500510		2602000510	
12	10	70	6	2601500512		2602000512	
16	14	70	6	2601500516		2602000516	
* 3	16	38	3	2601500603		2602000603	
4	14	50	6	2601500604		2602000604	
6	18	50	6	2601500606		2602000606	
8	18	63	6	2601500608		2602000608	
10	20	65	6	2601500610		2602000610	
12	25	70	6	2601500612		2602000612	
16	25	70	6	2601500616		2602000616	

NEW

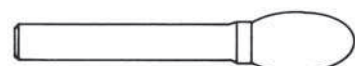
* Microfrese / Micro rotary files



Frese rotative in metallo duro

Carbide rotary files - Fraises rotatives carbure

Fresas rotativas de metal duro - Hartmetall Fräserstifte



Ø	l	L	d	26015 HM3		26020 HM4	
				cod.	€ cad/each	cod.	€ cad/each
* 3	16	38	3	2601500703		2602000703	
4	16	50	6	2601500704		2602000704	
6	18	50	6	2601500706		2602000706	
8	18	63	6	2601500708		2602000708	
10	20	65	6	2601500710		2602000710	
12	25	70	6	2601500712		2602000712	
16	25	70	6	2601500716		2602000716	
* 3	16	38	3	2601500803		2602000803	
4	14	50	6	2601500804		2602000804	
6	18	50	6	2601500806		2602000806	
8	18	63	6	2601500808		2602000808	
10	20	65	6	2601500810		2602000810	
12	25	70	6	2601500812		2602000812	
16	25	70	6	2601500816		2602000816	
* 3	6	38	3	2601500903		2602000903	
4	6	50	6	2601500904		2602000904	
6	10	50	6	2601500906		2602000906	
8	13	58	6	2601500908		2602000908	
10	16	61	6	2601500910		2602000910	
12	20	65	6	2601500912		2602000912	
16	25	70	6	2601500916		2602000916	



ABS



ABS

Ø10 HM3 5 pcs
Art. 26030206 €

Ø10 HM4 5 pcs
Art. 26030203 €

Ø12 HM3 5 pcs
Art. 26030207 €

Ø12 HM4 5 pcs
Art. 26030202 €

Ø10 HM3+HM4 10 pcs
Tutte le forme - All the shapes
Art. 26030401 €

Ø12 HM3+HM4 10 pcs
Tutte le forme - All the shapes
Art. 26030402 €

Ø8 HM4 5 pcs
Ø12 HM4 5 pcs
Art. 26030403 €

Ø10 HM4 5 pcs
Art. 26030404 €

Ø12 HM4 5 pcs
Art. 26030405 €



Art. 26030502 45 pcs €
Ø 6-8-10-12-16 HM4
Tutte le forme - All the shapes

Seghe a tazza bimetalliche HSS a dentatura variabile

HSS bimetal hole saws / Scies tréplans bimetal HSS

Coronas perforadoras bimetalicas HSS / HSS-bimetall Lochsägen



HSS M3/1

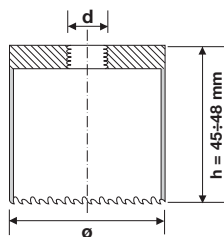
21060



Variabile - Variable Z 4-6

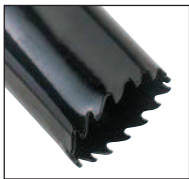


BIM. - HSS M3/1



Art. 21066

Versione neutra
Generic version



Personalizza con il tuo logo
Your private label

Confezione / Packaging



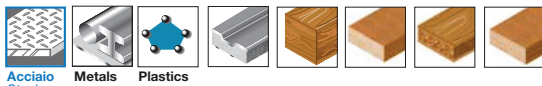
21060



21062

Ø mm	Ø Pollici Inch	d Filetto Thread	cod. 21060	€ cad/each	cod. 21062	€ cad/each
14	9/16	UNF 1/2 x 20	2106001400		2106201400	
16	5/8		2106001600		2106201600	
17	11/16		2106001700		2106201700	
19	3/4		2106001900		2106201900	
20			2106002000		2106202000	
21	13/16		2106002100		2106202100	
22	7/8		2106002200		2106202200	
24	15/16		2106002400		2106202400	
25	1"		2106002500		2106202500	
27	1,1/16		2106002700		2106202700	
29	1,1/8		2106002900		2106202900	
30	1,3/16		2106003000		2106203000	
32	1,1/4	UNF 5/8 x 18	2106003200		2106203200	
33	1,5/16		2106003300		2106203300	
35	1,3/8		2106003500		2106203500	
37	1,7/16		2106003700		2106203700	
38	1,1/2		2106003800		2106203800	
40	1,9/16		2106004000		2106204000	
41	1,5/8		2106004100		2106204100	
43	1,11/16		2106004300		2106204300	
44	1,3/4		2106004400		2106204400	
45	-		2106004500		2106204500	
46	1,13/16		2106004600		2106204600	
48	1,7/8		2106004800		2106204800	
50	-		2106005000		2106205000	
51	2"		2106005100		2106205100	
52	2,1/16		2106005200		2106205200	
54	2,1/8		2106005400		2106205400	
55	-		2106005500		2106205500	
56	-		2106005600		2106205600	
57	2,1/4		2106005700		2106205700	
59	2,5/16		2106005900		2106205900	
60	2,3/8		2106006000		2106206000	
62	-		2106006200		2106206200	
64	2,1/2		2106006400		2106206400	
65	2,9/16		2106006500		2106206500	
67	2,5/8		2106006700		2106206700	
68	-		2106006800		2106206800	
70	2,3/4		2106007000		2106207000	
73	2,7/8		2106007300		2106207300	
75	-		2106007500		2106207500	
76	3"		2106007600		2106207600	
79	3,1/8		2106007900		2106207900	
83	3,1/4		2106008300		2106208300	
86	3,3/8		2106008600		2106208600	
89	3,1/2		2106008900		2106208900	
92	3,5/8		2106009200		2106209200	
95	3,3/4		2106009500		2106209500	
98	3,7/8		2106009800		2106209800	
100	-		2106010000		2106210000	
102	4"		2106010200		2106210200	
105	4,1/8		2106010500		2106210500	
108	4,1/4		2106010800		2106210800	
111	4,3/8		2106011100		2106211100	
114	4,1/2		2106011400		2106211400	
121	4,3/4		2106012100		2106212100	
127	5"		2106012700		2106212700	
133	5,1/4		2106013300		2106213300	
140	5,1/2		2106014000		2106214000	
146	5,3/4"		2106014600		2106214600	
152	6"		2106015200		2106215200	
160	6,5/16		2106016000		-	
168	6,5/8		2106016800		-	
177	6,31/32		2106017700		-	
200	7,7/8		2106020000		-	
210	8,5/16		2106021000		-	

Applicazioni / Applications



- Seghe bimetalliche HSS a dentatura variabile e spoglia positiva per il taglio altamente professionale di qualsiasi materiale a spessore sottile quale acciaio, ghisa, alluminio, rame, bronzo, ottone, legno, plastica, fibra di vetro, resine sintetiche, formica, cartongesso. Grande rendimento e durata, taglio pulito, max. profondità di foratura 5 mm.
- Variable tooth bimetal hole saws for faster and smoother cuts in: iron, steel, aluminium, brass, copper, cast iron, stainless steel, wood and plywood, plastics, fibreglass etc... Max. cutting depth : 13/64
- Scies cloches bimetal-HSS à denture progressive pour l'emploi professionnel. Pour percer les métaux, fer, fonte, acier inox, bois, plastique. Profondeur de coupe: 5 mm
- Coronas perforadoras bimetalicas HSS con diente variable y angulo positivo para taladrar acero, laton, bronce, aluminio, madera, plastico etc. Profundidad de corte: 5 mm.
- HSS Bi-Metall-Lochsägen mit vario-verzahnung für schnellen Bohrfortschritt in Stahl, Guss, Kupfer, Bronze, Aluminium, Kunststoffe, Gipskarton, Holz.



Alberi per seghe a tazza bimetale (intercambiabili con qualsiasi altra marca)



Arbors for bimetal hole saws / Arbres de montage pour scies trépan bimetale
Husillos para coronas bimetálicas / Aufnahmeschäfte

ALBERI PER SEGHE BIMETAL Ø 14÷30 mm - Fit hole saws Ø 14÷30

210705514	210705515	210705519	210705518	210705519 SDS	Per seghe Fit hole saws	d mm	cod.	€ cad/each
					Ø 14 ÷ 30	Ø 6,35	210705514	
					Ø 14 ÷ 30	HEX 6,35 Q.C.	210705515	
					Ø 14 ÷ 30	HEX 8,5	210705519	
					Ø 14 ÷ 30	HEX 11	210705518	
					Ø 14 ÷ 30	SDS PLUS	210705519SDS	

ALBERI PER SEGHE BIMETAL Ø 32÷210 mm - Fit hole saws Ø 32÷210

210705520	210705521	210705546	210705547	210705548	Per seghe Fit hole saws	d mm	cod.	€ cad/each
					Ø 32 ÷ 210	HEX 11	210705520	
					Ø 32 ÷ 210	HEX 6,35 Q.C.	210705521	
					Ø 32 ÷ 210	HEX 8,5	210705546	
					Ø 32 ÷ 210	HEX 8,5	210705547	
					Ø 32 ÷ 210	HEX 8,5 Q.C.	210705548	
					Ø 32 ÷ 210	SDS PLUS	210705546SDS	
					Ø 32 ÷ 210	SDS PLUS	210705549SDS	
					Ø 32 ÷ 210	HEX 11	210705545	
					Ø 32 ÷ 210	HEX 16	210705573	

21070200	21070201	21070300	21070302	Punta pilota Pilot drill	Per alberi Fit arbors	cod.	€ cad/each
				Ø 6,35 x 105	5514-5520 5545-5573-5518	21070200	
				Ø 6,35 x 80	5515-5519-5519SDS 5521-5546-5546SDS 5547-5548-5549SDS	21070201	
				Adattatore - montato su alberi 5514-5519 permette di portare frese da Ø 32 a Ø 210 Arbor adapter - Allows 5514-5519 to be used with 1.1/4" through 6" hole saws		21070300	
				Prolunga - L = 300 mm 12" extension - to be used with arbors 5545-5520		21070302	

Confezione / Packaging

