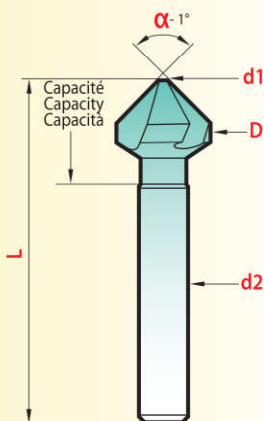
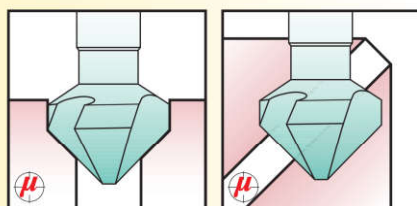


# TRI-DENT



## FRAISES À NOYER Trois dents

Les fraises **magaforce** sont en CARBURE MONOBLOC.  
Cette conception leur confère une solidité unique.

## Three flute COUNTERSINKS

The **magaforce** cutters are made from SOLID CARBIDE.  
This design offers a unique strength.

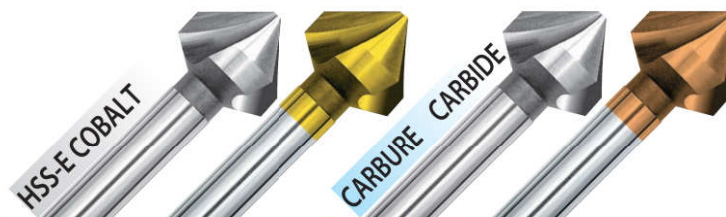
## AVELLANADORES De tres labios

Las herramientas **magaforce** están fabricadas en METAL DURO INTEGRAL.  
Este concepto ofrece una rigidez única.

## FRESE CONICHE con tre denti

Le frese **magaforce** sono in METALLO DURO INTEGRALE.  
Questa struttura conferisce loro una solidità unica.

82°



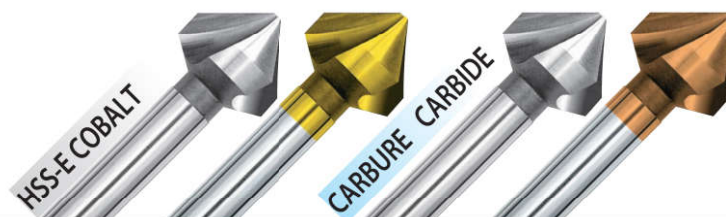
D z9	d1	d2	L	magafor	TiN	magaforce	Hard'X
mm (inch)	maxi	h9	± 1	434	4834	8434	8434-H
6,3	1,5	5	45				
6,35 (1/4")	1,5	6,35	45				
7,93 (5/16")	2,0	6,35	45				
8,3	2,0	6	50				
9,52 (3/8")	2,5	6,35	50				
10,4	2,5	6	50				
12,4	2,8	8	56				
12,70 (1/2")	2,9	6,35	50				
15,87 (5/8")	3,2	9,52	60				
16,5	3,2	10	61				
19,05 (3/4")	3,5	9,52	60				
20,5	3,5	10	64				
25,0	3,8	10	68				
25,40 (1")	3,8	9,52	70				
31,0	4,2	12	73				

\* Queues with 3 flats for optimum tool holding.  
Shanks with 3 flats to optimize tool holding.  
3 planos en el mango para optimizar la sujeción de la herramienta.  
Codolo con 3 piani per un bloccaggio ottimale dell'utensile.

performances

Page 64  
Pagina

100°



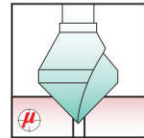
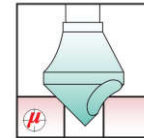
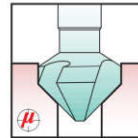
D z9	d1	d2	L	magafor	TiN	magaforce	Hard'X
mm (inch)	maxi	h9	± 1	435	4835	8435	8435-H
6,3	1,5	5	44				
8,3	2,0	6	49				
10,4	2,5	6	49				
12,4	2,8	8	55				
16,5	3,2	10	59				
20,5	3,5	10	62				
25,0	3,8	10	65				
31,0	4,2	12	68				

\* Queues with 3 flats for optimum tool holding.  
Shanks with 3 flats to optimize tool holding.  
3 planos en el mango para optimizar la sujeción de la herramienta.  
Codolo con 3 piani per un bloccaggio ottimale dell'utensile.

# performances

Vc = vitesse speed velocidad velocidad = m/min.  
 Vf = avance feed avance avanzamento = mm/min.  
 $\frac{Vc \times 1000}{\pi \times \varnothing} =$  Tours par min. Rev. / min.  
 Giri / min. revoluciones por minuto.

## ÉBAVURAGE - CHANFREINAGE DEBURRING - COUNTERSINKING DESBARBADO - AVELLANADO SVASATURA - SBAVATURA



Recommandation  
 Recomendación  
 Suggestimento

N° 1

N° 2

Autres  
 Otros

Others

Altre soluzioni

MATIÈRE MATERIAL MATERIALE		HSS-Co	HSS-Co + TiN	HSS 8% Co	HSS 8% Co + Red'X	Carbure Carbide Metallo Duro	Carbure Carbide + Hard'X	HSS-Co	HSS-Co + TiN	HSS-Co	HSS-Co + TiN
Pages Páginas Pagina		47 ~ 57		49		49 ~ 56		60 - 61		62 - 63	
Aciers Steels	Vc	17~22	17~22	35~45	35~45	40~80	40~80	35~45	35~45	35~45	35~45
Ø 10		85	85	165	165	250	250	165	165	165	165
Aceros Acciai ≤ 500 N/mm²	Vf	45	45	85	85	125	125	85	85	85	85
Ø 30		30	30	55	55	85	85	55	55	55	55
Aciers Steels	Vc	10~15	10~15	20~30	20~30	30~60	30~60	20~30	20~30	20~30	20~30
Ø 10		60	60	110	110	170	170	110	110	110	110
Aceros Acciai 500 ~ 800 N/mm²	Vf	30	30	55	55	85	85	55	55	55	55
Ø 30		20	20	35	35	60	60	35	35	35	35
Aciers Steels	Vc	8~12	8~12	16~20	16~20	20~40	20~40	15~20	15~20	15~20	15~20
Ø 10		35	35	55	55	100	100	55	55	55	55
Aceros Acciai 800 ~ 1000 N/mm²	Vf	25	25	35	35	60	60	35	35	35	35
Ø 30		15	15	25	25	45	45	25	25	25	25
Inox Stainless steel	Vc	6~10	6~10	12~15	12~15	20~40	20~40	12~15	12~15	12~15	12~15
Ø 10		30	30	45	45	100	100	45	45	45	45
Aceros Inoxidables 1000 ~ 1300 N/mm²	Vf	15	15	25	25	60	60	25	25	25	25
Ø 30		10	10	20	20	40	40	20	20	20	20
Acier anti-abrasion Abrasive tough	Vc				12~15	15~20	15~20				
Ø 10					40	55	55				
Steel < 420 HB	Vf				30	35	35				
Ø 20					20	25	25				
Acero resistente a la abrasión Ø 30					20	25	25				
Bronze dur Inconel, Nimonic	Vc			4~6	4~6	10~12	10~12				
Ø 10				16	16	30	30				
Hard bronze Ø 20	Vf			8	8	16	16				
Ø 30				6	6	10	10				
Bronze/Bronzo duro Ø 30				6	6	10	10				
Acier traité Treated steel	Vc					8~10	10~12				
Ø 10						20	30				
≥ 60 HRC Ø 20	Vf					10	16				
Acero tratado Acciai trattati Ø 30						8	10				
Fonte Cast iron	Vc	15~25	15~25	20~40	20~40	40~80	40~80	20~40	20~40	20~40	20~40
Ø 10		70	70	125	125	250	250	125	125	125	125
Fundición Ø 20	Vf	40	40	75	75	150	150	75	75	75	75
Ghisa Ø 30		30	30	50	50	100	100	50	50	50	50
Aluminium Alluminio	Vc	35~45	35~45	50~60	50~60	40~100	40~100	50~60	50~60	50~60	50~60
Ø 10		200	200	255	255	350	350	255	255	255	255
Ø 20	Vf	130	130	180	180	230	230	180	180	180	180
Ø 30		110	110	150	150	200	200	150	150	150	150
Laiton Brass Bronze	Vc	20~30	20~30	30~40	30~40			30~40	30~40	30~40	30~40
Ø 10		120	120	150	150			150	150	150	150
Latòn - Bronce Ø 20	Vf	85	85	110	110			110	110	110	110
Bronzo Ø 30		70	70	90	90			90	90	90	90
Cuivre Copper	Vc	15~25	15~25	20~30	20~30	50~80	50~80	20~30	20~30	20~30	20~30
Ø 10		95	95	120	120	300	300	120	120	120	120
Cobre Ø 20	Vf	60	60	80	80	200	200	80	80	80	80
Rame Ø 30		45	45	65	65	175	175	65	65	65	65
Stratifié Laminated	Vc	35~70	35~70	35~70	35~70			50~100	50~100	50~100	50~100
Ø 10		300	300	300	300			400	400	400	400
Laminados Ø 20	Vf	200	200	200	200			300	300	300	300
Laminati Ø 30		150	150	150	150			250	250	250	250
Nylon PVC	Vc	35~70	35~70	35~70	35~70			50~100	50~100	50~100	50~100
Ø 10		400	400	400	400			450	450	450	450
Plastics / Plásticos Ø 20	Vf	300	300	300	300			350	350	350	350
Plastiche Ø 30		250	250	250	250			300	300	300	300