

Tolérances

ℓ	
\emptyset 0,3~0,5	+ 0,15
\emptyset 0,6~0,8	+ 0,20
\emptyset 0,9~2,5	+ 0,30



Micro-NC



magafor standard				90°	
D	d2	L	ℓ	magaforce 819-D	Hard'X 819-DH
+ 0,01	h5	± 1	+ 1	€ 42,84	48,07
0,3*	3	39	0,9	39,19	44,41
0,4	3	39	1,2	35,79	39,97
0,5	3	39	1,5	33,44	37,62
0,6	3	39	1,8	33,44	37,62
0,7	3	39	2,1	33,44	37,62
0,8	3	39	2,4	33,44	37,62
0,9	3	39	2,7	33,44	37,62
1,0	3	39	3,0	33,44	37,62
1,2	3	39	3,6	33,44	37,62
1,5	3	39	4,5	33,44	37,62
2,0	3	39	6,0	33,44	37,62
2,5	3	39	7,5	33,44	37,62

* Pointage à partir de 0,05! Spotting from 0,05! Centrado desde 0,05! Centratura da 0,05!

FORETS À POINTER NC COURTS

Angle 90°: on obtiendra centrage et chanfreinage en une seule opération.

Angles 120°: L'avant-trou obtenu correspond à l'angle en bout de l'outil de perçage et évite à celui-ci de dévier.

SHORT NC SPOTTING DRILLS

90 degree angle: centering and chamfering are obtained in a single operation.

120 degree angle: The preliminary hole corresponds to the angle at the end of the tool used in drilling and prevents it from deviating.

BROCAS DE PUNTEAR CNC CORTAS

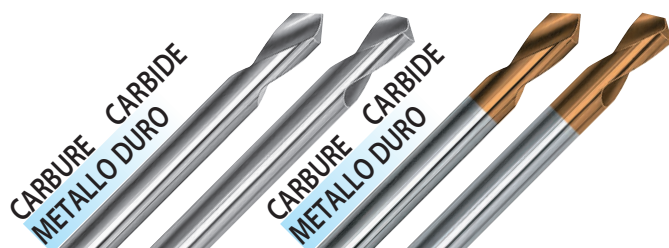
Ángulo 90°: obtendrá un centrado y avellanado en una sola operación.

Ángulo de 120°: El agujero previo obtenido corresponde al ángulo de la punta de la herramienta utilizada para taladrar y previene su desvío.

PUNTE A CENTRARE NC CORTE

Angolo 90°: si otterrà la centratura e lo smusso in un'unica operazione.

Angolo 120°: l'avanforo realizzato corrisponde all'angolo di affilatura dell'utensile a forare impedendo a quest'ultimo di deviare.



magafor standard			90°	120°	90°	120°
D	L	ℓ	magaforce 8195	magaforce 8196	Hard'X 8195-H	Hard'X 8196-H
h5	± 1	+ 2	€ 23,51	€ 23,51	€ 26,65	€ 26,65
2,0	40	8	20,90	20,90	24,03	24,03
3,0	45	10	20,90		24,03	
3,17 (1/8")	45	10	25,08	25,08	28,21	27,00
4,0	50	12	29,26		32,39	
4,76 (3/16")	50	15	29,26	29,26	32,39	32,39
5,0	50	15	33,44	33,44	36,57	36,57
6,0	50	18	36,57	36,57	39,71	39,71
6,35 (1/4")	50	18	47,02		51,20	
7,93 (5/16")	60	23	47,02	47,02	51,20	51,20
8,0	60	23	68,97	68,97	73,15	73,15
9,52 (3/8")	70	24	70,02	70,02	74,19	74,19
10,0	70	24	98,23	98,23	104,50	104,50
12,0	70	24	106,59	106,59	113,90	113,90
12,70 (1/2")	70	24	145,25	145,25	154,66	154,66
14,0	75	24	165,11	165,11	173,47	173,47
15,87 (5/8")	80	26	166,16	166,16	174,51	174,51
16,0	80	26	300,96	300,96	312,45	312,45
20,0	100	35				

Autres types

- 34 avec plat / with flats / con piano
- 37 cône morse / morse taper shank / mango cono Morse

Other types

- 35 HSS 8% Co α 142°
- 38 longs / largas / lunghe

Otros tipos

- 36 coupe à gauche / left hand cut / corte a izquierdas / elica sinistra

Altri tipi

Performances

Page Pagina 43



NFE 66052 • ISO 10898			90°	90°	120°	90°	120°	90°	120°
D h6 *	L ± 1	ℓ + 1	Classic 190	magafor 195	magafor 196	TiN 0895	TiN 0896	Red'X 0995	Red'X 0996
2,0	49	8	€	€ 13,06	€ 13,06	€ 17,24	€ 17,24	€ 18,29	€ 18,29
3,0	50	10	8,26	10,87	10,87	14,63	14,63	15,67	15,67
3,17 (1/8")	50	10		11,08	11,08	14,84	14,84	15,88	15,88
4,0	52	12	8,57	11,29	11,29	15,47	15,47	16,51	16,51
4,76 (3/16")	60	15		12,12	12,12	16,30	16,30	17,35	17,35
5,0	60	15	9,20	12,23	12,23	16,41	16,41	17,56	17,56
6,0	66	20	9,72	12,54	12,54	18,18	18,18	19,33	19,33
6,35 (1/4")	66	22		14,37	14,37	20,06	20,06	21,21	21,21
7,93 (5/16")	79	25		15,41		21,68		22,99	
8,0	79	25	11,76	15,41	15,41	21,68	21,68	22,99	22,99
9,52 (3/8")	89	25		17,24	17,24	24,66	24,66	26,33	26,33
10,0	89	25	12,80	17,45	17,45	24,98	24,98	26,65	26,65
12,0	102	30	18,29	24,03	24,03	34,48	34,48	36,57	36,57
12,70 (1/2")	102	35		25,60	25,60	36,05	36,05	37,62	37,62
14,0	115	35		34,22	34,22	47,55	47,55	50,16	50,16
15,87 (5/8")	115	35		34,48	34,48	49,64	49,64	52,25	52,25
16,0	115	35	27,17	35,01	35,01	49,90	49,90	53,29	53,29
18,0	130	40		64,79	64,79	84,64	84,64	89,87	89,87
19,05 (3/4")	131	40		66,88	66,88	87,78	87,78	94,05	94,05
20,0	131	40	51,73	67,40	67,40	87,78	87,78	94,05	94,05
25,0	138	45		94,05	94,05	120,17	120,17	128,53	128,53
25,4 (1")	138	45		102,41	102,41	128,53	128,53	136,89	136,89

* Code 190 = h7

Vidéo en ligne
www.magafor.com



magafor, Le choix! The choice! La elección! La scelta!

Matière Material Materiale	HSS	HSS-E Cobalt	HSS-E Cobalt + TiN	HSS-E Cobalt + Red'X	CARBURE METALLO DURO	CARBIDE + Hard'X
Dureté Hardness Durezza	63 HRC	65 HRC	65 HRC + 2300 HV	65 HRC + 3500 HV	1800 HV	1800 HV + 3500 HV
Utilisation Use Utilización Impiego	Petites séries Small series Pequeñas series Piccole serie	Production intensive Intensive production Producción intensiva Produzione intensiva		Alliages durs et abrasifs Hard and abrasive alloys Aleaciones duras y abrasivos Leghe dure e abrasive	Aciers trempés Treated steels Aceros tratados Acciai temprati	
Page Pagina	35-39-41	35 ~ 41		35-35-41	34-37-40	

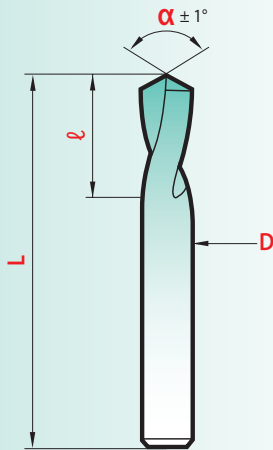
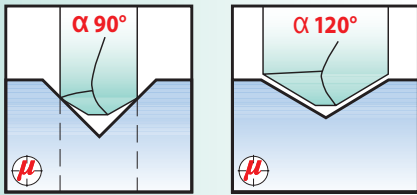
Promo-kits



magafor

COMPOSITION	COMPOSICIÓN	COMPOSIZIONE: 1 pièce pieza pezzo Ø 4 - 5 - 6 - 8 - 10 - 12				
TYPE	TIPO	magafor	TiN	Red'X	magaforce	Hard'X
90°	Code	195	0895	0995	8195	8195-H
120°	Code	196	0896	0996	8196	8196-H
	€	91,36	130,63	137,94	303,05	327,08

New 2020



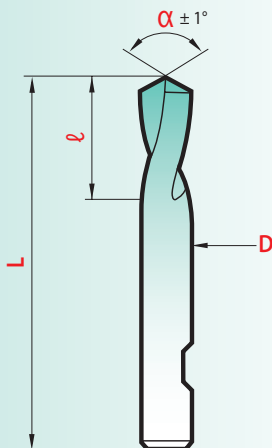
FORETS À POINTER NC COURTS

SHORT NC SPOTTING DRILLS

BROCAS DE PUNTEAR CNC CORTAS

PUNTE A CENTRARE NC CORTE

NFE 66052 • ISO 10898



HSS 8% Co

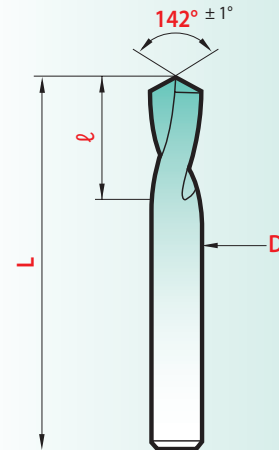
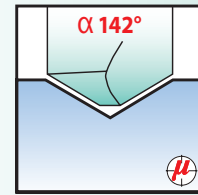


D h6	L ± 1	ℓ + 1	90°		120°		90°		120°	
			magafor 19-J	magafor 19-K	TiN 089-J	TiN 089-K	Red'X 099-J	Red'X 099-K		
3,0	50	10	€ 13,06	€ 13,06	€ 17,24	€ 17,24	€ 18,29	€ 18,29	€ 18,29	€ 18,29
4,0	52	12	13,58	13,58	17,77	17,77	18,81	18,81	18,81	18,81
5,0	60	15	14,63	14,63	19,33	19,33	20,38	20,38	20,38	20,38
6,0	66	20	15,67	15,67	21,42	21,42	22,47	22,47	22,47	22,47
8,0	79	25	18,55	18,55	25,08	25,08	26,39	26,39	26,39	26,39
10,0	89	25	20,90	20,90	27,69	27,69	29,26	29,26	29,26	29,26
12,0	102	30	29,00	29,00	39,71	39,71	41,80	41,80	41,80	41,80
16,0	115	35	42,84	42,84	58,52	58,52	61,92	61,92	61,92	61,92
20,0	131	40	81,77	81,77	103,45	103,45	109,72	109,72	109,72	109,72

DIN 6535 HB
Avec méplat de serrage
With flat Con plano
Attacco Weldon



D h6	L ± 1	ℓ + 1	90°		120°		90°		120°	
			magafor 195-W	magafor 196-W	TiN 0895-W	TiN 0896-W	Red'X 0995-W	Red'X 0996-W		
6,0	66	20	€ 15,05	€ 15,05	€ 21,84	€ 21,84	€ 23,20	€ 23,20	€ 23,20	€ 23,20
8,0	79	25	18,50	18,50	26,02	26,02	27,59	27,59	27,59	27,59
10,0	89	25	20,90	20,90	29,99	29,99	31,98	31,98	31,98	31,98
12,0	102	30	28,84	28,84	41,38	41,38	43,89	43,89	43,89	43,89
16,0	115	35	42,01	42,01	59,88	59,88	63,95	63,95	63,95	63,95
20,0	131	40	80,46	80,46	105,34	105,34	112,86	112,86	112,86	112,86



Pour les alliages durs, l'angle à 142° prépositionne les trous, avant utilisation de forets α 135° ou 140°. Deux qualités proposées : HSS-E Cobalt et carbure monobloc. Pour les alliages fortement abrasifs la gamme **8190-H** est préconisée.

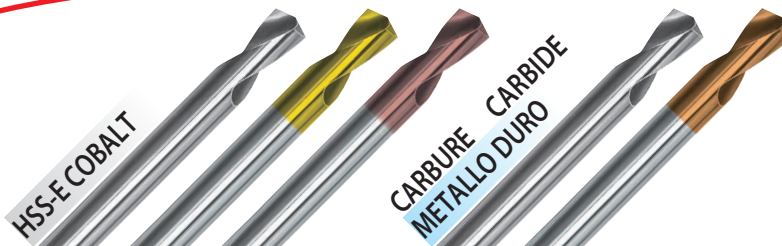
In hard alloys the 142° angle has to be used for the spotting operation before the 135° or 140° twist drills. Two qualities are offered: HSS-E Cobalt and solid carbide. For abrasive alloys the **8190-H** range is recommended.

En aleaciones de alta dureza el ángulo de 142° debe usarse para la operación de punteado antes de usar brocas con 135° ó 140°. Disponibles en dos calidades: HSS-E Cobalto y Metal Duro. Para aleaciones abrasivas recomendamos la referencia **8190-H**.

Per lavorazioni su leghe dure l'angolo a 142° consente il corretto posizionamento della punta preposta alla foratura avente angolo di 135° o 140°. Due sono le tipologie offerte: HSS-E e metallo duro. La gamma **8190-H** è raccomandata nelle lavorazioni di leghe fortemente abrasive.

FORETS À POINTER NC
142°
NC SPOTTING DRILLS
BROCAS DE PUNTEAR CNC
142°
PUNTE A CENTRARE NC

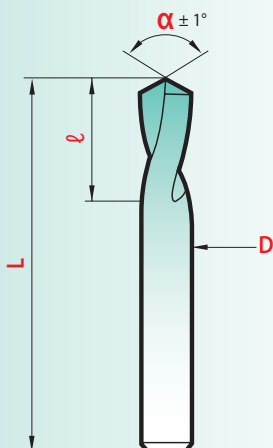
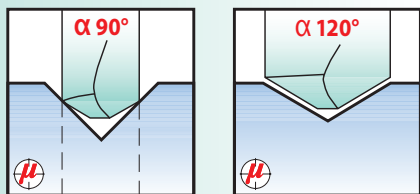
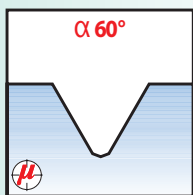
New 2020



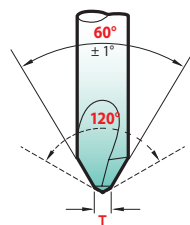
magafor standard			142°			142°			
D	L	ℓ	magafor	TiN	Red'X	L	ℓ	magaforce	Hard'X
h7*	± 1	+ 1	194	0894	0994	± 1	+ 1	8190	8190-H
2,0			€	€	€	40	8	€ 26,25	€ 29,26
3,0	50	10	14,11	17,77	19,33	45	10	23,65	26,65
4,0	52	12	15,15	18,81	20,38	50	12	27,85	30,83
5,0	60	15	16,20	20,38	21,42	50	15	32,00	35,01
6,0	66	20	16,72	22,47	23,51	50	18	35,65	38,66
6,35 (1/4")						50	18	38,80	41,80
8,0	79	25	20,38	26,65	28,21	60	23	50,30	54,34
9,52 (3/8")						70	24	72,35	77,33
10,0	89	25	22,99	30,83	32,39	70	24	74,30	78,38
12,0	102	30	31,35	42,32	44,41	70	24	103,70	109,72
12,7 (1/2")						70	24	112,10	119,13
15,87 (5/8")						80	26	172,75	180,78
16,0	115	35	47,02	61,65	64,79	80	26	173,85	181,83
20,0	131	40	89,87	110,77	115,99				

* CARBURE CARBIDE METAL DURO METALLO DURO = h5

Hard-X
 Jusqu'à Up to
 Hasta Fino a
67 HRC



FORETS À POINTER NC
 NC SPOTTING DRILLS
 BROCAS DE PUNTEAR CNC
 PUNTE A CENTRARE NC



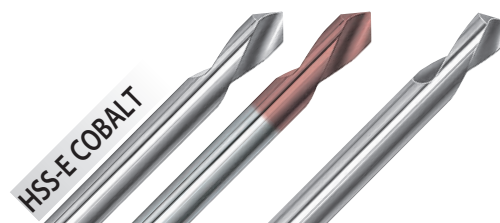
60°

magafor standard

D	L	ℓ	T*	α 60°	
h6	± 1	+ 1		magafor 191	Red'X 0991
4,0	52	12	0,8	€ 47,02	52,25
5,0	60	15	0,9	49,64	54,86
6,0	66	20	1,0	52,25	60,09
8,0	79	25	1,3	54,86	65,31
10,0	89	25	1,6	57,47	70,54
12,0	102	30	2,0	62,70	78,38
16,0	115	35	3,0	94,05	117,56
20,0	131	40	3,5	156,75	193,32

*T = angle ángulo Angolo 120°

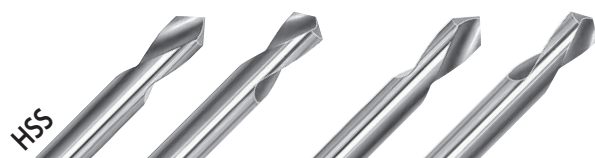
Coupe à gauche
 Left hand cut
 Corte a izquierdas
 Elica sinistra



magafor standard

D	L	ℓ	α 90°		α 120°
h6	± 1	+ 1	magafor 192	TiN 0992	magafor 193
3,0	50	10	€ 26,13	€ 31,35	€ 26,13
4,0	52	12	31,35	36,57	31,35
5,0	60	15	36,57	41,80	36,57
6,0	66	20	41,80	49,64	41,80
8,0	79	25	47,02	57,47	47,02
10,0	89	25	52,25	65,31	52,25
12,0	102	30	62,70	78,38	
16,0	115	35	99,27	122,79	

Extra courts
 Extra short
 Extra cortas
 Extra corta



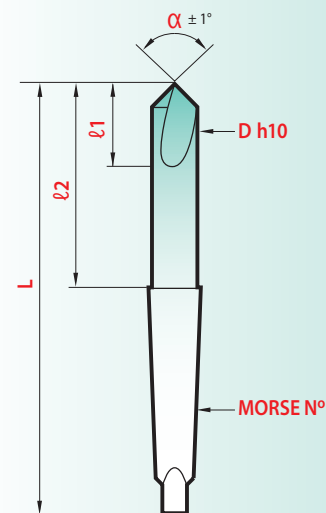
D h7		L	ℓ	Classic			
inch	mm	± 1	+ 1	19-A	19-B	19-AG	19-BG
1/8"	3,17	32	9,5	€ 9,40	€ 9,40	€ 15,60	€ 15,60
3/16"	4,76	35	12,5	10,45	10,45	17,35	17,35
1/4"	6,35	38	16	12,28	12,28	20,40	20,40
5/16"	7,93	38	16	13,06	13,06	21,70	21,70
3/8"	9,52	51	25,5	14,63	14,63	24,30	24,30
7/16"	11,11	51	25,5	18,03	18,03		
1/2"	12,7	51	25,5	21,68	21,68	36,00	36,00
5/8"	15,87	57	28,5	29,52	29,52	49,10	49,10
3/4"	19,05	57	28,5	60,09	60,09	99,75	99,75
7/8"	22,22	64	32	80,99	80,99		
1"	25,4	64	32	89,35	89,35	148,30	148,30

Queue cône Morse
Morse taper shank
Mango
Cono Morse



D h10	L ±1	ℓ1 +1	ℓ2 +1	MORSE N°	90°		120°	
					magafor 198	€	magafor 1906	€
10,0	130	25	64	1	88,30	€	102,93	€
12,0	130	30	64	1	92,48		127,49	
16,0	148	35	68	2	113,90		151,52	
20,0	148	40	68	2	135,85		206,91	
25,0	171	45	72	3	187,05			

magafor



OUTILS MULTI-FONCTIONS
MULTI-FUNCTION TOOLS
HERRAMIENTAS MULTI-FUNCIÓN
UTENSILI MULTI-FUNZIONE

Promo-kits



6 COMBI-mag Ø 4 - 5 - 6 - 8 - 10 - 12
007 €143,16



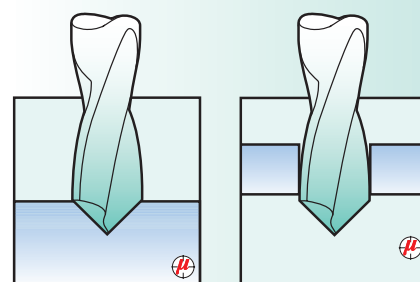
90°

COMBI-mag

inch	D h7 mm	L ±1	ℓ +1	T*	Red'X 007
	3	50	6	0,3	€ 16,20
1/8"	3,17	50	6	0,3	16,20
	4	52	8	0,4	16,72
3/16"	4,76	60	9	0,5	17,24
	5	60	10	0,5	17,24
	6	66	12	0,6	20,38
1/4"	6,35	66	12	0,6	21,42
	7,93	79	14	0,8	23,77
	8	79	14	0,8	23,77
3/8"	9,52	89	16	1	27,17
	10	89	16	1	28,21
	12	102	18	1,2	36,57
1/2"	12,7	102	19	1,3	38,66
	14	115	21	1,4	51,73
5/8"	15,87	115	24	1,6	53,82
	16	115	24	1,6	53,82

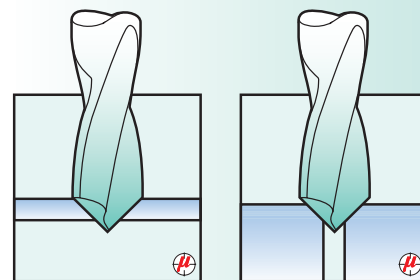
*T = 0,1 D Épaisseur d'âme Web thickness Espesor del núcleo Spessore in punta del nocciolo

COMBI-mag



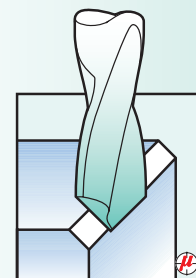
POINTAGE
 SPOTTING
 PUNTEADO
 CENTRATURA

PERÇAGE
 DRILLING
 TALADRADO
 FORATURA

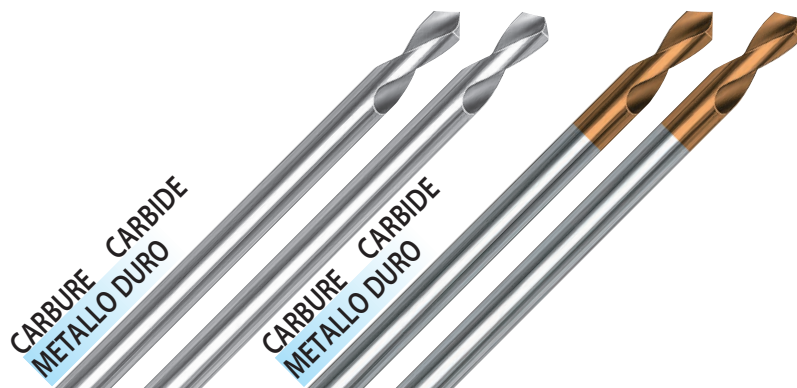
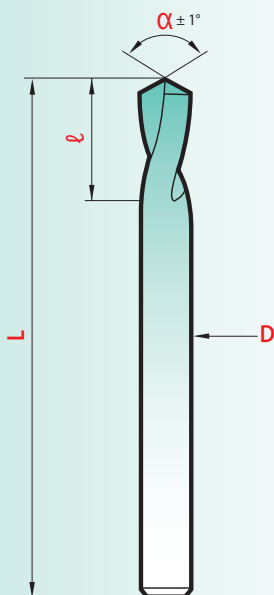
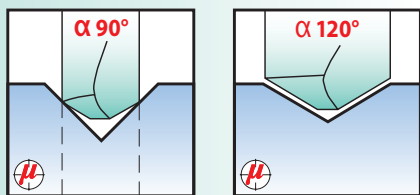


CHANFREIN DIRECT
 DIRECT CHAMFER
 CHAFLANES DIRECTOS
 SVASATURA RAPIDA

CHANFREINAGE
 COUNTERSINKING
 AVELLANADO
 SMUSSATURA



CHANFREIN LONGITUDINAL
 LONGITUDINAL CHAMFER
 CHAFLANES LONGITUDINALES
 SMUSSI LONGITUDINALI



magafor standard			90°	120°	90°	120°
D	L	ℓ	magaforce 8197	magaforce 8199	Hard'X 8197-H	Hard'X 8199-H
h5	± 1	+ 1	€	€	€	€
1,0	50	6	75,76		78,90	
2,0	60	8	62,70		65,83	
3,0	80	10	67,92		71,06	
4,0	100	12	78,38	78,38	81,51	81,51
5,0	120	15	83,60	83,60	86,73	86,73
6,0	140	20	94,05	94,05	98,23	98,23
6,35 (1/4")	140	22	104,50	104,50	108,68	108,68
8,0	140	25	114,95	114,95	119,13	119,13
9,52 (3/8")	170	25	193,32	198,55	198,55	198,55
10,0	170	25	198,55	198,55	203,77	203,77
12,0	170	30	250,80	250,80	258,64	258,64
12,70 (1/2")	170	35	261,25	261,25	269,09	269,09
15,87 (5/8")	200	35	376,20	376,20	386,65	386,65
16,0	200	35	376,20	376,20	386,65	386,65
19,05 (3/4")	200	40	574,75	574,75	587,81	587,81
20,0	200	40	600,88	600,88	613,94	613,94

FORETS À POINTER NC LONGS

LONG NC SPOTTING DRILLS

BROCAS DE PUNTEAR CNC LARGAS

PUNTE A CENTRARE NC LUNGHE

Hard-X Jusqu'à Upto Hasta Fino a 67 HRC

De dureté à chaud élevée (3500 HV), ce revêtement présente une très grande stabilité thermique et une excellente protection contre la chaleur et l'usure. Idéal pour les usinages à sec - à très grande vitesse - dans les aciers traités et matrices.

With a high hardness (3500 HV), this coating shows a high thermic stability and an excellent protection against heat and wear. Ideal for dry machining - high speed cut - in treated steels and dies.

Con una alta dureza (3500 HV) este recubrimiento proporciona una alta estabilidad térmica y una excelente protección contra el calor y el desgaste. Ideal para mecanizado en seco - a alta velocidad - en aceros tratados y de matrices.

Con notevole durezza a caldo (3500 HV) questo rivestimento presenta una grande stabilità termica ed un'eccellente protezione contro il calore e l'usura. Ideale per le lavorazioni a secco - a velocità elevate - negli acciai trattati e nelle matrici.

magafor, Le choix! The choice! La elección! La scelta!

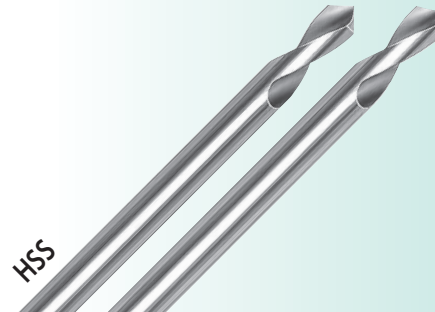
Matière Material Materiale	HSS	HSS-E Cobalt	HSS-E Cobalt + Red'X	CARBURE METALLO DURO	CARBURE CARBIDE + Hard'X
Dureté Härte Durezza	63 HRC	65 HRC	65 HRC + 3500 HV	1800 HV	1800 HV + 3500 HV
Utilisation Use Utilización Impiego	Petites séries Small series Pequeñas series Piccole serie	Production intensive Intensive production Producción intensiva Produzione intensiva		Aciers trempés Treated steels Aceros tratados Acciai temprati	
Page Pagina	35 - 39 - 41		35 ~ 41	34 - 37 - 40	

Red-X

Jusqu'à Up to
Hasta Fino a
55 HRC



magafor standard			90°	120°	90°	120°
D h6	L ± 1	ℓ + 1	magafor 197	magafor 199	Red'X 0997	Red'X 0999
1,0	50	6	€ 49,64	€ 49,64	€ 53,82	€ 53,82
2,0	60	8	41,80	41,80	50,16	50,16
3,0	80	10	36,57	36,57	40,75	40,75
4,0	100	12	33,96	33,96	38,14	38,14
5,0	120	15	36,57	36,57	40,75	40,75
6,0	140	20	39,19	39,19	43,37	43,37
6,35 (1/4")	140	22	41,80	41,80	47,02	47,02
8,0	140	25	44,41	44,41	50,68	50,68
9,52 (3/8")	170	25	60,09	60,09	67,40	67,40
10,0	170	25	62,70	62,70	71,06	71,06
12,0	170	30	77,33	77,33	86,73	86,73
12,70 (1/2")	170	35	80,46	80,46	89,87	89,87
15,87 (5/8")	200	35	112,50	112,50	120,75	120,75
16,0	200	35	114,50	114,50	122,75	122,75
19,05 (3/4")	200	40	144,25	144,25	159,25	159,25
20,0	200	40	147,50	147,50	164,50	164,50
25,4 (1")	200	45	185,50	185,50		



α		90°	120°
D h7 inch	mm	L ± 1	ℓ
1/4"	6,35	66 (2-5/8")	22
		102 (4")	22
		140 (5-1/2")	22
3/8"	9,52	79 (3")	25
		127 (5")	25
		178 (7")	25
1/2"	12,7	95 (3-3/4")	35
		152 (6")	35
		203 (8")	35
5/8"	15,87	111 (4-3/8")	35
		200 (8")	35
		229 (9")	35
3/4"	19,05	127 (5")	40
		200 (8")	40
		254 (10")	40
1"	25,4	138 (5-7/16")	45
		200 (8")	45
		254 (10")	45

performances

Page
Pagina 43