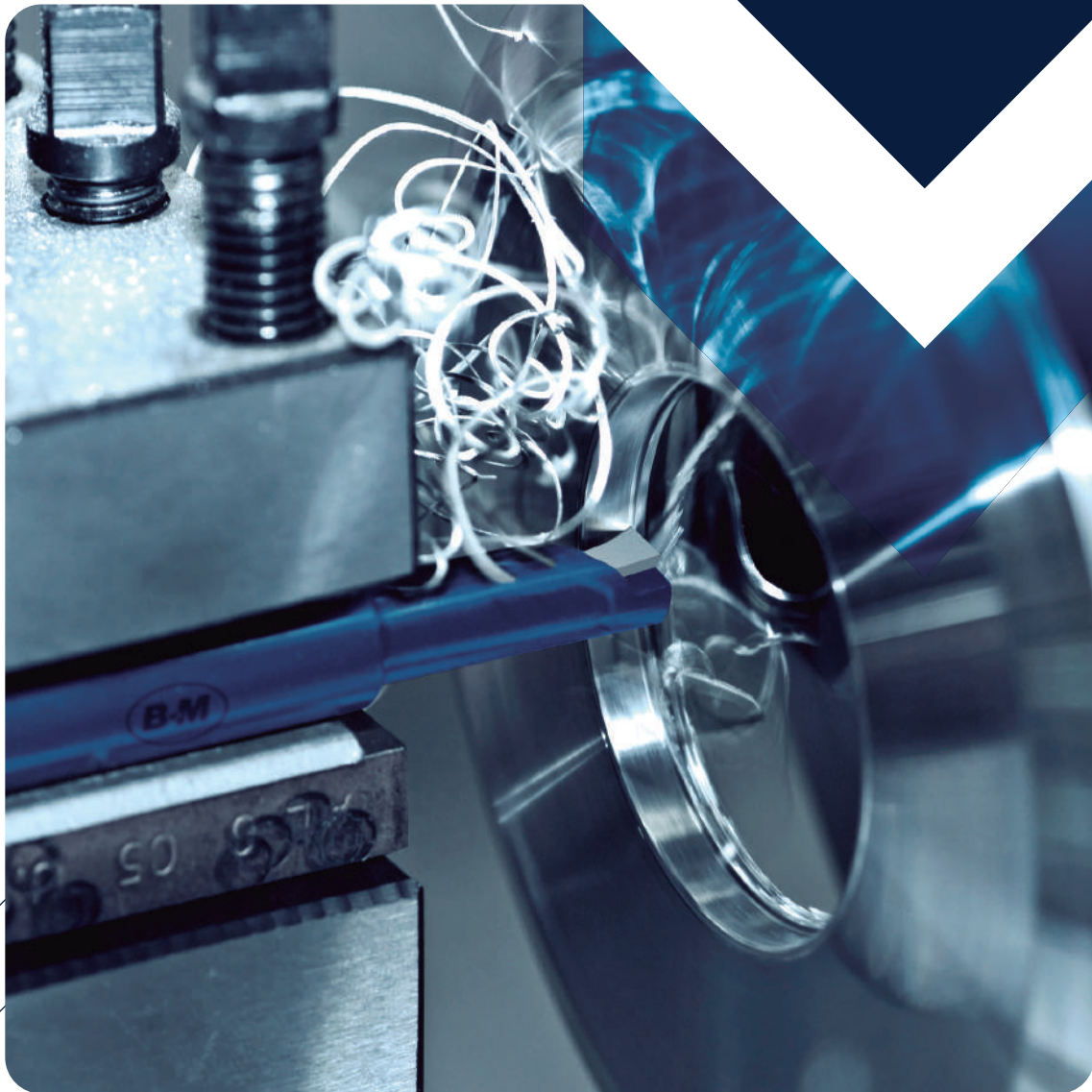


BLUE-MASTER®
by *celesa*



CUCHILLAS
PARA TORNO

CUCHILLAS DE COBALTO PARA TORNO


Ref. CT1

HSSCo
10%
DIN
4964
FORMA
B
TOL
h14

CUCHILLAS CUADRADAS



CT1									
∅ x L1 mm	€	∅ x L1 mm	€	∅ x L1 mm	€	∅ x L1 mm	€	∅ x L1 mm	€
4 x 4 x 80	12,86	6 x 6 x 100	17,92	8 x 8 x 200	45,84	12 x 12 x 100	50,37	16 x 16 x 125	119,52
4 x 4 x 100	19,48	6 x 6 x 125	22,23	10 x 10 x 63	24,95	12 x 12 x 125	62,40	16 x 16 x 160	130,83
4 x 4 x 150	25,92	6 x 6 x 160	26,10	10 x 10 x 80	28,20	12 x 12 x 160	79,81	16 x 16 x 200	151,27
4 x 4 x 200	36,87	6 x 6 x 200	32,43	10 x 10 x 100	39,38	12 x 12 x 200	92,59	18 x 18 x 160	149,27
5 x 5 x 80	16,99	8 x 8 x 63	16,56	10 x 10 x 125	47,95	14 x 14 x 100	58,88	18 x 18 x 200	188,54
5 x 5 x 100	21,60	8 x 8 x 80	19,36	10 x 10 x 160	59,43	14 x 14 x 125	71,58	20 x 20 x 160	210,90
5 x 5 x 150	30,33	8 x 8 x 100	24,95	10 x 10 x 200	71,24	14 x 14 x 160	96,27	20 x 20 x 200	229,75
5 x 5 x 200	41,42	8 x 8 x 125	33,52	12 x 12 x 63	33,53	14 x 14 x 200	103,26	25 x 25 x 160	324,03
6 x 6 x 80	15,74	8 x 8 x 160	35,97	12 x 12 x 80	40,18	16 x 16 x 100	76,51	25 x 25 x 200	327,25



Ref. CT2

HSSCo
10%
DIN
4964
FORMA
A
TOL
h8

CUCHILLAS REDONDAS



CT2									
∅ x L1 mm	€	∅ x L1 mm	€	∅ x L1 mm	€	∅ x L1 mm	€	∅ x L1 mm	€
3 x 100	10,25	6 x 63	11,33	8 x 100	20,60	10 x 100	29,40	14 x 200	122,50
4 x 63	8,65	6 x 80	14,64	8 x 125	32,66	10 x 160	54,96	16 x 125	63,56
4 x 80	10,62	6 x 100	17,99	8 x 160	32,95	10 x 200	67,89	16 x 160	87,25
4 x 100	16,90	6 x 160	26,05	8 x 200	37,46	12 x 80	31,44	16 x 200	111,85
4 x 150	21,18	6 x 200	28,84	9 x 100	31,59	12 x 100	30,81	18 x 160	168,39
5 x 63	8,65	7 x 100	27,72	9 x 150	53,03	12 x 125	53,08	18 x 200	215,70
5 x 80	12,74	7 x 150	37,22	9 x 200	62,82	12 x 160	79,42	20 x 160	195,28
5 x 100	18,87	7 x 200	33,99	10 x 63	20,86	12 x 200	87,84	20 x 200	217,28
5 x 150	23,81	8 x 63	12,97	10 x 80	23,99	14 x 160	95,55	25 x 200	492,51
5 x 200	30,08	8 x 80	17,31						

CUCHILLAS DE COBALTO PARA TORNO



Ref. CT3

**HSSCo
10%**

**DIN
4964**

**FORMA
D**

**TOL
h14**

CUCHILLAS RECTANGULARES



CT3									
h x h1 x L1 mm	€	h x h1 x L1 mm	€	h x h1 x L1 mm	€	h x h1 x L1 mm	€	h x h1 x L1 mm	€
8 x 4 x 100	20,28	12 x 8 x 160	68,05	15 x 5 x 200	84,77	16 x 10 x 160	107,39	20 x 10 x 200	146,72
10 x 5 x 160	44,46	12 x 8 x 200	83,46	16 x 4 x 80	28,71	16 x 10 x 200	130,98	20 x 12 x 160	130,19
10 x 5 x 200	53,50	15 x 3 x 150	52,58	16 x 4 x 100	35,79	20 x 4 x 150	82,26	20 x 12 x 200	162,07
10 x 6 x 160	53,50	15 x 3 x 200	64,08	16 x 4 x 160	57,82	20 x 4 x 200	102,45	25 x 6 x 160	92,84
10 x 6 x 200	66,08	15 x 4 x 150	60,43	16 x 8 x 160	80,23	20 x 5 x 160	78,66	25 x 6 x 200	112,47
12 x 6 x 160	57,02	15 x 4 x 200	73,78	16 x 8 x 200	97,55	20 x 5 x 200	97,94	25 x 12 x 200	212,40
12 x 6 x 200	67,65	15 x 5 x 150	69,55	16 x 10 x 100	62,94	20 x 10 x 160	118,00		



Ref. CT4

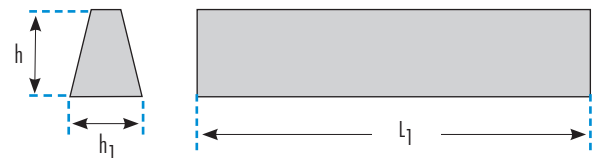
**HSSCo
10%**

**DIN
4964**

**FORMA
E**

**TOL
h12**

CUCHILLAS TRAPEZIALES



CT4			
h x h1 x L1 mm	€	h x h1 x L1 mm	€
12 x 3,0 x 160	39,66	19 x 3,50 x 125	59,12
13 x 2,5 x 100	43,46	20 x 5,00 x 160	84,00
15 x 2,5 x 100	50,29	20 x 5,00 x 200	116,03
16 x 4,0 x 160	66,78	25 x 6,00 x 160	108,82



Ref. CT5

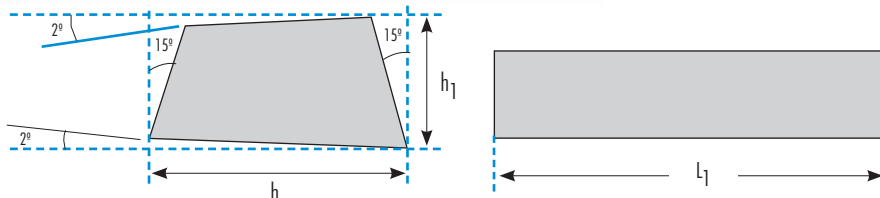
**HSSCo
10%**

**DIN
4964**

**FORMA
INDEX 1**

**TOL
h12**

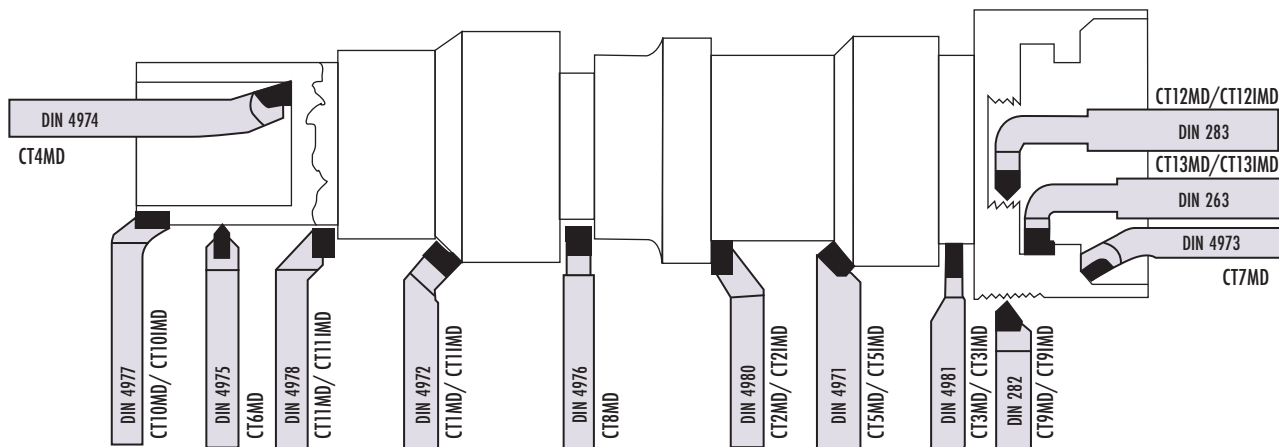
CUCHILLAS BITRAPEZIALES



CT5	
h x h1 x L1 mm	€
13 x 2,5 x 100	47,37
15 x 2,5 x 100	51,49
19 x 3,5 x 125	64,44

CUCHILLAS PARA TORNO

DIAGRAMA DE OPERACIONES Y GEOMETRÍAS

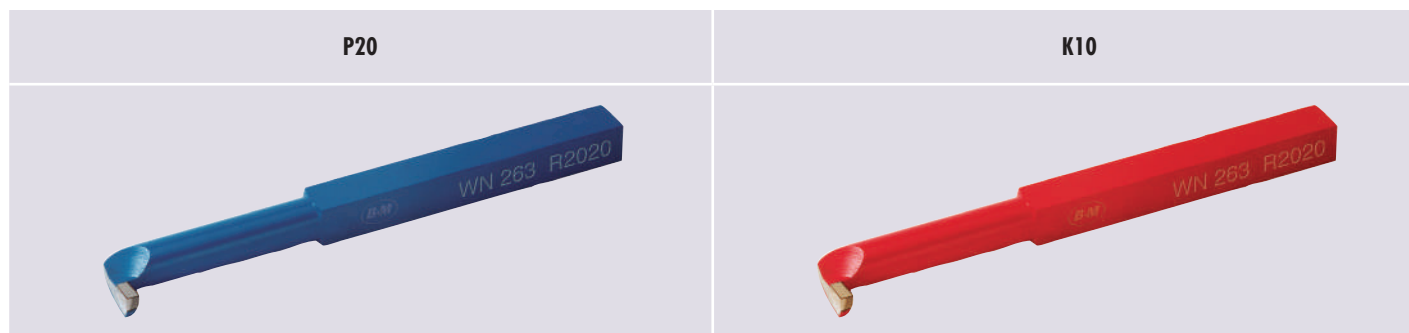


* Otras medidas disponibles bajo demanda

APLICACIONES

P20	Calidad recomendada en operaciones de torneado de acero, acero fundido y fundición maleable de viruta larga. Altos valores de resistencia al desgaste.
K10	Calidad recomendada en operaciones de torneado de fundición gris, fundición dura, acero templado, fundición maleable de viruta corta, aleaciones de aluminio al silicio, bronce y latón.

CALIDADES



Ref. CT5MD
Ref. CT5IMD

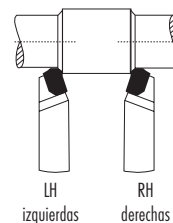
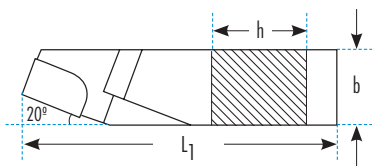
DIN 4971

P-20

K-10

ISO 1

CUCHILLAS RECTAS PARA CILINDRAR



P20		K10		h x b x L1 mm	€
DERECHAS	IZQUIERDAS	DERECHAS	IZQUIERDAS		
CT5MD10x10x90P	CT5IMD10x10x90P	CT5MD10x10x90K	CT5IMD10x10x90K	10 x 10 x 90	11,04
CT5MD12x12x100P	CT5IMD12x12x100P	CT5MD12x12x100K	CT5IMD12x12x100K	12 x 12 x 100	11,87
CT5MD16x16x110P	CT5IMD16x16x110P	CT5MD16x16x110K	CT5IMD16x16x110K	16 x 16 x 110	14,92
CT5MD20x20x125P	CT5IMD20x20x125P	CT5MD20x20x125K	CT5IMD20x20x125K	20 x 20 x 125	20,35
CT5MD25x25x140P	CT5IMD25x25x140P	CT5MD25x25x140K	CT5IMD25x25x140K	25 x 25 x 140	30,12

CUCHILLAS PARA TORNO

Ref. CT1MD
Ref. CT11MD

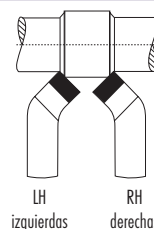
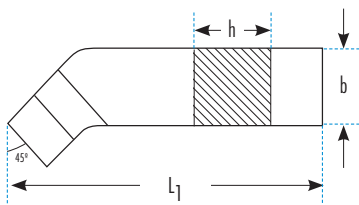
**DIN
4972**

P-20

K-10

**ISO
2**

CUCHILLAS PARA ESCUADRAR 45°



P20

K10

DERECHAS	IZQUIERDAS	DERECHAS	IZQUIERDAS	h x b x L1 mm	€
CT1MD12x12x100P	CT11MD12x12x100P	CT1MD12x12x100K	CT11MD12x12x100K	12 x 12 x 100	13,18
CT1MD16x16x110P	CT11MD16x16x110P	CT1MD16x16x110K	CT11MD16x16x110K	16 x 16 x 110	16,42
CT1MD20x20x125P	CT11MD20x20x125P	CT1MD20x20x125K	CT11MD20x20x125K	20 x 20 x 125	20,86
CT1MD25x25x140P	CT11MD25x25x140P	CT1MD25x25x140K	CT11MD25x25x140K	25 x 25 x 140	29,51

Ref. CT7MD

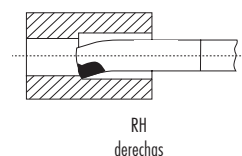
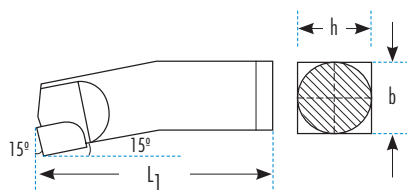
**DIN
4973**

P-20

K-10

**ISO
8**

CUCHILLAS RECTAS PARA MANDRINAR



P20

K10

DERECHAS	DERECHAS	h x b x L1 mm	€
CT7MD8x8x125P	CT7MD8x8x125K	8 x 8 x 125	15,78
CT7MD10x10x125P	CT7MD10x10x125K	10 x 10 x 125	16,26
CT7MD12x12x180P	CT7MD12x12x180K	12 x 12 x 180	16,73
CT7MD16x16x210P	CT7MD16x16x210K	16 x 16 x 210	18,76
CT7MD20x20x250P	CT7MD20x20x250K	20 x 20 x 250	24,37
CT7MD25x25x300P	CT7MD25x25x300K	25 x 25 x 300	38,38

Ref. CT4MD

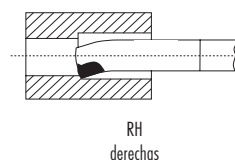
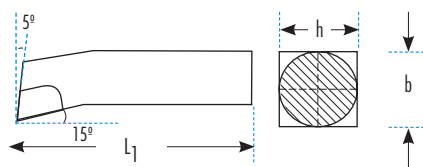
**DIN
4974**

P-20

K-10

**ISO
9**

CUCHILLAS PARA TORNEADO INTERIOR



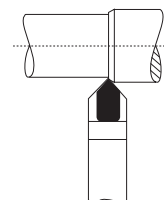
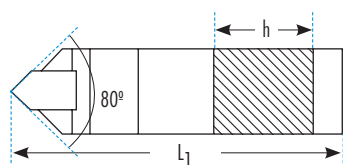
P20

K10

DERECHAS	DERECHAS	h x b x L1 mm	€
CT4MD8x8x125P	CT4MD8x8x125K	8 x 8 x 125	16,26
CT4MD10x10x150P	CT4MD10x10x150K	10 x 10 x 150	16,06
CT4MD12x12x180P	CT4MD12x12x180K	12 x 12 x 180	17,03
CT4MD16x16x210P	CT4MD16x16x210K	16 x 16 x 210	20,28
CT4MD20x20x250P	CT4MD20x20x250K	20 x 20 x 250	25,63
CT4MD25x25x300P	CT4MD25x25x300K	25 x 25 x 300	38,93
CT4MD32x32x355P	CT4MD32x32x355K	32 x 32 x 355	68,53

CUCHILLAS PARA TORNO

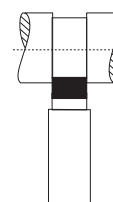
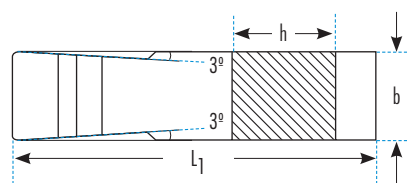
Ref. CT6MD

DIN
4975
P-20
K-10
ISO
10
CUCHILLAS RECTAS PARA CILINDRAR


Recta

P20		K10		h x b x L1 mm	€
RECTA	RECTA	RECTA	RECTA		
CT6MD16x10x110P	CT6MD16x10x110K	16 x 10 x 110	12,16		
CT6MD20x12x125P	CT6MD20x12x125K	20 x 12 x 125	14,08		
CT6MD25x16x140P	CT6MD25x16x140K	25 x 16 x 140	17,94		
CT6MD32x20x170P	CT6MD32x20x170K	32 x 20 x 170	40,32		

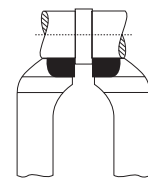
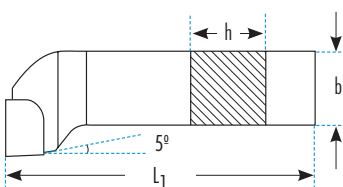
Ref. CT8MD

DIN
4976
P-20
K-10
ISO
4
CUCHILLAS RECTAS PARA RANURAR ANCHA


Recta

P20		K10		h x b x L1 mm	€
RECTA	RECTA	RECTA	RECTA		
CT8MD16x10x110P	CT8MD16x10x110K	16 x 10 x 110	14,60		
CT8MD20x12x125P	CT8MD20x12x125K	20 x 12 x 125	16,02		
CT8MD25x16x140P	CT8MD25x16x140K	25 x 16 x 140	22,58		
CT8MD32x20x170P	CT8MD32x20x170K	32 x 20 x 170	33,30		

 Ref. CT10MD
 Ref. CT10IMD

DIN
4977
P-20
K-10
ISO
5
CUCHILLAS ACODADAS PARA ATAQUE FRONTAL

 LH
 izquierdas

 RH
 derechas

P20		K10		h x b x L1 mm	€
DERECHAS	IZQUIERDAS	DERECHAS	IZQUIERDAS		
CT10MD10x10x90P	CT10IMD10x10x90P	CT10MD10x10x90K	CT10IMD10x10x90K	10 x 10 x 90	12,31
CT10MD12x12x100P	CT10IMD12x12x100P	CT10MD12x12x100K	CT10IMD12x12x100K	12 x 12 x 100	14,10
CT10MD16x16x110P	CT10IMD16x16x110P	CT10MD16x16x110K	CT10IMD16x16x110K	16 x 16 x 110	15,48
CT10MD20x20x125P	CT10IMD20x20x125P	CT10MD20x20x125K	CT10IMD20x20x125K	20 x 20 x 125	19,87
CT10MD25x25x140P	CT10IMD25x25x140P	CT10MD25x25x140K	CT10IMD25x25x140K	25 x 25 x 140	30,58

CUCHILLAS PARA TORNO

Ref. CT11MD
Ref. CT111MD

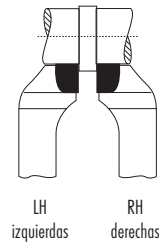
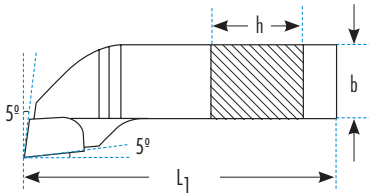
DIN
4978

P-20

K-10

ISO
3

CUCHILLAS ACODADAS PARA ATAQUE LATERAL



P20		K10		h x b x L1 mm	€
DERECHAS	IZQUIERDAS	DERECHAS	IZQUIERDAS		
CT11MD10x10x90P	CT11MD10x10x90P	CT11MD10x10x90K	CT11MD10x10x90K	10 x 10 x 90	13,50
CT11MD12x12x100P	CT11MD12x12x100P	CT11MD12x12x100K	CT11MD12x12x100K	12 x 12 x 100	15,90
CT11MD16x16x110P	CT11MD16x16x110P	CT11MD16x16x110K	CT11MD16x16x110K	16 x 16 x 110	17,68
CT11MD20x20x125P	CT11MD20x20x125P	CT11MD20x20x125K	CT11MD20x20x125K	20 x 20 x 125	26,21
CT11MD25x25x140P	CT11MD25x25x140P	CT11MD25x25x140K	CT11MD25x25x140K	25 x 25 x 140	43,30

Ref. CT2MD
Ref. CT21MD

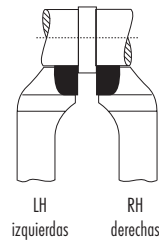
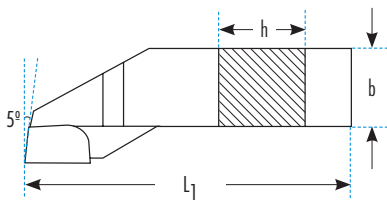
DIN
4980

P-20

K-10

ISO
6

CUCHILLAS PARA ESCUADRAR A 90°



P20		K10		h x b x L1 mm	€
DERECHAS	IZQUIERDAS	DERECHAS	IZQUIERDAS		
CT2MD10x10x90P	CT21MD10x10x90P	CT2MD10x10x90K	CT21MD10x10x90K	10 x 10 x 90	11,94
CT2MD12x12x100P	CT21MD12x12x100P	CT2MD12x12x100K	CT21MD12x12x100K	12 x 12 x 100	13,22
CT2MD16x16x110P	CT21MD16x16x110P	CT2MD16x16x110K	CT21MD16x16x110K	16 x 16 x 110	16,06
CT2MD20x20x125P	CT21MD20x20x125P	CT2MD20x20x125K	CT21MD20x20x125K	20 x 20 x 125	21,36
CT2MD25x25x140P	CT21MD25x25x140P	CT2MD25x25x140K	CT21MD25x25x140K	25 x 25 x 140	31,10

Ref. CT3MD
Ref. CT31MD

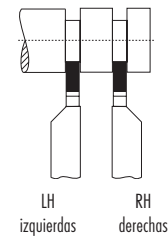
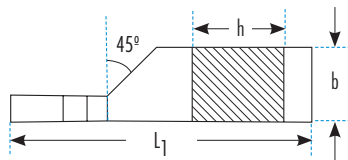
DIN
4981

P-20

K-10

ISO
7

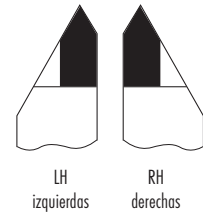
CUCHILLAS PARA TRONZAR



P20		K10		h x b x L1 mm	€
DERECHAS	IZQUIERDAS	DERECHAS	IZQUIERDAS		
CT3MD12x08x100P	CT31MD12x08x100P	CT3MD12x08x100K	CT31MD12x08x100K	12 x 8 x 100 x 3	12,36
CT3MD16x10x110P	CT31MD16x10x110P	CT3MD16x10x110K	CT31MD16x10x110K	16 x 10 x 110 x 4	13,50
CT3MD20x12x125P	CT31MD20x12x125P	CT3MD20x12x125K	CT31MD20x12x125K	20 x 12 x 125 x 5	15,61
CT3MD25x16x140P	CT31MD25x16x140P	CT3MD25x16x140K	CT31MD25x16x140K	25 x 16 x 140 x 6	20,70

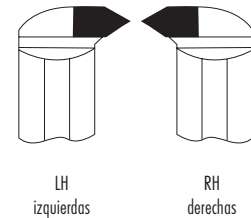
CUCHILLAS PARA TORNO

 Ref. CT9MD
 Ref. CT9IMD

**DIN
282**
P-20
K-10
**ISO
12**
CUCHILLAS PARA ROSCADO DE EXTERIORES

P20
K10

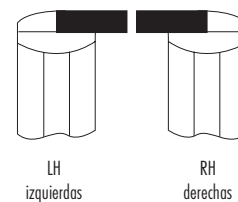
DERECHAS	IZQUIERDAS	DERECHAS	IZQUIERDAS	h x b x L1 mm	€
CT9MD16x10x120P	CT9IMD16x10x120P	CT9MD16x10x120K	CT9IMD16x10x120K	16 x 10 x 120	15,47
CT9MD20x12x140P	CT9IMD20x12x140P	CT9MD20x12x140K	CT9IMD20x12x140K	20 x 12 x 140	18,12
CT9MD25x16x160P	CT9IMD25x16x160P	CT9MD25x16x160K	CT9IMD25x16x160K	25 x 16 x 160	23,60

 Ref. CT12MD
 Ref. CT12IMD

**DIN
283**
P-20
K-10
**ISO
13**
CUCHILLAS PARA ROSCADO DE INTERIORES

P20
K10

DERECHAS	IZQUIERDAS	DERECHAS	IZQUIERDAS	h x b x L1 mm	€
CT12MD10x10x140P	CT12IMD10x10x140P	CT12MD10x10x140K	CT12IMD10x10x140K	10 x 10 x 140	25,31
CT12MD12x12x160P	CT12IMD12x12x160P	CT12MD12x12x160K	CT12IMD12x12x160K	12 x 12 x 160	25,75
CT12MD16x16x180P	CT12IMD16x16x180P	CT12MD16x16x180K	CT12IMD16x16x180K	16 x 16 x 180	33,84
CT12MD20x20x210P	CT12IMD20x20x210P	CT12MD20x20x210K	CT12IMD20x20x210K	20 x 20 x 210	40,19
CT12MD25x25x250P	CT12IMD25x25x250P	CT12MD25x25x250K	CT12IMD25x25x250K	25 x 25 x 250	56,98

 Ref. CT13MD
 Ref. CT13IMD

**DIN
263**
P-20
K-10
**ISO
11**
CUCHILLAS PARA RANURADO DE INTERIORES

P20
K10

DERECHAS	IZQUIERDAS	DERECHAS	IZQUIERDAS	h x b x L1 mm	€
CT13MD12x12x160P	CT13IMD12x12x160P	CT13MD12x12x160K	CT13IMD12x12x160K	12 x 12 x 160	26,53
CT13MD16x16x180P	CT13IMD16x16x180P	CT13MD16x16x180K	CT13IMD16x16x180K	16 x 16 x 180	33,17
CT13MD20x20x210P	CT13IMD20x20x210P	CT13MD20x20x210K	CT13IMD20x20x210K	20 x 20 x 210	41,88
CT13MD25x25x250P	CT13IMD25x25x250P	CT13MD25x25x250K	CT13IMD25x25x250K	25 x 25 x 250	52,62