

ROSCADO

Threading

Taraudage

MACHOS MÁQUINA MÉTRICA

Metric Machine Taps

Tarauds Machine Métrique

130

MACHOS MÁQUINA MÉTRICA ISO

ISO Metric Machine Taps

Tarauds Machine Métrique ISO

161

MACHOS MANO MÉTRICA

Metric Hand Taps

Tarauds à Main Métrique

163

MACHOS WHITWORTH

Whitworth Taps

Tarauds Whitworth

170

MACHOS UNC

UNC Taps

Tarauds UNC

175

MACHOS UNF-SAE

UNF-SAE Taps

Tarauds UNF-SAE

179

MACHOS GAS (BSP)

Gas (BSP) Taps

Tarauds Gaz (BSP)

182

MACHOS UN-BSPT-UNEF-PG-NPT

UN-BSPT-UNEF-PG-NPT Taps

Tarauds UN-BSPT-UNEF-PG-NPT

186

COJINETES MANO / MÁQUINA

Hand / Machine Dies

Filières à Main / Machine

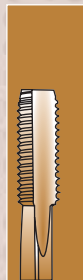
191

ACCESORIOS ROSCADO

Threading Accesories

Accessoires Taraudage

198



DIÁMETROS DE TALADRADO Y EJES PREVIOS AL ROSCADO

Drilling & Axis Diameters Before Threading

Diamètres Taraudage et Axes Pré-Taraudage

M			
M	P	Ø	Ø
1	0,25	0,75	0,97
1,1	0,25	0,85	1,07
1,2	0,25	0,95	1,17
1,4	0,30	1,10	1,36
1,6	0,35	1,25	1,54
1,7	0,35	1,30	1,64
1,8	0,35	1,45	1,74
2	0,40	1,60	1,93
2,2	0,45	1,75	2,13
2,3	0,40	1,90	2,23
2,5	0,45	2,05	2,43
2,6	0,45	2,10	2,53
3	0,50	2,50	2,92
3,5	0,60	2,90	3,41
4	0,70	3,30	3,91
4,5	0,75	3,70	4,41
5	0,80	4,20	4,90
6	1,00	5,00	5,88
7	1,00	6,00	6,88
8	1,25	6,80	7,87
9	1,25	7,80	8,87
10	1,50	8,50	9,85
11	1,50	9,50	10,85
12	1,75	10,20	11,83
14	2,00	12,00	13,82
16	2,00	14,00	15,82
18	2,50	15,50	17,79
20	2,50	17,50	19,79
22	2,50	19,50	21,79
24	3,00	21,00	23,77
27	3,00	24,00	26,77
30	3,50	26,50	29,73
33	3,50	29,50	32,73
36	4,00	32,00	35,70
39	4,00	35,00	38,70
42	4,50	37,50	41,69
45	4,50	40,50	44,69
48	5,00	43,00	47,66
52	5,00	47,00	51,66
56	5,50	50,50	55,56
60	5,50	54,50	59,56
64	6,00	58,00	63,52
68	6,00	62,00	67,52

MF			
MF	P	Ø	Ø
2,5	0,35	2,15	2,44
3	0,35	2,65	2,94
3,5	0,35	3,15	3,44
4	0,35	3,65	3,94
4	0,50	3,50	3,93
4,5	0,50	4,00	4,43
5	0,50	4,50	4,93
5,5	0,50	5,00	5,43
6	0,50	5,50	5,93
6	0,75	5,20	5,90
7	0,75	6,20	6,90
8	0,50	7,50	7,93
8	0,75	7,20	7,90
8	1,00	7,00	7,88
9	0,75	8,20	8,90
9	1,00	8,00	8,88
10	0,50	9,50	9,93
10	0,75	9,20	9,90
10	1,00	9,00	9,88
10	1,25	8,80	9,86
11	0,75	10,20	10,90
11	1,00	10,00	10,88
12	0,75	11,25	11,90
12	1,00	11,00	11,88

MF			
MF	P	Ø	Ø
12	1,25	10,80	11,86
12	1,50	10,50	11,85
13	1,00	12,00	12,88
13	1,50	11,50	12,85
13	1,75	11,25	12,83
14	1,00	13,00	13,88
14	1,25	12,80	13,86
14	1,50	12,50	13,85
15	1,00	14,00	14,88
15	2,00	13,00	14,82
16	1,00	15,00	15,88
16	1,50	14,50	15,85
17	1,00	16,00	16,88
17	1,50	15,50	16,85
18	1,00	17,00	17,88
18	1,50	16,50	17,85
18	2,00	16,00	17,82
20	1,00	19,00	19,88
20	1,50	18,50	19,85
20	2,00	18,00	19,82
22	1,00	21,00	21,88
22	1,50	20,50	21,85
22	2,00	20,00	21,82
24	1,00	23,00	23,88
24	1,50	22,50	23,85
24	2,00	22,00	23,82
25	1,00	24,00	24,88
25	1,50	23,50	24,85
25	2,00	23,00	25,82
26	1,00	25,00	25,88
26	1,50	24,50	25,85
27	1,00	26,00	26,88
27	1,50	25,50	26,85
27	2,00	25,00	26,82
28	1,00	27,00	27,88
28	1,50	26,50	27,85
28	2,00	26,00	27,82
30	1,00	29,00	29,88
30	1,50	28,50	29,85
30	2,00	28,00	29,82
30	3,00	27,00	29,77
32	1,50	30,50	31,85
32	2,00	30,00	31,82
33	1,50	31,50	32,85
33	2,00	31,00	32,82
33	3,00	30,00	32,77
34	1,50	32,50	33,85
35	1,50	33,50	34,85
36	1,50	34,50	35,85
36	2,00	34,00	35,82
36	3,00	33,00	35,76
38	1,50	36,50	37,85
39	1,50	37,50	38,85
39	2,00	37,00	38,82
39	3,00	36,00	38,76
40	1,50	38,50	39,85
40	2,00	38,00	39,82
40	3,00	37,00	39,76
42	1,50	40,50	41,85
42	2,00	40,00	41,82
42	3,00	39,00	41,76
45	1,50	43,50	44,85
45	2,00	43,00	44,82
45	3,00	42,00	44,76
48	1,50	46,50	47,85
48	2,00	46,00	47,82
48	3,00	45,00	47,76
50	1,50	48,50	49,85
50	2,00	48,00	49,82
50	3,00	47,00	49,76
52	1,50	50,50	51,85
52	2,00	50,00	51,82
52	3,00	49,00	51,76

LAMINACIÓN		
Cold Forming - Réfouleur		
M	P	Ø
3	0,50	2,75
4	0,70	3,65
4,5	0,75	4,15
5	0,80	4,60
5	0,90	4,55
6	1,00	5,50
7	1,00	6,50
8	1,25	7,40
10	1,50	9,30
12	1,75	11,20
14	2,00	13,10
16	2,00	15,10
18	2,50	16,90
20	2,50	18,90
22	2,50	20,90
24	3,00	22,65

W			
W	HILOS Threads Filets	Ø	Ø
3/32	48	1,80	2,21
1/8	40	2,50	3,00
5/32	32	3,10	3,78
3/16	24	3,60	4,57
7/32	24	4,40	5,36
1/4	20	5,10	6,16
5/16	18	6,50	7,76
3/8	16	7,90	9,30
7/16	14	9,30	10,89
1/2	12	10,50	12,43
9/16	12	12,00	13,92
5/8	11	13,50	15,62
3/4	10	16,50	18,76
7/8	9	19,25	21,89
1	8	22,00	25,08
1 1/8	7	24,75	28,21
1 1/4	7	27,75	31,36
1 3/8	6	30,50	34,51
1 1/2	6	33,50	37,66
1 5/8	5	35,50	40,81
1 3/4	5	39,00	43,96
1 7/8	4,5	41,50	47,11
2	4,5	44,50	50,26
2 1/4	4	50,00	56,56
2 1/2	4	56,00	62,87
2 3/4	3,5	62,00	69,85
3	3,5	68,50	76,20

UNC			
UNC	HILOS Threads Filets	Ø	Ø
N°1	64	1,50	1,79
N°2	56	1,80	2,12
N°3	48	2,10	2,44
N°4	40	2,30	2,76
N°5	40	2,60	3,09
N°6	32	2,85	3,41
N°8	32	3,50	4,07
N°10	24	3,90	4,71
N°12	24	4,50	5,37
1/4	20	5,20	6,22
5/16	18	6,60	7,80
3/8	16	8,00	9,37
7/16	14	9,40	10,95
1/2	13	10,75	12,52

UNC			
UNC	HILOS Threads Filets	Ø	Ø
9/16	12	12,25	14,10
5/8	11	13,50	15,68
3/4	10	16,50	18,84
7/8	9	19,50	22,00
1	8	22,25	25,16
1 1/8	7	25,00	28,31
1 1/4	7	28,25	31,49
1 3/8	6	30,75	34,63
1 1/2	6	34,00	37,81
1 3/4	5	39,50	44,12
2	4,5	45,25	50,45
2 1/4	4,5	51,20	56,80
2 1/2	4	57,25	63,10
2 3/4	4	63,50	69,45
3	4	70,00	75,80

UNF-SAE			
UNF	HILOS Threads Filets	Ø	Ø
N°0	80	1,30	1,47
N°1	72	1,60	1,79
N°2	64	1,90	2,12
N°3	56	2,10	2,44
N°4	48	2,40	2,77
N°5	44	2,70	3,10
N°6	40	3,00	3,42
N°8	36	3,50	4,08
N°10	32	4,10	4,73
N°12	28	4,70	5,38
1/4	28	5,50	6,24
5/16	24	6,90	7,82
3/8	24	8,50	9,41
7/16	20	9,90	10,98
1/2	20	11,50	12,56
9/16	18	12,90	14,14
5/8	18	14,50	15,73
3/4	16	17,50	18,89
7/8	14	20,40	22,05
1	12	23,30	25,21
1 1/8	12	26,50	28,38
1 1/4	12	29,50	31,56
1 3/8	12	32,70	34,73
1 1/2	12	36,50	37,91

GAS (BSP)			
Gas	HILOS Threads Filets	Ø	Ø
1/8	28	8,80	9,62
1/4	19	11,80	13,03
3/8	19	15,25	16,53
1/2	14	19,00	20,81
5/8	14	21,00	22,77
3/4	14	24,50	26,30
7/8	14	28,25	30,06
1	11	30,75	33,07
1 1/8	11	35,50	37,71
1 1/4	11	39,50	41,73
1 3/8	11	42,00	44,14
1 1/2	11	45,20	47,62
1 3/4	11	51,40	53,56
2	11	57,20	59,43
2 1/4	11	63,30	65,48
2 3/8	11	67,00	69,15
2 1/2	11	72,80	74,94
2 3/4	11	79,10	81,27
3	11	85,50	87,57

DIÁMETROS DE TALADRADO Y EJES PREVIOS AL ROSCADO

Drilling & Axis Diameters Before Threading

Diametres Taraudage et Axes Pré-Taraudage

BSPT (RC)		
BSPT	HILOS Threads Filets	Ø
1/16	28	6,30
1/8	28	8,30
1/4	19	11,00
3/8	19	14,50
1/2	14	18,10
3/4	14	23,50
1	11	29,60
1 1/4	11	38,10
1 1/2	11	44,00
2	11	55,60

UNEF			
UNEF	HILOS Threads Filets	Ø	Ø
N°12	32	4,70	5,39
1/4	32	5,55	6,25
5/16	32	7,15	7,84
3/8	32	8,70	9,42
7/16	28	10,20	11,00
1/2	28	11,80	12,59
9/16	24	13,20	14,18
5/8	24	14,80	15,75
3/4	20	17,80	18,91
7/8	20	20,95	22,09
1	20	24,10	25,26
1 1/8	18	27,15	28,40
1 1/4	18	30,35	31,59
1 3/8	18	33,60	34,76
1 1/2	18	36,70	37,94

PG			
PG	HILOS Threads Filets	Ø	Ø
07	20	11,40	12,40
09	18	14,00	15,10
11	18	17,25	18,50
13,5	18	19,00	20,30
16	18	21,25	22,40
21	16	26,75	28,15
29	16	35,50	36,85
36	16	45,50	46,85
42	16	52,50	53,85
48	16	58,00	59,15

NPT			
NPT	HILOS Threads Filets	Ø	Ø
1/16	27	6,20	7,58
1/8	27	8,50	9,93
1/4	18	11,00	13,18
3/8	18	14,50	16,60
1/2	14	17,80	20,63
3/4	14	23,00	25,95
1	11,5	29,00	32,51
1 1/4	11,5	37,50	41,23
1 1/2	11,5	44,00	47,30
2	11,5	56,00	59,31

EQUIVALENCIA ROSCAS MM

Threading Equivalence mm

Equivalence Taraudage mm

W / UNC / UNF / UNEF	mm
3/32	2,381
1/8	3,175
5/32	3,969
3/16	4,762
7/32	5,556
1/4	6,350
9/32	7,144
5/16	7,938
3/8	9,525
7/16	11,112
1/2	12,700
9/16	14,288
5/8	15,875
3/4	19,050
7/8	22,225
1	25,400
1 1/8	28,575
1 1/4	31,750

W / UNC / UNF / UNEF	mm
1 3/8	34,925
1 1/2	38,100
1 5/8	41,275
1 3/4	44,450
1 7/8	47,625
2	50,800

GAS (BSP) / BSPT (RC)	mm
1/8	9,728
1/4	13,157
3/8	16,662
1/2	20,955
5/8	22,911
3/4	26,441
7/8	30,201
1	33,249
1 1/8	37,897
1 1/4	41,910

GAS (BSP) / BSPT (RC)	mm
1 3/8	44,323
1 1/2	47,803
1 5/8	51,988
1 3/4	53,746
2	59,614
2 1/4	65,710
2 3/8	69,390
2 1/2	75,184
2 3/4	81,534
3	87,844

PG	mm
07	12,500
09	15,200
11	18,600
13,5	20,400
16	22,500
21	28,300

PG	mm
29	37,000
36	47,000
42	54,000
48	59,300

NPT	mm
1/8	10,287
1/4	13,716
3/8	17,145
1/2	21,336
3/4	23,670
1	33,401
1 1/4	42,164
1 1/2	48,260
2	60,325
2 1/2	73,025
3	88,900

ROTURA DE MACHOS

La rotura de un macho, en un porcentaje muy elevado, se produce en la zona más frágil del mismo. Por ejemplo, en el caso de machos DIN 371 con mango reforzado, se da en la terminación de la zona de roscado, con más posibilidades en los casos de roscado rígido con un macho para agujeros ciegos, a la salida del mismo.

Para evitar en un porcentaje elevado el riesgo de rotura, hay que tener en cuenta algunas recomendaciones:

- Ejecutar el taladrado previo con una broca en buenas condiciones.
- Utilizar el macho adecuado para cada material a trabajar.
- Usar un porta-machos flotante Ref. 3193 con compensación radial y axial, que alinea el eje del macho respecto al eje del orificio a roscar.

BROKEN TAPS

Breaking a tap, in a high percentage, happens in its most fragile side. For example, when using reinforced shank DIN 371 taps, this happens in the end of the threading area, most probably in rigid threading cases with a tap for blind holes, when turning it out.

In order to avoid this breaking risk, have in mind some recommendations:

- Make the previous drilling with a drill bit in good conditions.
- Use the proper tap for each working material
- Use a Ref. 3193 Floating Tap Holder with radial & axial compensation, that aligns the tap axis to the hole-to-thread axis.

RUPTURE DE TARAUDS

La ruptura d'un taraud dans la plupart des cas se produit dans la zone la plus fragile de l'outil. Par exemple, dans le cas de tarauds DIN 371 avec queue renforcée, se produit dans la fin de la partie filetée, avec plus de possibilités de casse dans les filetages rigides avec tarauds pour trous borgnes a la sortie du même.

Pour éviter un haut pourcentage de casse, il faut respecter les conseils suivants:

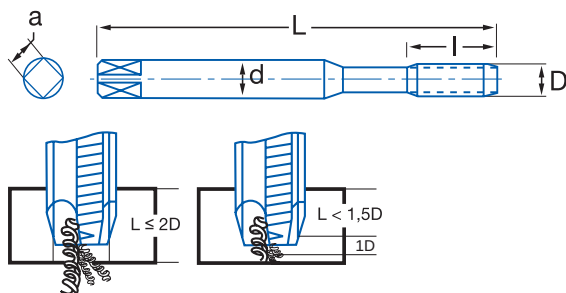
- Pré-taraudage avec un foret en bonnes conditions.
- Employer un taraud approprié pour chaque matériel à usiner.
- Employer un porte-tarauds flottant Ref. 3193 avec compensation rayon et axiale qui aligne l'axe du taraud par rapport à l'axe du trou à tarauder.

Ref. **3130**

MACHO RECTO MÁQUINA MÉTRICA MATERIALES DUROS M. REFORZADO

Reinforced Shank Hard Materials Metric Machine Straight Tap

Taraud Droit Machine Metrique Matériaux Durs Queue Renforcée



Material		Vc
Grupo	Sub.	TIALN
1	1.3	4-8
1	1.4	3-5
4		10-15
7	7.2	20-30

Vc= m/min.

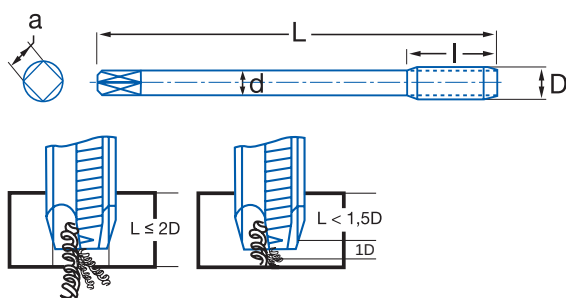
M	P	L mm	I mm	d mm	a mm	Z	Nº Art. TIALN	€
M3	0,50	56	11	3,50	2,70	3	15354	22,04
M4	0,70	63	13	4,50	3,40	3	15355	22,04
M5	0,80	70	16	6,00	4,90	3	15357	21,30
M6	1,00	80	19	6,00	4,90	3	15360	23,59
M8	1,25	90	22	8,00	6,20	3	15361	27,36
M10	1,50	100	24	10,00	8,00	3	15363	33,34

Ref. **3230**

MACHO RECTO MÁQUINA MÉTRICA MATERIALES DUROS

Hard Materials Metric Machine Straight Tap

Taraud Droit Machine Metrique Matériaux Durs



Material		Vc
Grupo	Sub.	TIALN
1	1.3	4-8
1	1.4	3-5
4		10-15
7	7.2	20-30

Vc= m/min.

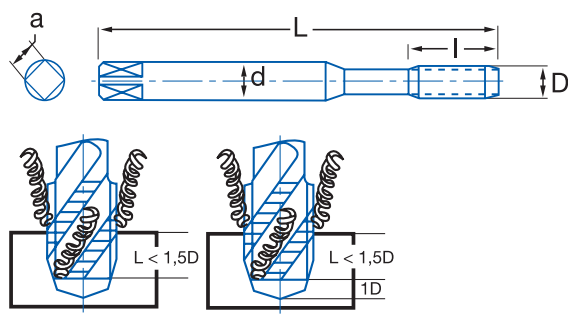
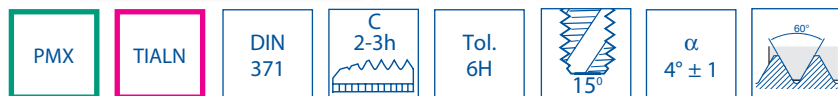
M	P	L mm	I mm	d mm	a mm	Z	Nº Art. TIALN	€
M12	1,75	110	29	9,00	7	3	16394	41,46
M14	2,00	110	30	11,00	9	3	16395	57,38
M16	2,00	110	32	12,00	9	3	16396	70,15
M18	2,50	125	34	14,00	11	3	13216	131,68
M20	2,50	140	34	16,00	12	3	13217	151,45

Ref. **3170**

MACHO HELICOIDAL MÁQUINA MÉTRICA MATERIALES DUROS M. REFORZADO

Reinforced Shank Hard Materials Metric Machine Spiral Tap

Taraud Hélicoïdal Machine Métrique Matériaux Durs Queue Renforcée



Material		Vc
Grupo	Sub.	TIALN
1	1.3	4-8
1	1.4	3-5
4		10-15
7	7.2	20-30

Vc= m/min.

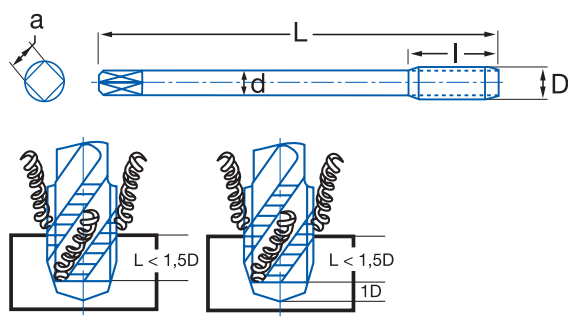
M	P	L mm	I mm	d mm	a mm	Z	Nº Art. TIALN	€
M3	0,50	56	11	3,50	2,70	3	15366	24,17
M4	0,70	63	13	4,50	3,40	3	15367	24,17
M5	0,80	70	16	6,00	4,90	3	15369	24,17
M6	1,00	80	19	6,00	4,90	3	15372	25,43
M8	1,25	90	22	8,00	6,20	3	15373	30,44
M10	1,50	100	24	10,00	8,00	3	15375	37,82

Ref. **3270**

MACHO HELICOIDAL MÁQUINA MÉTRICA MATERIALES DUROS

Hard Materials Metric Machine Spiral Tap

Taraud Hélicoïdal Machine Métrique Matériaux Durs



Material		Vc
Grupo	Sub.	TIALN
1	1.3	4-8
1	1.4	3-5
4		10-15
7	7.2	20-30

Vc= m/min.

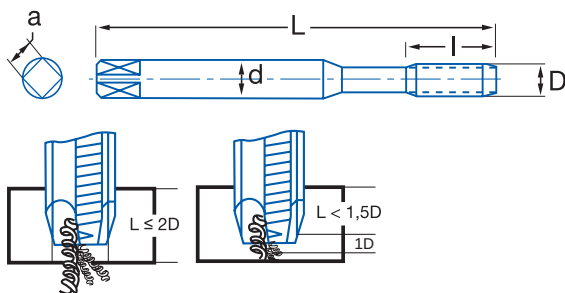
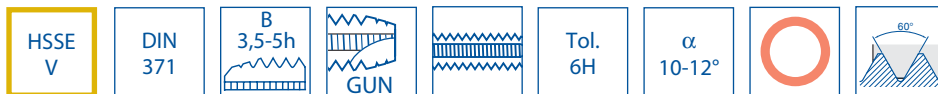
M	P	L mm	I mm	d mm	a mm	Z	Nº Art. TIALN	€
M12	1,75	110	18	9,00	7,00	3	16399	49,85
M14	2,00	110	20	11,00	9,00	3	16400	65,41
M16	2,00	110	20	12,00	9,00	4	16401	82,62
M18	2,50	125	25	14,00	11,00	4	13218	113,21
M20	2,50	140	25	16,00	12,00	4	13219	121,52

Ref. **3143**

MACHO RECTO MÁQUINA MÉTRICA MATERIALES ALEADOS M. REFORZADO

Reinforced Shank Alloy Materials Metric Machine Straight Tap

Taraud Droit Machine Metrique Matériaux Alliages Queue Renforcée



Material		Vc
Grupo	Sub.	HSSE-V
1	1.2	6-8
3	3.2	7-10
6	6.3	14-20

Vc= m/min.

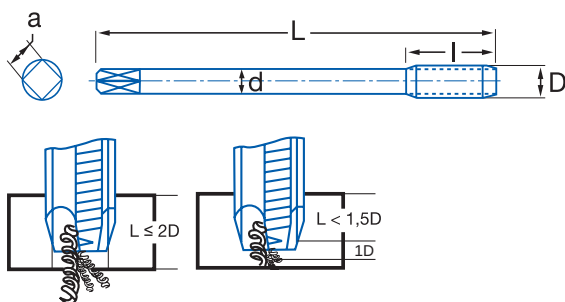
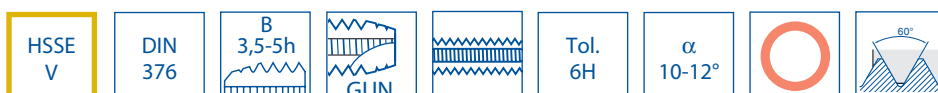
M	P	L mm	I mm	d mm	a mm	Z	Nº Art. HSSE-V	€
M3	0,50	56	11	3,50	2,70	3	69532	12,56
M4	0,70	63	13	4,50	3,40	3	69534	12,84
M5	0,80	70	16	6,00	4,90	3	69535	12,84
M6	1,00	80	17	6,00	4,90	3	69537	14,12
M8	1,25	90	20	8,00	6,20	3	69538	15,84
M10	1,50	100	24	10,00	8,00	3	15672	18,24

Ref. **3243**

MACHO RECTO MÁQUINA MÉTRICA MATERIALES ALEADOS

Alloy Materials Metric Machine Straight Tap

Taraud Droit Machine Metrique Matériaux Alliages



Material		Vc
Grupo	Sub.	HSSE-V
1	1.2	6-8
3	3.2	7-10
6	6.3	14-20

Vc= m/min.

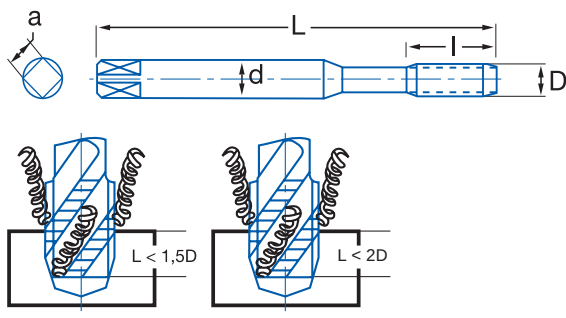
M	P	L mm	I mm	d mm	a mm	Z	Nº Art. HSSE-V	€
M8	1,25	90	20	6,00	4,90	3	69876	16,55
M10	1,50	100	22	7,00	5,50	3	69877	20,35
M12	1,75	110	24	9,00	7,00	3	69879	25,06
M14	2,00	110	26	11,00	9,00	3	69880	31,35
M16	2,00	110	27	12,00	9,00	3	69882	36,87
M18	2,50	125	30	14,00	11,00	4	69883	52,25
M20	2,50	140	32	16,00	12,00	4	69885	56,43

Ref. **3153**

MACHO HELICOIDAL MÁQUINA MÉTRICA MATERIALES ALEADOS M. REFORZADO

Reinforced Shank Alloy Materials Metric Machine Spiral Tap

Tarud Hélicoïdal Machine Metrique Matériaux Alliages Queue Renforcée



Material		Vc
Grupo	Sub.	HSSE-V
1	1.2	6-8
3	3.2	7-10
6	6.3	14-20

Vc= m/min.

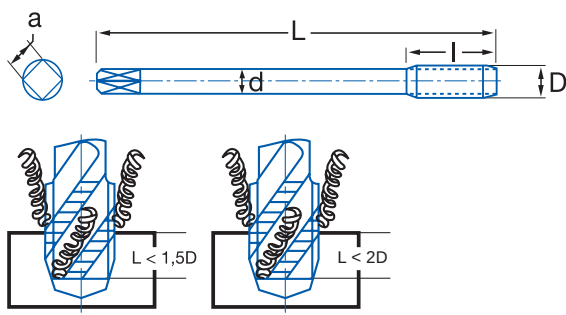
M	P	L mm	l mm	d mm	a mm	Z	Nº Art. HSSE-V	€
M3	0,50	56	5	3,50	2,70	3	69412	13,82
M4	0,70	63	7	4,50	3,40	3	69414	14,14
M5	0,80	70	8	6,00	4,90	3	69415	14,14
M6	1,00	80	10	6,00	4,90	3	69483	15,51
M8	1,25	90	13	8,00	6,20	3	69484	17,41
M10	1,50	100	15	10,00	8,00	3	69519	20,07

Ref. **3253**

MACHO HELICOIDAL MÁQUINA MÉTRICA MATERIALES ALEADOS

Alloy Materials Metric Machine Spiral Tap

Tarud Hélicoïdal Machine Metrique Matériaux Alliages



Material		Vc
Grupo	Sub.	HSSE-V
1	1.2	6-8
3	3.2	7-10
6	6.3	14-20

Vc= m/min.

M	P	L mm	l mm	d mm	a mm	Z	Nº Art. HSSE-V	€
M8	1,25	90	13	6	4,90	3	69864	18,21
M10	1,50	100	15	7	5,50	3	69865	22,40
M12	1,75	110	18	9	7,00	3	69867	27,58
M14	2,00	110	20	11	9,00	4	69868	34,49
M16	2,00	110	20	12	9,00	4	69870	40,57
M18	2,50	125	25	14	11,00	4	69871	57,47
M20	2,50	140	25	16	12,00	4	69873	62,09

Ref. **3125**

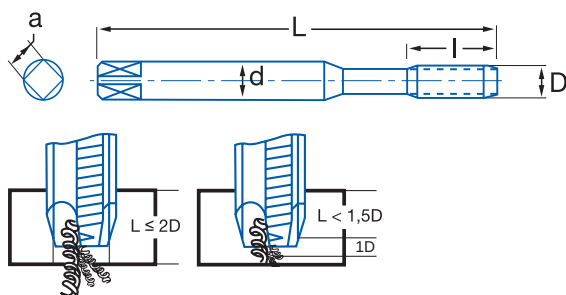
MACHO RECTO MÁQUINA MÉTRICA INOX GRAN RENDIMIENTO M. REFORZADO

Reinforced Shank High Performance Stainless Metric Machine Straight Tap

Taraud Droit Machine Metrique Inox Haut Rendement Queue Renforcée



PMX	TIALN	DIN 371	B 3,5-5h	GUN	Tol. 6H	α 10-12°		A.R.I.* * Alto Rendimiento Intensivo I.H.P.* * Intensive High Performance H.P.I.* * Haute Performance Intensif	
-----	-------	---------	-------------	-----	------------	--------------------	--	--	--



Material		Vc *
Grupo	Sub.	TIALN
1	1.2	6-8
	2.1	8-14
2	2.2	6-10
	5.1	10-15
5	5.2	12-20

* Posible Uso en Seco: Vc -50 %

* Possible Dry-Use: Vc -50%

* Emploi possible à sec: Vc -50 %

Vc= m/min.

M	P	L mm	l mm	d mm	a mm	Z	N° Art. TIALN	€
M3	0,50	56	11	3,50	2,70	3	28059	22,05
M4	0,70	63	13	4,50	3,40	3	28060	22,58
M5	0,80	70	16	6,00	4,90	3	28062	23,81
M6	1,00	80	17	6,00	4,90	3	28063	23,81
M8	1,25	90	20	8,00	6,20	3	28064	27,59
M10	1,50	100	24	10,00	8,00	3	28065	32,92

Ref. 3125 + 1016 TIALSIN



Cont. 10 pcs

N° Art.
TIALSIN €

Machos / Taps / Tarauds
DIN 371: M4-M10

Brocas / Twist Drills / Forets
1016 TIALSIN:
3,3-4,2-5,0-6,8-8,5

32669 158,36

Ref. 3125 + 1020 HSSE



Cont. 10 pcs

N° Art.
5% Co €

Machos / Taps / Tarauds
DIN 371: M4-M5-M6-M8-M10

Brocas / Twist Drills / Forets
1020 HSSE:
3,3-4,2-5,0-6,8-8,5

32674 148,23

Ref. **3225**

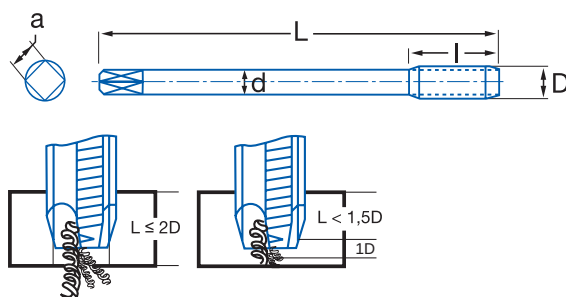
MACHO RECTO MÁQUINA MÉTRICA INOX GRAN RENDIMIENTO

High Performance Stainless Metric Machine Straight Tap

Taraud Droit Machine Metrique Inox Haut Rendement



PMX	TIALN	DIN 376	B 3,5-5h	GUN	Tol. 6H	α 10-12°		A.R.I.* * Alto Rendimiento Intensivo I.H.P.* * Intensive High Performance H.P.I.* * Haute Performance Intensif	
-----	-------	---------	-------------	-----	------------	--------------------	--	--	--



Material		Vc *
Grupo	Sub.	TIALN
1	1.2	6-8
	2.1	8-14
2	2.2	6-10
	5.1	10-15
5	5.2	12-20

* Posible Uso en Seco: Vc -50 %

* Possible Dry-Use: Vc -50%

* Emploi possible à sec: Vc -50 %

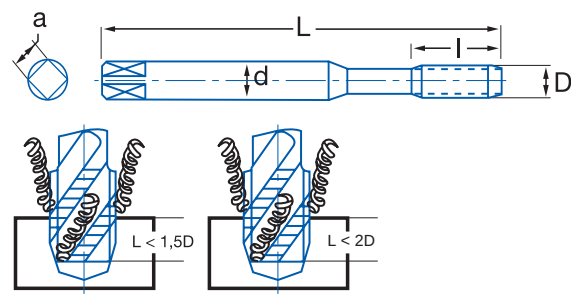
Vc= m/min.

M	P	L mm	l mm	d mm	a mm	Z	N° Art. TIALN	€
M12	1,75	110	24	9,00	7,00	3	28073	41,93

Ref. **3165****MACHO HELICOIDAL MÁQUINA MÉTRICA INOX GRAN RENDIMIENTO M. REFORZADO**

Reinforced Shank High Performance Stainless Metric Machine Spiral Tap

Taraud Hélicoïdal Machine Metrique Inox Haut Rendement Queue Renforcée



Material		Vc *
Grupo	Sub.	TIALN
1	1.2	6-8
	2.1	8-14
2	2.2	6-10
	5.1	10-15
5	5.2	12-20

* Posible Uso en Seco: Vc -50 %

* Possible Dry-Use: Vc -50%

* Emploi possible à sec: Vc -50 %

Vc= m/min.

M	P	L mm	l mm	d mm	a mm	Z	Nº Art. TIALN	€
M3	0,50	56	11	3,50	2,70	3	28066	25,28
M4	0,70	63	13	4,50	3,40	3	28068	25,28
M5	0,80	70	16	6,00	4,90	3	28069	25,90
M6	1,00	80	17	6,00	4,90	3	28070	26,99
M8	1,25	90	20	8,00	6,20	3	28071	31,38
M10	1,50	100	24	10,00	8,00	3	28072	37,06

Ref. 3165 + 1016 TIALSIN

Cont. 10 pcs

Nº Art.
TIALSIN €Machos / Taps / Tarauds
DIN 371: M4-M5-M6-M8-M10Brocas / Twist Drills / Forets
1016 TIALSIN: 3,3-4,2-5,0-6,8-8,5

32675 174,26

Ref. 3165 + 1020 HSSE

Cont. 10 pcs

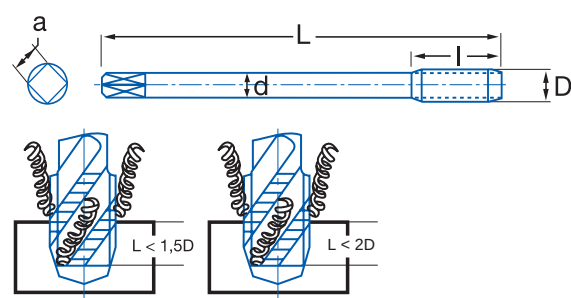
Nº Art.
5% Co €Machos / Taps / Tarauds
DIN 371: M4-M5-M6-M8-M10Brocas / Twist Drills / Forets
1020 HSSE: 3,3-4,2-5,0-6,8-8,5

32670 164,13

Ref. **3265****MACHO HELICOIDAL MÁQUINA MÉTRICA INOX GRAN RENDIMIENTO**

High Performance Stainless Metric Machine Spiral Tap

Taraud Hélicoïdal Machine Metrique Inox Haut Rendement



Material		Vc *
Grupo	Sub.	TIALN
1	1.2	6-8
	2.1	8-14
2	2.2	6-10
	5.1	10-15
5	5.2	12-20

* Posible Uso en Seco: Vc -50 %

* Possible Dry-Use: Vc -50%

* Emploi possible à sec: Vc -50 %

Vc= m/min.

M	P	L mm	l mm	d mm	a mm	Z	Nº Art. TIALN	€
M12	1,75	110	24	9,00	7,00	3	28074	50,28

Ref. **3149**

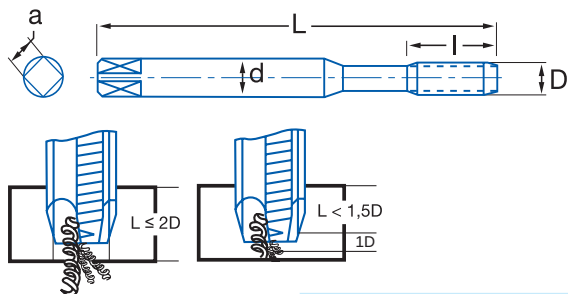
MACHO RECTO MÁQUINA MÉTRICA INOX MANGO REFORZADO

Reinforced Shank Stainless Metric Machine Straight Tap

Taraud Droit Machine Metrique Inox Queue Renforcée



HSSE 5% Co	TIN	DIN 371	B 3,5-5h	GUN	Tol. 6H	α 10-12°		
---------------	-----	------------	-------------	-----	------------	--------------------	--	--



Material		Vc
Grupo	Sub.	TIN
2	2.1	8-12
	2.2	5-8
5	5.1	8-12
	5.2	12-20

Vc= m/min.

M	P	L mm	l mm	d mm	a mm	Z	Nº Art. TIN	€
M3	0,50	56	11	3,50	2,70	3	21834	16,45
M4	0,70	63	13	4,50	3,40	3	21835	16,66
M5	0,80	70	16	6,00	4,90	3	21836	17,26
M6	1,00	80	17	6,00	4,90	3	21837	17,38
M8	1,25	90	20	8,00	6,20	3	21838	20,25
M10	1,50	100	24	10,00	8,00	3	21839	23,55

Ref. **3249**

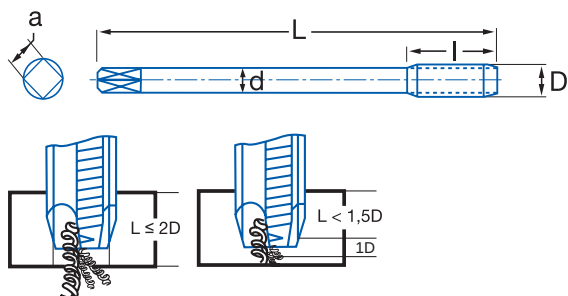
MACHO RECTO MÁQUINA MÉTRICA INOX

Stainless Metric Machine Straight Tap

Taraud Droit Machine Metrique Inox



HSSE 5% Co	TIN	DIN 376	B 3,5-5h	GUN	Tol. 6H	α 10-12°		
---------------	-----	------------	-------------	-----	------------	--------------------	--	--



Material		Vc
Grupo	Sub.	TIN
2	2.1	8-12
	2.2	5-8
5	5.1	8-12
	5.2	12-20

Vc= m/min.

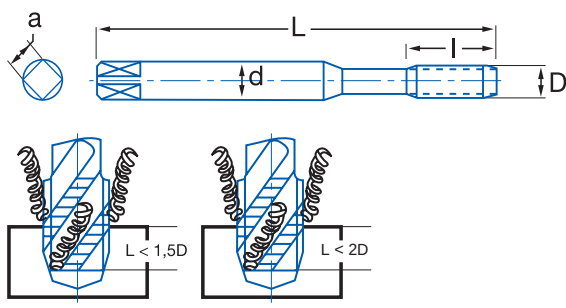
M	P	L mm	l mm	d mm	a mm	Z	Nº Art. TIN	€
M8	1,25	90	20	6	4,90	3	21840	22,29
M10	1,50	100	22	7	5,50	3	21841	25,48
M12	1,75	110	24	9	7,00	3	21843	30,10
M14	2,00	110	26	11	9,00	3	21844	39,25
M16	2,00	110	27	12	9,00	3	21846	43,28
M18	2,50	125	30	14	11,00	4	21847	67,42
M20	2,50	140	32	16	12,00	4	21848	70,18
M22	2,50	140	34	18	14,50	4	16268	90,12
M24	3,00	160	38	18	14,50	4	16269	76,07

Ref. **3159**

MACHO HELICOIDAL MÁQUINA MÉTRICA INOX M. REFORZADO

Reinforced Shank Stainless Metric Machine Spiral Tap

Taraut Héliçoïdal Machine Metrique Inox Queue Renforcée



Material		Vc
Grupo	Sub.	TIN
2	2.1	8-12
	2.2	5-8
5	5.1	8-12
	5.2	12-20

Vc= m/min.

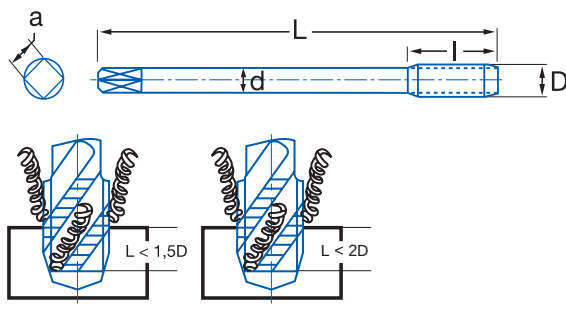
M	P	L mm	I mm	d mm	a mm	Z	Nº Art. TIN	€
M3	0,50	56	5	3,50	2,70	3	21849	17,88
M4	0,70	63	7	4,50	3,40	3	21850	17,88
M5	0,80	70	8	6,00	4,90	3	21851	18,30
M6	1,00	80	10	6,00	4,90	3	21852	19,11
M8	1,25	90	13	8,00	6,20	3	21853	22,10
M10	1,50	100	15	10,00	8,00	3	21854	25,99

Ref. **3259**

MACHO RECTO MÁQUINA MÉTRICA INOX

Stainless Metric Machine Straight Tap

Taraut Droit Machine Metrique Inox



Material		Vc
Grupo	Sub.	TIN
2	2.1	8-12
	2.2	5-8
5	5.1	8-12
	5.2	12-20

Vc= m/min.

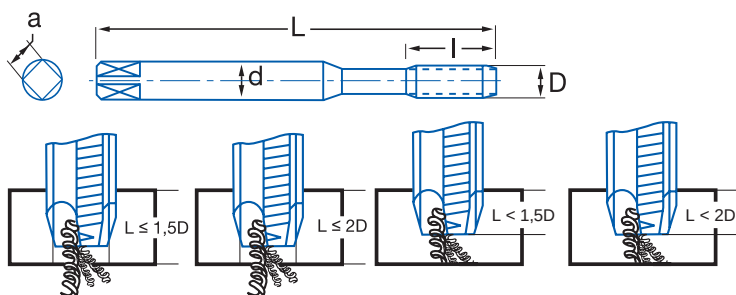
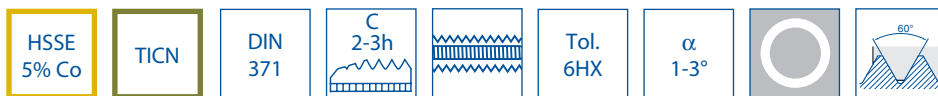
M	P	L mm	I mm	d mm	a mm	Z	Nº Art. TIN	€
M8	1,25	90	13	6,00	4,90	3	21855	23,43
M10	1,50	100	15	7,00	5,50	3	21856	29,31
M12	1,75	110	18	9,00	7,00	3	21857	34,13
M14	2,00	110	20	11,00	9,00	4	21858	42,65
M16	2,00	110	20	12,00	9,00	4	21859	46,87
M18	2,50	125	25	14,00	11,00	4	21860	67,64
M20	2,50	140	25	16,00	12,00	4	21861	69,90
M22	2,50	140	25	18,00	14,50	4	16270	92,34
M24	3,00	160	30	18,00	14,50	4	16271	87,87

Ref. **3176**

MACHO RECTO MÁQUINA MÉTRICA FUNDICIÓN M. REFORZADO

Reinforced Shank Cast Iron Metric Machine Straight Tap

Taraud Droit Machine Metrique Fonte Queue Renforcée



Material		Vc
Grupo	Sub.	TICN
3	3.1	15-20
	3.2	10-15

Vc= m/min.

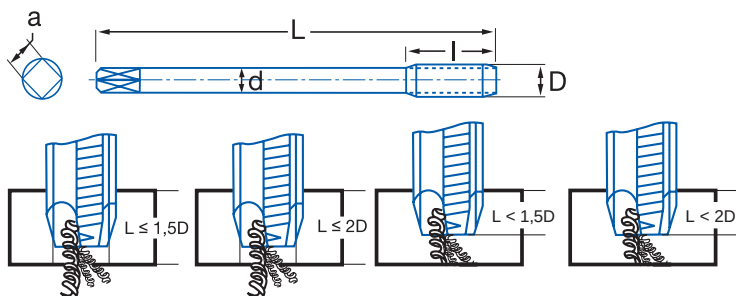
M	P	L mm	l mm	d mm	a mm	Z	Nº Art. TICN	€
M3	0,50	56	10	3,50	2,70	3	19680	14,43
M4	0,70	63	12	4,50	3,40	3	19681	14,70
M5	0,80	70	14	6,00	4,90	3	19682	14,70
M6	1,00	80	16	6,00	4,90	4	19683	16,71
M8	1,25	90	18	8,00	6,20	4	19685	18,77
M10	1,50	100	20	10,00	8,00	4	19686	21,45

Ref. **3276**

MACHO RECTO MÁQUINA MÉTRICA FUNDICIÓN

Cast Iron Metric Machine Straight Tap

Taraud Droit Machine Metrique Fonte



Material		Vc
Grupo	Sub.	TICN
3	3.1	15-20
	3.2	10-15

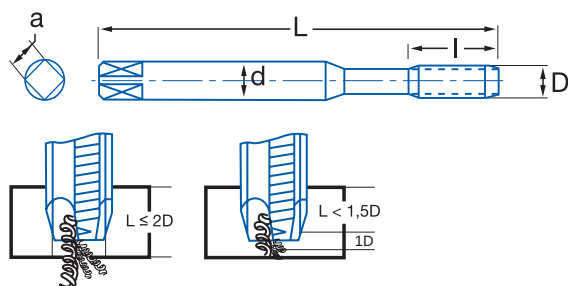
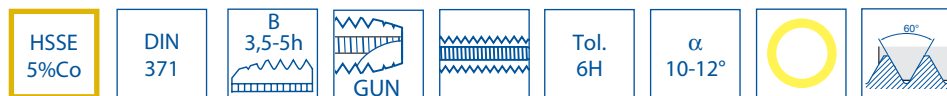
Vc= m/min.

M	P	L mm	l mm	d mm	a mm	Z	Nº Art. TICN	€
M6	1,00	80	16	4,50	3,40	4	19687	17,43
M8	1,25	90	18	6,00	4,90	4	19688	19,57
M10	1,50	100	20	7,00	5,50	4	19690	22,46
M12	1,75	110	22	9,00	7,00	4	19691	26,72
M14	2,00	110	25	11,00	9,00	4	19694	43,92
M16	2,00	110	28	12,00	9,00	4	19696	51,68
M18	2,50	125	32	14,00	11,00	4	19697	74,35
M20	2,50	140	32	16,00	12,00	4	19698	74,63

Ref. **3172**

MACHO RECTO MÁQUINA MÉTRICA ALUMINIO M. REFORZADO

Reinforced Shank Aluminium Metric Machine Straight Tap
Taraud Droit Machine Metrique Aluminium Queue Renforcée



Material		Vc
Grupo	Sub.	5% Co
6	6.1	15-35

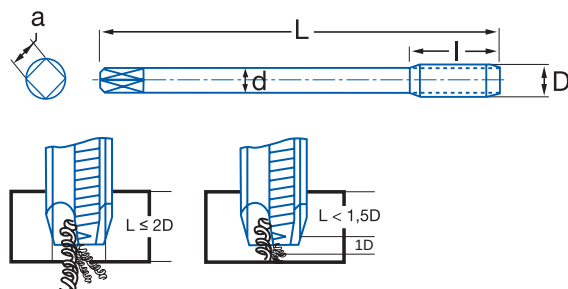
Vc= m/min.

M	P	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
M3	0,50	56	11	3,50	2,70	3	14557	17,27
M4	0,70	63	13	4,50	3,40	3	14574	17,35
M5	0,80	70	16	6,00	4,90	3	14745	17,27
M6	1,00	80	19	6,00	4,90	3	14725	18,21
M8	1,25	90	22	8,00	6,20	3	14746	21,81
M10	1,50	100	24	10,00	8,00	3	14737	25,67

Ref. **3272**

MACHO RECTO MÁQUINA MÉTRICA ALUMINIO

Aluminium Metric Machine Straight Tap
Taraud Droit Machine Metrique Aluminium



Material		Vc
Grupo	Sub.	5% Co
6	6.1	15-35

Vc= m/min.

M	P	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
M12	1,75	110	29	9,00	7,00	3	14751	32,04
M14	2,00	110	30	11,00	9,00	3	14761	58,04
M16	2,00	110	32	12,00	9,00	3	14764	63,29
M18	2,50	125	30	14,00	11,00	4	14767	81,90
M20	2,50	140	32	16,00	12,00	4	14773	87,13

Ref. **3175**

MACHO HELICOIDAL MÁQUINA MÉTRICA ALUMINIO M. REFORZADO

Reinforced Shank Aluminium Metric Machine Spiral Tap

Taraud Hélicoïdal Machine Metrique Aluminium Queue Renforcée



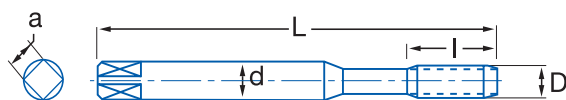
HSSE
5%Co

DIN
371



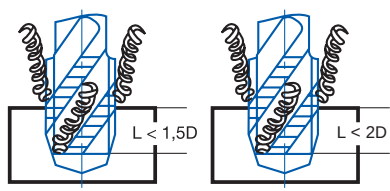
Tol.
6H

α
 $16^\circ \pm 2$



Material		Vc
Grupo	Sub.	5% Co
6	6.1	15-35

Vc= m/min.



M	P	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
M3	0,50	56	11	3,50	2,70	2	14565	19,20
M4	0,70	63	13	4,50	3,40	2	14577	19,28
M5	0,80	70	16	6,00	4,90	2	14724	19,20
M6	1,00	80	19	6,00	4,90	2	14730	20,25
M8	1,25	90	22	8,00	6,20	2	14733	24,24
M10	1,50	100	24	10,00	8,00	2	14739	28,52

Ref. **3275**

MACHO HELICOIDAL MÁQUINA MÉTRICA ALUMINIO

Aluminium Metric Machine Spiral Tap

Taraud Hélicoïdal Machine Metrique Aluminium



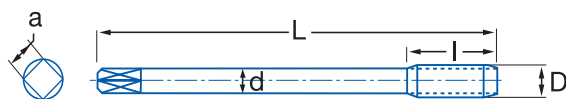
HSSE
5%Co

DIN
376



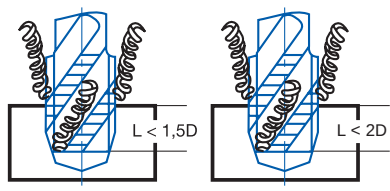
Tol.
6H

α
 $16^\circ \pm 2$



Material		Vc
Grupo	Sub.	5% Co
6	6.1	15-35

Vc= m/min.



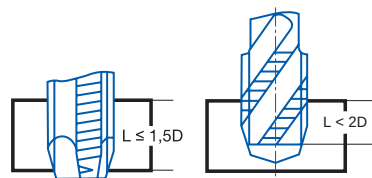
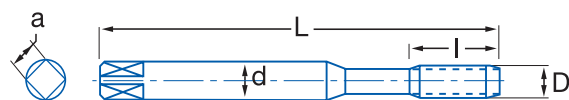
M	P	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
M12	1,75	110	29	9,00	7,00	2	14755	35,61
M14	2,00	110	30	11,00	9,00	3	14763	64,49
M16	2,00	110	32	12,00	9,00	3	14766	70,32
M18	2,50	125	30	14,00	11,00	3	14769	90,99
M20	2,50	140	32	16,00	12,00	3	14775	96,80

Ref. **3174**

MACHO RECTO MÁQUINA MÉTRICA ALUMINIO M. REFORZADO DENTADO ALTERNO

Interrupted Thread Reinforced Shank Aluminium Metric Machine Straight Tap

Taraut Droit Machine Metrique Aluminium Queue Renforcée Denture Alternée



Material		Vc
Grupo	Sub.	5% Co
1	1.1	20-25
1	1.2	8-18
2	2.1	8-10
2	2.2	8-10
5	5.1	10-25
5	5.2	10-25
6	6.1	12-25
6	6.2	12-25
6	6.3	15-20
7	7.1	20-25

Vc= m/min.

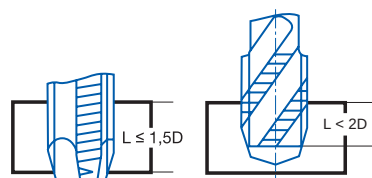
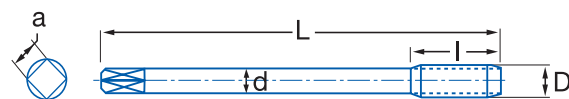
M	P	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
M3	0,50	56	11	3,50	2,70	3	69390	18,12
M4	0,70	63	13	4,50	3,40	3	69393	18,12
M5	0,80	70	16	6,00	4,90	3	69394	18,12
M6	1,00	80	19	6,00	4,90	3	69396	19,08
M8	1,25	90	22	8,00	6,20	3	69397	22,82
M10	1,50	100	24	10,00	8,00	3	69399	26,88

Ref. **3274**

MACHO RECTO MÁQUINA MÉTRICA ALUMINIO DENTADO ALTERNO

Interrupted Thread Aluminium Metric Machine Straight Tap

Taraut Droit Machine Metrique Aluminium Denture Alternée



Material		Vc
Grupo	Sub.	5% Co
1	1.1	20-25
1	1.2	8-18
2	2.1	8-10
2	2.2	8-10
5	5.1	10-25
5	5.2	10-25
6	6.1	12-25
6	6.2	12-25
6	6.3	15-20
7	7.1	20-25

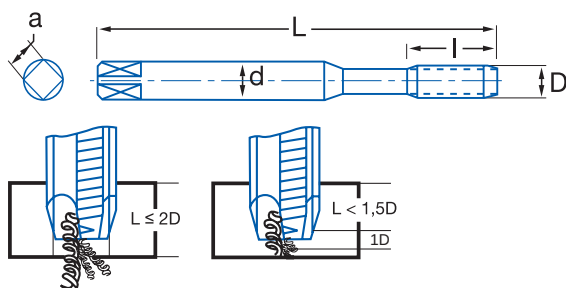
Vc= m/min.

M	P	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
M5	0,80	70	16	3,50	2,70	3	69853	18,12
M8	1,25	90	22	6,00	4,90	3	69856	22,82
M10	1,50	100	24	7,00	5,50	3	69858	26,88
M12	1,75	110	29	9,00	7,00	3	69859	33,56
M14	2,00	110	30	11,00	9,00	3	69861	60,80
M16	2,00	110	32	12,00	9,00	3	69862	61,18

Ref. **3120**

MACHO RECTO MÁQUINA MÉTRICA MULTIFUNCIÓN M. REFORZADO

Reinforced Shank Multipurpose Metric Machine Straight Tap
Taraud Droit Machine Metrique Multifonction Queue Renforcée



Material		Vc
Grupo	Sub.	TIN
1	1.1	10-12
1	1.2	4-6
2	2.1	6-10
2	2.2	4-7
3	3.1	8-12
3	3.2	7-10
5	5.1	8-12
5	5.2	12-20
6	6.2	12-20
6	6.3	12-20
7	7.1	10-15

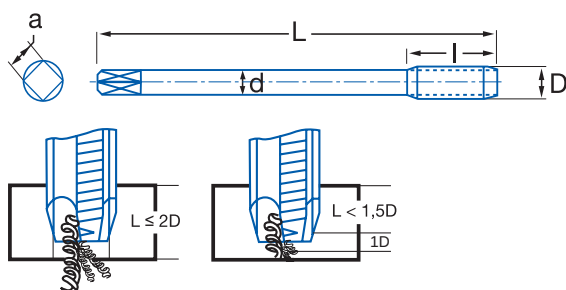
Vc= m/min.

M	P	L mm	I mm	d mm	a mm	Z	Nº Art. TIN	€
M3	0,50	56	11	3,50	2,70	3	28046	22,57
M4	0,70	63	13	4,50	3,40	3	28047	22,86
M5	0,80	70	16	6,00	4,90	3	28048	23,77
M6	1,00	80	17	6,00	4,90	3	28049	23,86
M8	1,25	90	20	8,00	6,20	3	28050	27,62
M10	1,50	100	24	10,00	8,00	3	28051	32,31

Ref. **3220**

MACHO RECTO MÁQUINA MÉTRICA MULTIFUNCIÓN

Multipurpose Metric Machine Straight Tap
Taraud Droit Machine Metrique Multifonction



Material		Vc
Grupo	Sub.	TIN
1	1.1	10-12
1	1.2	4-6
2	2.1	6-10
2	2.2	4-7
3	3.1	8-12
3	3.2	7-10
5	5.1	8-12
5	5.2	12-20
6	6.2	12-20
6	6.3	12-20
7	7.1	10-15

Vc= m/min.

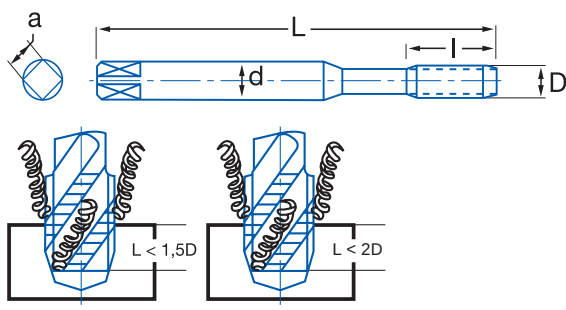
M	P	L mm	I mm	d mm	a mm	Z	Nº Art. TIN	€
M12	1,75	110	24	9,00	7,00	3	28075	41,05
M14	2,00	110	26	11,00	9,00	3	28077	53,58
M16	2,00	110	27	12,00	9,00	3	28079	59,16
M18	2,50	125	30	14,00	11,00	4	28081	84,82
M20	2,50	140	32	16,00	12,00	4	28083	87,29

Ref. **3160**

MACHO HELICOIDAL MÁQUINA MÉTRICA MULTIFUNCIÓN M. REFORZADO

Reinforced Shank Multipurpose Metric Machine Spiral Tap

Taraut Héliçoïdal Machine Metrique Multifonction Queue Renforcée



Material		Vc
Grupo	Sub.	TIN
1	1.1	10-12
1	1.2	4-6
2	2.1	6-10
2	2.2	4-7
3	3.1	8-12
3	3.2	7-10
5	5.1	8-12
5	5.2	12-20
6	6.2	12-20
6	6.3	12-20
7	7.1	10-15

Vc= m/min.

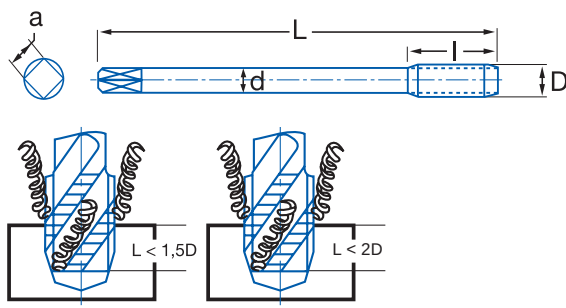
M	P	L mm	I mm	d mm	a mm	Z	Nº Art. TIN	€
M3	0,50	56	11	3,50	2,70	3	28052	24,45
M4	0,70	63	13	4,50	3,40	3	28053	24,45
M5	0,80	70	16	6,00	4,90	3	28054	25,05
M6	1,00	80	17	6,00	4,90	3	28055	26,15
M8	1,25	90	20	8,00	6,20	3	28056	30,32
M10	1,50	100	24	10,00	8,00	3	28057	35,69

Ref. **3260**

MACHO HELICOIDAL MÁQUINA MÉTRICA MULTIFUNCIÓN

Multipurpose Metric Machine Spiral Tap

Taraut Héliçoïdal Machine Metrique Multifonction



Material		Vc
Grupo	Sub.	TIN
1	1.1	10-12
1	1.2	4-6
2	2.1	6-10
2	2.2	4-7
3	3.1	8-12
3	3.2	7-10
5	5.1	8-12
5	5.2	12-20
6	6.2	12-20
6	6.3	12-20
7	7.1	10-15

Vc= m/min.

M	P	L mm	I mm	d mm	a mm	Z	Nº Art. TIN	€
M12	1,75	110	24	9,00	7,00	3	28076	46,62
M14	2,00	110	26	11,00	9,00	3	28078	58,25
M16	2,00	110	27	12,00	9,00	3	28080	64,02
M18	2,50	125	30	14,00	11,00	4	28082	92,24
M20	2,50	140	32	16,00	12,00	4	28084	95,23

Ref. **3110**

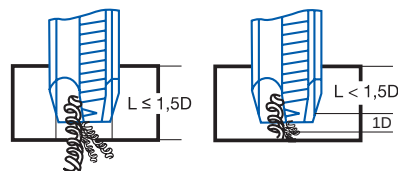
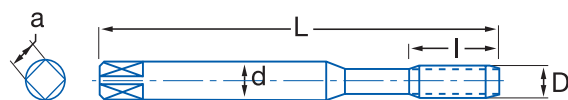
MACHO RECTO MÁQUINA MÉTRICA MANGO REFORZADO

Reinforced Shank Metric Machine Straight Tap

Taraud Droit Machine Métrique Queue Renforcée



HSSE 5%Co	DIN 371	C 2-3h	Tol. 6H	α $10^\circ \pm 2$	
--------------	------------	-----------	------------	------------------------------	--



Material		Vc
Grupo	Sub.	5%Co
3	3.1	15-20
5	5.1	5-8
6	6.3	12-15

Vc= m/min.

M	P	L mm	l mm	d mm	a mm	Z	N° Art. 5% Co	€
M2	0,40	45	9	2,80	2,10	3	62945	14,00
M2,5	0,45	50	9	2,80	2,10	3	77131	14,00
M3	0,50	56	11	3,50	2,70	3	62948	8,36
M3,5	0,60	56	13	4,00	3,00	3	62951	12,56
M4	0,70	63	13	4,50	3,40	3	62954	8,50
M4,5	0,75	70	16	6,00	4,90	3	77138	17,60
M5	0,80	70	16	6,00	4,90	3	62957	8,50
M6	1,00	80	19	6,00	4,90	3	62960	9,71
M7	1,00	80	19	7,00	5,50	3	62963	14,20
M8	1,25	90	22	8,00	6,20	3	62969	10,92
M10	1,50	100	24	10,00	8,00	3	62984	12,42

Ref. 3110



Cont. 7 pcs

N° Art.
5% Co €

Machos / Taps / Tarauds
DIN 371: M3-M4-M5-M6-
M8-M10 + DIN 376: M12

43351 83,82

Ref. 3110 + 1010 HSS



Cont. 14 pcs

N° Art.
HSS €

Machos / Taps / Tarauds
DIN 371: M3-M4-M5-M6-
M8-M10 + DIN 376: M12

43357 95,69

Brocas / Twist Drills / Forets
HSS: 2,5-3,3-4,2-5,0-6,8-
8,5-10,2

Ref. 3110 + 1016 HSSE



Cont. 14 pcs

N° Art.
5% Co €

Machos / Taps / Tarauds
DIN 371: M3-M4-M5-M6-
M8-M10 + DIN 376: M12

16198 103,58

Brocas / Twist Drills / Forets
HSSE: 2,5-3,3-4,2-5,0-6,8-
8,5-10,2

Ref. **3210**

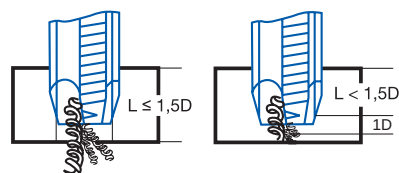
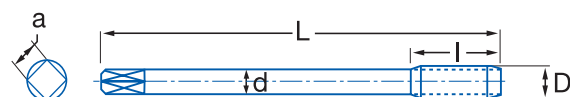
MACHO RECTO MÁQUINA MÉTRICA

Metric Machine Straight Tap

Taraud Droit Machine Métrique



HSSE 5%Co	M	DIN 376	C 2-3h	Tol. 6H	α $10^\circ \pm 2$	
--------------	---	------------	-----------	------------	------------------------------	--



Material		Vc
Grupo	Sub.	5%Co
3	3.1	15-20
5	5.1	5-8
6	6.3	12-15

Vc= m/min.

M	P	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
M3	0,50	56	11	2,20		3	69993	8,35
M4	0,70	63	13	2,80	2,10	3	69850	8,48
M5	0,80	70	16	3,50	2,70	3	69994	8,48
M6	1,00	80	19	4,50	3,40	3	69996	9,66
M7	1,00	80	19	5,50	4,30	3	70144	14,17
M8	1,25	90	22	6,00	4,90	3	69997	10,87
M10	1,50	100	24	7,00	5,50	3	69999	12,37
M12	1,75	110	29	9,00	7,00	3	70117	14,76
M14	2,00	110	30	11,00	9,00	3	70119	24,97
M16	2,00	110	32	12,00	9,00	3	70120	29,37
M18	2,50	125	34	14,00	11,00	3	70122	42,22
M20	2,50	140	34	16,00	12,00	3	70123	44,97
M22	2,50	140	34	18,00	14,50	3	70146	54,44
M24	3,00	160	38	18,00	14,50	4	70147	65,18
M27	3,00	160	38	20,00	16,00	4	70149	81,37
M30	3,50	180	45	22,00	18,00	4	70150	104,19
M33	3,50	180	50	25,00	20,00	4	70152	125,24
M36	4,00	200	56	28,00	22,00	4	70153	160,11

Ref. **3210****MACHO RECTO MÁQUINA MÉTRICA FINA**

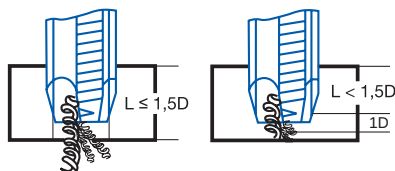
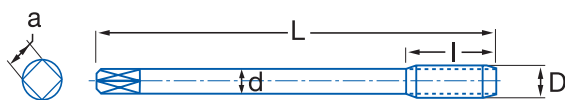
Metric Fine Machine Straight Tap

Taraud Droit Machine Métrique Pas Fin

HSSE
5%CoMétrica
FinaDIN
374Tol.
6H α
 $10^\circ \pm 2$ 

Material		Vc
Grupo	Sub.	5%Co
3	3.1	15-20
5	5.1	5-8
6	6.3	12-15

Vc= m/min.



M	P	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
MF4	0,50	63	10	2,80	2,10	3	70365	20,48
MF5	0,50	70	12	3,50	2,70	3	70366	21,07
MF6	0,50	80	14	4,50	3,40	3	74951	25,06
MF6	0,75	80	14	4,50	3,40	3	70368	16,61
MF8	0,50	80	13	6,00	4,90	3	70369	28,30
MF8	0,75	80	19	6,00	4,90	3	70305	20,25
MF8	1,00	90	22	6,00	4,90	3	70306	17,18
MF9	1,00	90	22	7,00	5,50	3	70371	25,06
MF10	0,75	90	20	7,00	5,50	3	70372	30,90
MF10	1,00	90	20	7,00	5,50	3	70308	19,05
MF10	1,25	100	24	7,00	5,50	3	70309	21,80
MF11	1,00	90	20	8,00	6,20	3	70374	31,66
MF12	1,00	100	22	9,00	7,00	3	70312	25,13
MF12	1,25	100	22	9,00	7,00	3	70314	25,45
MF12	1,50	100	22	9,00	7,00	3	70315	22,79
MF14	1,00	100	22	11,00	9,00	3	70317	38,59
MF14	1,25	100	22	11,00	9,00	3	70318	34,11
MF14	1,50	100	22	11,00	9,00	3	70320	26,86
MF15	1,00	100	22	12,00	9,00	3	70378	48,21
MF16	1,00	100	22	12,00	9,00	3	70380	48,00
MF16	1,50	100	22	12,00	9,00	3	70323	33,61
MF18	1,00	110	25	14,00	11,00	3	70326	53,76
MF18	1,50	110	25	14,00	11,00	3	70327	42,04
MF18	2,00	125	34	14,00	11,00	3	70329	54,25
MF20	1,00	125	25	16,00	12,00	3	70330	71,01
MF20	1,50	125	25	16,00	12,00	3	70332	47,58
MF20	2,00	140	34	16,00	12,00	3	70333	62,32
MF22	1,00	125	25	18,00	14,50	3	70381	79,60
MF22	1,50	125	25	18,00	14,50	3	75023	57,28
MF22	2,00	140	34	18,00	14,50	3	70335	79,60
MF24	1,00	140	28	18,00	14,50	4	70383	86,75
MF24	1,50	140	28	18,00	14,50	4	70336	70,37
MF24	2,00	140	28	18,00	14,50	4	70338	88,96
MF25	1,50	140	28	18,00	14,50	4	70384	103,69
MF26	1,50	140	28	18,00	14,50	4	70339	94,92
MF27	1,50	140	28	20,00	16,00	4	70386	103,85
MF27	2,00	140	28	20,00	16,00	4	70341	123,38
MF28	1,50	140	28	20,00	16,00	4	70342	103,69
MF30	1,00	150	28	22,00	18,00	4	70387	132,63
MF30	1,50	150	28	22,00	18,00	4	70344	108,07
MF30	2,00	150	28	22,00	18,00	4	70389	133,77
MF32	1,50	150	28	22,00	18,00	4	70345	129,40
MF33	1,50	160	30	25,00	20,00	4	70347	148,34
MF33	2,00	160	30	25,00	20,00	4	70348	252,48
MF35	1,50	170	30	28,00	22,00	4	70350	171,24
MF42	1,50	170	30	32,00	24,00	6	70390	242,35
MF45	1,50	180	32	36,00	29,00	6	70351	300,12
MF48	2,00	190	32	36,00	29,00	6	75037	461,62
MF50	1,50	190	32	36,00	29,00	6	70393	358,57

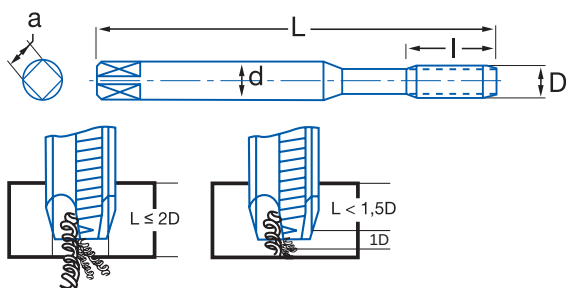
Ref. **3100**

MACHO RECTO MÁQUINA MÉTRICA MANGO REFORZADO

Reinforced Shank Metric Machine Straight Tap
Taraud Droit Machine Métrique Queue Renforcée



HSSE 5%Co	DIN 371	B 3,5-5h	GUN	Tol. 6H	α 10-12°	
--------------	------------	-------------	-----	------------	--------------------	--



Material		Vc
Grupo	Sub.	5% Co
1	1.1	6-10
5	5.1	5-8
6	6.1	15-35
	6.2	14-20

Vc= m/min.

M	P	L mm	l mm	d mm	a mm	Z	N° Art. 5% Co	€
M2	0,40	45	9	2,80	2,10	3	62771	14,91
M2,5	0,45	50	9	2,80	2,10	3	76724	14,91
M2,6	0,45	50	9	2,80	2,10	3	76725	14,91
M3	0,50	56	11	3,50	2,70	3	62774	8,47
M3,5	0,60	56	13	4,00	3,00	3	62777	13,40
M4	0,70	63	13	4,50	3,40	3	62780	8,93
M4,5	0,75	70	16	6,00	4,90	3	76728	20,29
M5	0,80	70	16	6,00	4,90	3	62783	8,93
M6	1,00	80	19	6,00	4,90	3	62789	9,82
M7	1,00	80	19	7,00	5,50	3	76733	15,54
M8	1,25	90	22	8,00	6,20	3	62795	10,99
M10	1,50	100	24	10,00	8,00	3	62807	13,52



Cont. 25 pcs	N° Art. 5% Co	€
Machos / Taps / Tarauds		
DIN 371: M4-M5-M6-M8-M10	38998	260,95
(5 pcs x M)		

Ref. 3100



Cont. 7 pcs	N° Art. 5% Co	€
Machos / Taps / Tarauds		
DIN 371: M3-M4-M5-M6-M8-M10	43348	86,57
+ DIN 376: M12		

Ref. 3100 + 1010 HSS



Cont. 14 pcs	N° Art. HSS	€
Machos / Taps / Tarauds		
DIN 371: M3-M4-M5-M6- M8-M10		
+ DIN 376: M12	43354	98,09
Brocas / Twist Drills / Forets		
HSS: 2,5-3,3-4,2-5,0-6,8- 8,5-10,2		

Ref. 3100 + 1016 HSSE



Cont. 14 pcs	N° Art. 5% Co	€
Machos/ Taps / Tarauds		
DIN 371: M3-M4-M5- M6-M8-M10		
+ DIN 376: M12	21801	105,76
Brocas / Twist Drills / Forets		
HSSE: 2,5-3,3-4,2-5,0- 6,8-8,5-10,2		

Ref. **3101**

MACHO RECTO MÁQUINA MÉTRICA CORTE IZQUIERDA M. REFORZADO

Reinforced Shank Left Cutting Metric Machine Straight Tap

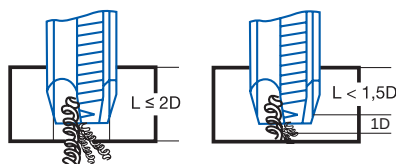
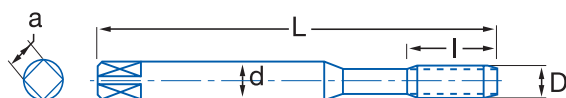
Taraud Droit Machine Métrique Coupe à Gauche Queue Renforcée

NEW!



Material		Vc
Grupo	Sub.	5% Co
1	1.1	6-10
5	5.1	5-8
6	6.1	15-35
	6.2	14-20

Vc= m/min.



M	P	L mm	l mm	d mm	a mm	Z	N° Art. 5% Co	€
M2	0,40	45	9	2,80	2,10	3	59469	29,82
M3	0,50	56	11	3,50	2,70	3	59470	16,94
M4	0,70	63	13	4,50	3,40	3	59471	17,86
M5	0,80	70	16	6,00	4,90	3	59472	17,86
M6	1,00	80	19	6,00	4,90	3	59473	19,64
M7	1,00	80	19	7,00	5,50	3	59474	31,08
M8	1,25	90	22	8,00	6,20	3	59475	21,98
M10	1,50	100	24	10,00	8,00	3	59476	27,04

Ref. **3105**

MACHO RECTO MÁQUINA MÉTRICA MANGO REFORZADO

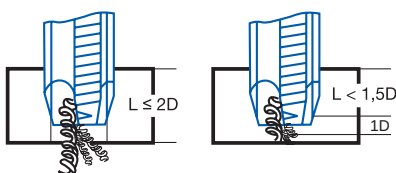
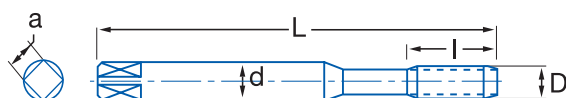
Reinforced Shank Metric Machine Straight Tap

Taraud Droit Machine Métrique Queue Renforcée



Material		Vc
Grupo	Sub.	5% Co
1	1.1	6-10
5	5.1	5-8
6	6.1	15-35
	6.2	14-20

Vc= m/min.



M	P	L mm	l mm	d mm	a mm	Z	N° Art. 5% Co	€
M3	0,50	56	11	3,50	2,70	3	38319	11,84
M4	0,70	63	13	4,50	3,40	3	38320	11,84
M5	0,80	70	16	6,00	4,90	3	38321	11,84
M6	1,00	80	19	6,00	4,90	3	38322	11,94
M8	1,25	90	22	8,00	6,20	3	38323	14,33
M10	1,50	100	24	10,00	8,00	3	38324	16,84

Ref. **3200**

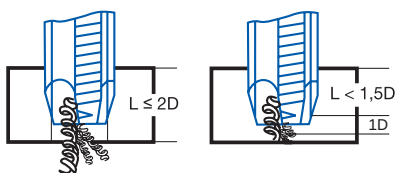
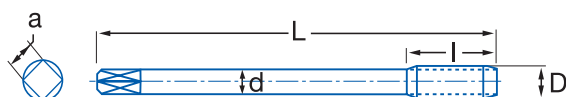
MACHO RECTO MÁQUINA MÉTRICA

Metric Machine Straight Tap

Taraud Droit Machine Métrique



HSSE 5%Co	Métrica	DIN 376	B 3,5-5h	GUN	Tol. 6H	α 10-12°	60°
--------------	---------	------------	-------------	-----	------------	--------------------	-----



Material		Vc
Grupo	Sub.	5% Co
1	1.1	6-10
5	5.1	5-8
6	6.1	15-35
	6.2	14-20

Vc= m/min.

M	P	L mm	I mm	d mm	a mm	Z	N° Art. 5% Co	€
M3	0,50	56	11	2,20			70090	9,04
M4	0,70	63	13	2,80	2,10	3	70092	9,14
M5	0,80	70	16	3,50	2,70	3	70093	9,14
M6	1,00	80	19	4,50	3,40	3	70095	10,05
M7	1,00	80	19	5,50	4,30	3	70224	15,95
M8	1,25	90	22	6,00	4,90	3	70096	11,29
M10	1,50	100	24	7,00	4,50	3	70098	13,89
M11	1,50	100	24	8,00	6,20	3	70225	26,80
M12	1,75	110	29	9,00	7,00	3	70183	17,11
M14	2,00	110	30	11,00	9,00	3	70185	27,46
M16	2,00	110	32	12,00	9,00	3	70186	32,31
M18	2,50	125	34	14,00	11,00	3	75215	45,77
M20	2,50	140	34	16,00	12,00	3	70189	49,48
M22	2,50	140	34	18,00	14,50	3	70212	59,85
M24	3,00	160	38	18,00	14,50	4	70213	71,16
M27	3,00	160	38	20,00	16,00	4	70215	89,18
M30	3,50	180	45	22,00	18,00	4	70216	114,58
M33	3,50	180	50	25,00	20,00	4	70218	144,12
M36	4,00	200	56	28,00	22,00	4	70219	176,08



Cont. 25 pcs	N° Art. 5% Co	€
Machos / Taps / Tarauds		
DIN 376: M4-M5-M6-M8-M10	39000	267,55
(5 pcs x M)		

Ref. **3200**

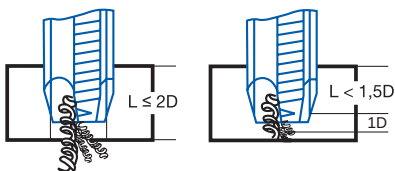
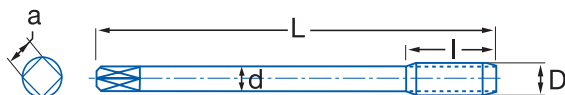
MACHO RECTO MÁQUINA MÉTRICA FINA

Metric Fine Machine Straight Tap

Taraud Droit Machine Métrique Pas Fin



HSSE 5%Co	Métrica Fina	DIN 374	B 3,5-5h	GUN	Tol. 6H	α 10-12°	60°
--------------	-----------------	------------	-------------	-----	------------	--------------------	-----



Material		Vc
Grupo	Sub.	5% Co
1	1.1	6-10
5	5.1	5-8
6	6.1	15-35
	6.2	14-20

Vc= m/min.

M	P	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
MF8	0,75	80	19	6	4,90	3	70267	23,28
MF8	1,00	90	22	6	4,90	3	70248	18,87
MF10	1,00	90	20	7	5,50	3	70249	21,03
MF10	1,25	100	24	7	5,50	3	70251	25,06
MF12	1,00	100	22	9	7,00	3	70252	27,69
MF12	1,25	100	22	9	7,00	3	70254	27,96
MF12	1,50	100	22	9	7,00	3	70255	24,97
MF14	1,00	100	22	11	9,00	3	70281	42,45
MF14	1,25	100	22	11	9,00	3	70257	37,21
MF14	1,50	100	22	11	9,00	3	70258	29,56
MF15	1,50	100	22	12	9,00	3	70282	47,12
MF16	1,50	100	22	12	9,00	3	70260	36,96
MF18	1,00	110	25	14	11,00	3	70284	59,13
MF18	1,50	110	25	14	11,00	3	70261	46,23
MF18	2,00	125	34	14	11,00	3	70285	59,68
MF20	1,00	125	25	16	12,00	4	70287	78,05
MF20	1,50	125	25	16	12,00	4	70263	52,28
MF20	2,00	140	34	16	12,00	4	70288	68,56
MF22	1,50	125	25	18	14,50	4	75216	62,99
MF22	2,00	140	34	18	14,50	4	70290	99,82
MF24	1,50	140	28	18	14,50	4	70264	77,43
MF24	2,00	140	28	18	14,50	4	70291	97,88
MF26	1,50	140	28	18	14,50	4	70293	99,51
MF27	2,00	140	28	20	16,00	4	70294	135,71
MF28	1,50	140	28	20	16,00	4	70296	113,81
MF30	1,50	150	28	22	18,00	4	70266	118,87
MF32	1,50	150	28	22	18,00	4	70297	142,26
MF33	1,50	160	30	25	20,00	4	70299	162,65
MF33	2,00	160	30	25	20,00	4	70300	277,65
MF35	1,50	170	30	28	22,00	4	70302	188,42
MF45	1,50	180	32	36	29,00	6	70303	330,12

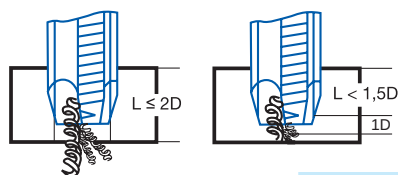
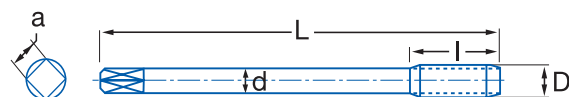
Ref. **3201**

MACHO RECTO MÁQUINA MÉTRICA CORTE IZQUIERDA

Left Cutting Metric Machine Straight Tap

Taraud Droit Machine Métrique Coupe à Gauche

NEW!



Material		Vc
Grupo	Sub.	5% Co
1	1.1	6-10
5	5.1	5-8
6	6.1	15-35
	6.2	14-20

Vc= m/min.

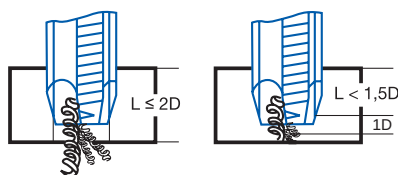
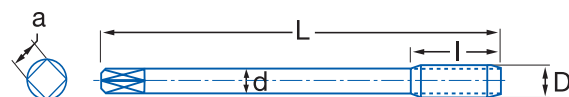
M	P	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
M3	0,50	56	11	2,20			59840	18,08
M4	0,70	63	13	2,80	2,10	3	20077	18,28
M5	0,80	70	16	3,50	2,70	3	20078	18,28
M6	1,00	80	19	4,50	3,40	3	20079	20,10
M7	1,00	80	19	5,50	4,30	3	59843	31,90
M8	1,25	90	22	6,00	4,90	3	10767	22,58
M10	1,50	100	24	7,00	5,50	3	59844	27,78
M11	1,50	100	24	8,00	6,20	3	59845	53,60
M12	1,75	110	29	9,00	7,00	3	29501	34,22
M14	2,00	110	30	11,00	9,00	3	59846	54,92
M16	2,00	110	32	12,00	9,00	3	59847	64,62

Ref. **3205**

MACHO RECTO MÁQUINA MÉTRICA TOLERANCIA 6G

6G Tolerance Metric Machine Straight Tap

Taraud Droit Machine Métrique Tolérance 6G



Material		Vc
Grupo	Sub.	5% Co
1	1.1	6-10
5	5.1	5-8
6	6.1	15-35
	6.2	14-20

Vc= m/min.

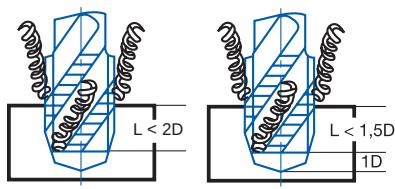
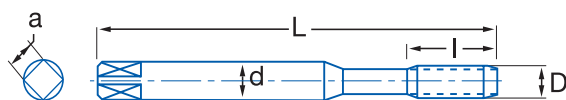
M	P	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
M12	1,75	110	29	9,00	7,00	3	38325	21,05
M14	2,00	110	30	11,00	9,00	3	38326	26,40
M16	2,00	110	32	12,00	9,00	3	38327	31,94
M18	2,50	125	34	14,00	11,00	3	38328	43,86
M20	2,50	140	34	16,00	12,00	3	38329	45,85

Ref. **3150**

MACHO HELICOIDAL MÁQUINA MÉTRICA M. REFORZADO

Reinforced Shank Metric Machine Spiral Tap

Taraud Hélicoïdal Machine Métrique Queue Renforcée



Material		Vc
Grupo	Sub.	5% Co
1	1.1	6-10
5	5.1	5-8
6	6.1	15-35
	6.2	14-20

Vc= m/min.

M	P	L mm	l mm	d mm	a mm	Z	N° Art. 5% Co	€
M3	0,50	56	5	3,50	2,70	3	63050	11,14
M3,5	0,60	56	6	4,00	3,00	3	63053	16,40
M4	0,70	63	7	4,50	3,40	3	63056	11,14
M5	0,80	70	8	6,00	4,90	3	63059	10,64
M6	1,00	80	10	6,00	4,90	3	63062	11,69
M7	1,00	80	10	7,00	5,50	3	63065	18,20
M8	1,25	90	13	8,00	6,20	3	63071	13,35
M10	1,50	100	15	10,00	8,00	3	63083	15,84



Cont. 25 pcs

N° Art.
5% Co

€

Machos / Taps / Tarauds

DIN 371: M4-M5-M6-M8-M10 38999 313,30
(5 pcs x M)

Ref. 3150

Ref. 3150 + 1010 HSS

Ref. 3150 + 1016 HSSE



Cont. 7 pcs

N° Art.

€

Machos /
Taps / Tarauds

DIN 371: M3-M4-M5-
M6-M8-M10 43353 98,42
+ DIN 376: M12



Cont. 14 pcs

N° Art.
HSS

€

Machos /
Taps / Tarauds

DIN 371: M3-M4-M5-
M6-M8-M10 43359 109,94
+ DIN 376: M12

Brocas /

Twist Drills / Forets
HSS: 2,5-3,3-4,2-5,0-6,8-
8,5-10,2



Cont. 14 pcs

N° Art.
5% Co

€

Machos /
Taps / Tarauds

DIN 371: M3-M4-M5-
M6-M8-M10 21802 117,58
+ DIN 376: M12

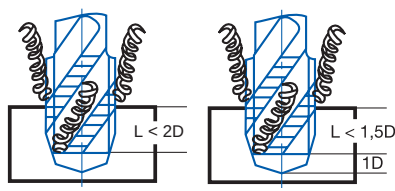
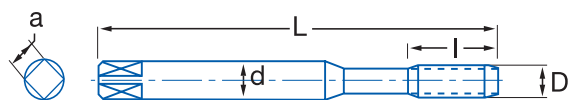
Brocas /

Twist Drills / Forets
HSSE: 2,5-3,3-4,2-5,0-
6,8-8,5-10,2

Ref. **3161****MACHO HELICOIDAL MÁQUINA MÉTRICA CORTE IZQUIERDA M. REFORZADO**

Reinforced Shank Left Cutting Metric Machine Spiral Tap

Taraud Hélicoïdal Machine Métrique Coupe à Gauche Queue Renforcée

NEW!

Material		Vc
Grupo	Sub.	5% Co
1	1.1	6-10
5	5.1	5-8
6	6.1	15-35
	6.2	14-20

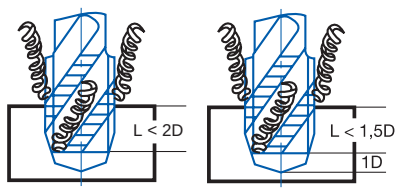
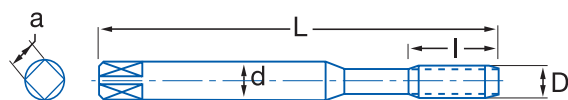
Vc= m/min.

M	P	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
M3	0,50	56	5	3,50	2,70	3	59477	22,28
M4	0,70	63	7	4,50	3,40	3	59478	22,28
M5	0,80	70	8	6,00	4,90	3	59479	21,28
M6	1,00	80	10	6,00	4,90	3	59480	23,38
M7	1,00	80	10	7,00	5,50	3	59481	36,40
M8	1,25	90	13	8,00	6,20	3	59482	26,70
M10	1,50	100	15	10,00	8,00	3	59483	31,68

Ref. **3155****MACHO HELICOIDAL MÁQUINA MÉTRICA M. REFORZADO TOLERANCIA 6G**

6G Tolerance Reinforced Shank Metric Machine Spiral Tap

Taraud Hélicoïdal Machine Métrique Queue Renforcée Tolérance 6G



Material		Vc
Grupo	Sub.	5% Co
1	1.1	6-10
5	5.1	5-8
6	6.1	15-35
	6.2	14-20

Vc= m/min.

M	P	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
M3	0,50	56	5	3,50	2,70	3	38330	13,05
M4	0,70	63	7	4,50	3,40	3	38331	13,05
M5	0,80	70	8	6,00	4,90	3	38332	12,59
M6	1,00	80	10	6,00	4,90	3	38333	13,80
M8	1,25	90	13	8,00	6,20	3	38334	16,47
M10	1,50	100	15	10,00	8,00	3	38335	19,54

Ref. **3250**

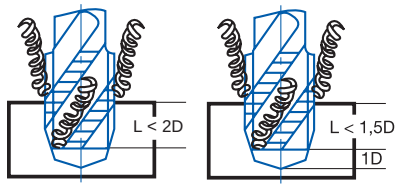
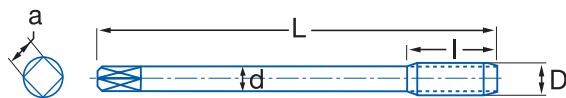
MACHO HELICOIDAL MÁQUINA MÉTRICA

Metric Machine Spiral Tap

Taraud Hélicoïdal Machine Métrique



HSSE 5%Co	Métrica	DIN 376	C 2-3h	35°	Tol. 6H	α $10^\circ \pm 2$	60°
--------------	---------	------------	-----------	-----	------------	------------------------------	-----



Material		Vc
Grupo	Sub.	5% Co
1	1.1	6-10
5	5.1	5-8
6	6.1	15-35
	6.2	14-20

Vc= m/min.

M	P	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
M3	0,50	56	5	2,20		3	70063	10,87
M4	0,70	63	7	2,80	2,10	3	70065	10,78
M5	0,80	70	8	3,50	2,70	3	70066	10,32
M6	1,00	80	10	4,50	3,40	3	70068	11,32
M8	1,25	90	13	6,00	4,90	3	70069	13,27
M10	1,50	100	15	7,00	5,50	3	70071	15,77
M12	1,75	110	18	9,00	7,00	3	70161	20,29
M14	2,00	110	20	11,00	9,00	3	70162	31,85
M16	2,00	110	20	12,00	9,00	4	70164	38,48
M18	2,50	125	25	14,00	11,00	4	75057	51,81
M20	2,50	140	25	16,00	12,00	4	70167	55,14
M22	2,50	140	25	18,00	14,50	4	70206	68,04
M24	3,00	160	30	18,00	14,50	4	70207	81,44
M27	3,00	160	30	20,00	16,00	4	70209	101,73
M30	3,50	180	35	22,00	18,00	4	70210	130,30



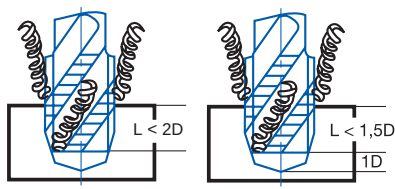
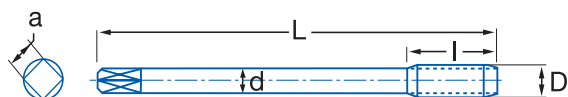
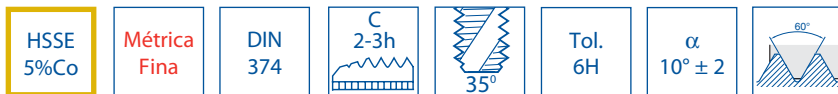
Cont. 25 pcs	Nº Art. 5% Co	€
Machos / Taps / Tarauds		
DIN 376: M4-M5-M6-M8-M10	39001	307,30
(5 pcs x M)		

Ref. **3250**

MACHO HELICOIDAL MÁQUINA MÉTRICA FINA

Metric Fine Machine Spiral Tap

Taraud Hélicoïdal Machine Métrique Pas Fin



Material		Vc
Grupo	Sub.	5% Co
1	1.1	6-10
5	5.1	5-8
6	6.1	15-35
	6.2	14-20

Vc= m/min.

M	P	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
MF8	1,00	90	13	6	4,90	3	70228	22,37
MF10	1,00	90	12	7	5,50	3	70230	26,37
MF10	1,25	100	15	7	5,50	3	70231	28,70
MF12	1,00	100	14	9	7,00	3	70233	32,75
MF12	1,25	100	14	9	7,00	3	70234	31,34
MF12	1,50	100	14	9	7,00	3	70236	30,16
MF14	1,25	100	16	11	9,00	3	70237	46,30
MF14	1,50	100	16	11	9,00	3	70239	37,07
MF16	1,50	100	16	12	9,00	4	70240	45,58
MF18	1,50	110	20	14	11,00	4	70242	55,06
MF20	1,50	125	20	16	12,00	4	70243	62,89
MF22	1,50	125	20	18	14,50	4	75192	82,30
MF24	1,50	140	22	18	14,50	4	70245	92,18
MF30	1,50	150	28	22	18,00	3	70246	141,74

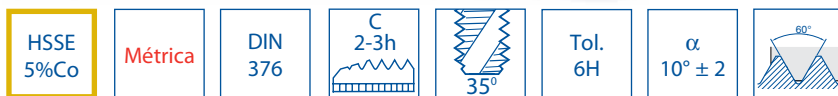
Ref. **3261**

MACHO HELICOIDAL MÁQUINA MÉTRICA CORTE IZQUIERDA

Left Cutting Metric Machine Spiral Tap

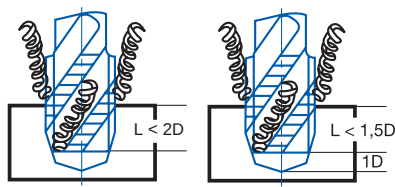
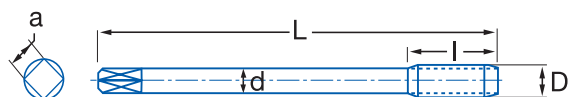
Taraud Hélicoïdal Machine Métrique Coupe à Gauche

NEW!



Material		Vc
Grupo	Sub.	5% Co
1	1.1	6-10
5	5.1	5-8
6	6.1	15-35
	6.2	14-20

Vc= m/min.



M	P	L mm	l mm	d mm	a mm	Z	N° Art. 5% Co	€
M3	0,50	56	5	2,20			59848	21,74
M4	0,70	63	7	2,80	2,10	3	59849	21,56
M5	0,80	70	8	3,50	2,70	3	59850	20,64
M6	1,00	80	10	4,50	3,40	3	59851	22,64
M8	1,25	90	13	6,00	4,90	3	59852	26,54
M10	1,50	100	15	7,00	5,50	3	59853	31,54
M12	1,75	110	18	9,00	7,00	3	59854	40,58
M14	2,00	110	20	11,00	9,00	3	59855	63,70
M16	2,00	110	20	12,00	9,00	4	59856	76,96

Ref. **3255**

MACHO HELICOIDAL MÁQUINA MÉTRICA TOLERANCIA 6G

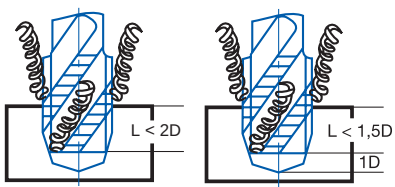
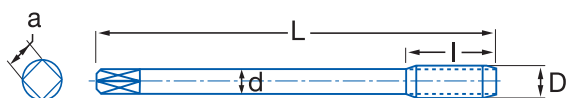
6G Tolerance Metric Machine Spiral Tap

Taraud Hélicoïdal Machine Métrique Tolérance 6G



Material		Vc
Grupo	Sub.	5% Co
1	1.1	6-10
5	5.1	5-8
6	6.1	15-35
	6.2	14-20

Vc= m/min.



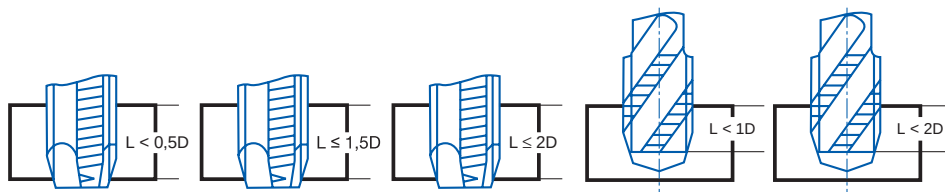
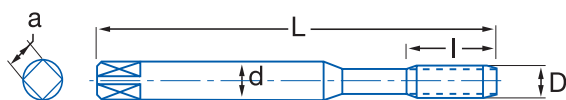
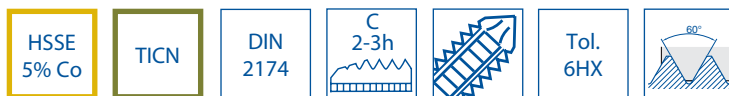
M	P	L mm	l mm	d mm	a mm	Z	N° Art. 5% Co	€
M12	1,75	110	18	9,00	7,00	3	38336	26,07
M14	2,00	110	20	11,00	9,00	3	38337	30,10
M16	2,00	110	20	12,00	9,00	4	38338	36,36
M18	2,50	125	25	14,00	11,00	4	38339	49,51
M20	2,50	140	25	16,00	12,00	4	38340	52,10

Ref. **3163**

MACHO MÁQUINA MÉTRICA LAMINACIÓN MANGO REFORZADO

Reinforced Shank Cold Forming Metric Machine Tap

Taraud Machine Métrique Réfourleur Queue Renforcée



Material		Vc
Grupo	Sub.	TiCN
1	1.1	10-15
5	5.1	15-30
	5.2	15-30
6	6.1	15-35
	6.2	15-30

Vc= m/min.

Materiales con un Coeficiente de Alargamiento de 12-14% - 12-14% Lengthening Coefficient Materials - Matériaux avec coefficient de rallonge 12-14%

M	P	L mm	l mm	d mm	a mm	Nº Art. TiCN	€
M3	0,50	56	10	3,50	2,70	21818	30,46
M3,5	0,60	56	11	4,00	3,00	21819	31,92
M4	0,70	63	12	4,50	3,40	21820	30,46
M5	0,80	70	14	6,00	4,90	21821	30,46
M6	1,00	80	16	6,00	4,90	21822	32,84
M8	1,25	90	18	8,00	6,20	21823	38,35
M10	1,50	100	20	10,00	8,00	21824	42,62
M12	1,75	110	22	9,00	7,00	21825	50,17

Ref. **3151**

MACHO HELICOIDAL MÁQUINA MÉTRICA M. REFORZADO VAPORIZADO

Vaporized Reinforced Shank Metric Machine Spiral Tap

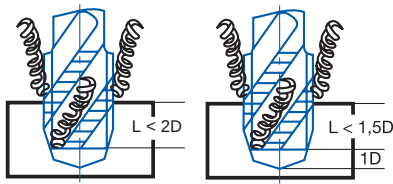
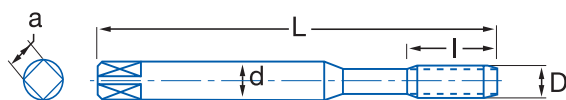
Taraud Hélicoïdal Machine Métrique Queue Renforcée Vaporisée



HSSE 5%Co	DIN 371	C 2-3h	Tol. 6H	35°	α $10^\circ \pm 2$	Rompe Virutas Chip Breaker Brise copeaux	
--------------	------------	-----------	------------	-----	------------------------------	--	--

Material		Vc
Grupo	Sub.	5% Co
1	1.1	6-10
6	6.1	14-20

Vc= m/min.



M	P	L mm	l mm	d mm	a mm	Z	N° Art. 5% Co	€
M3	0,50	56	11	3,50	2,70	3	14779	16,90
M4	0,70	63	13	4,50	3,40	3	14782	16,90
M5	0,80	70	16	6,00	4,90	3	14785	17,25
M6	1,00	80	19	6,00	4,90	3	14788	18,06
M8	1,25	90	22	8,00	6,20	3	14790	21,00
M10	1,50	100	24	10,00	8,00	3	14791	24,67

Ref. **3251**

MACHO HELICOIDAL MÁQUINA MÉTRICA VAPORIZADO

Vaporized Metric Machine Spiral Tap

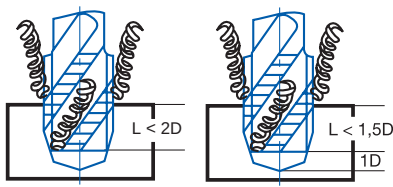
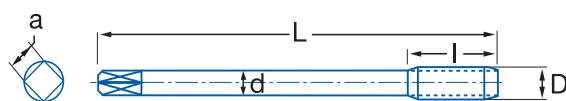
Taraud Hélicoïdal Machine Métrique Vaporisée



HSSE 5%Co	DIN 376	C 2-3h	Tol. 6H	35°	α $10^\circ \pm 2$	Rompe Virutas Chip Breaker Brise copeaux	
--------------	------------	-----------	------------	-----	------------------------------	--	--

Material		Vc
Grupo	Sub.	5% Co
1	1.1	6-10
6	6.1	14-20

Vc= m/min.



M	P	L mm	l mm	d mm	a mm	Z	N° Art. 5% Co	€
M12	1,75	110	29	9,00	7,00	3	14793	32,26
M14	2,00	110	30	11,00	9,00	3	14797	40,27
M16	2,00	110	32	12,00	9,00	3	14802	44,22
M18	2,50	125	30	14,00	11,00	4	14803	63,21
M20	2,50	140	32	16,00	12,00	4	14806	65,95

Ref. **3140**

MACHO RECTO MÁQUINA MÉTRICA COBRE/BRONCE M. REFORZADO

Reinforced Shank Copper/Bronze Metric Machine Straight Tap

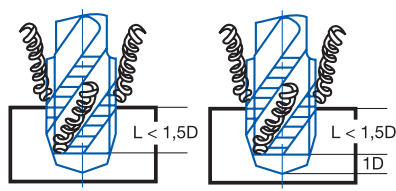
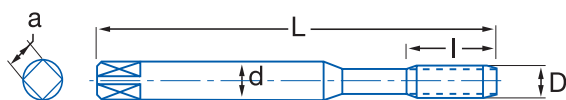
Taraut Droit Machine Métrique Cuivre/Bronze Queue Renforcée



HSSE 5% Co	DIN 371	C 2-3h		Tol. 6H	α $10^\circ \pm 2$	
---------------	------------	-----------	---	------------	------------------------------	---

Material		Vc
Grupo	Sub.	5% Co
5	5.1	10-15

Vc= m/min.



M	P	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
M3	0,50	56	5	3,50	2,70	3	69543	12,35
M3,5	0,60	56	6	4,00	3,00	3	69411	18,21
M4	0,70	63	7	4,50	3,40	3	69544	12,35
M5	0,80	70	8	6,00	4,90	3	69546	11,85
M6	1,00	80	10	6,00	4,90	3	69547	12,99
M7	1,00	80	10	7,00	5,50	3	69520	20,20
M8	1,25	90	13	8,00	6,20	3	69549	14,83
M10	1,50	100	15	10,00	8,00	3	69550	17,57

Ref. **3240**

MACHO RECTO MÁQUINA MÉTRICA COBRE/BRONCE

Copper/Bronze Metric Machine Straight Tap

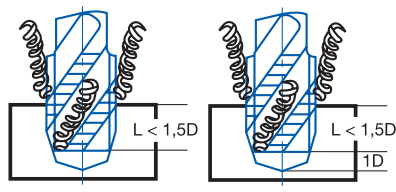
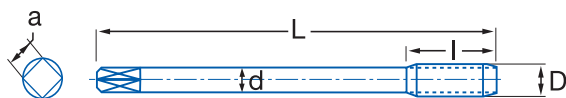
Taraut Droit Machine Métrique Cuivre/Bronze



HSSE 5% Co	DIN 376	C 2-3h		Tol. 6H	α $10^\circ \pm 2$	
---------------	------------	-----------	---	------------	------------------------------	---

Material		Vc
Grupo	Sub.	5% Co
5	5.1	10-15

Vc= m/min.



M	P	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
M3	0,50	56	5	2,20		3	69573	12,67
M4	0,70	63	7	2,80	2,10	3	69574	13,48
M5	0,80	70	8	3,50	2,70	3	69576	12,91
M6	1,00	80	10	4,50	3,40	3	69577	14,17
M8	1,25	90	13	6,00	4,90	3	69579	15,49
M10	1,50	100	15	7,00	5,50	3	69844	18,37
M12	1,75	110	18	9,00	7,00	3	69846	23,67
M14	2,00	110	20	11,00	9,00	3	69847	37,14
M16	2,00	110	20	12,00	9,00	3	69400	44,86
M18	2,50	125	25	14,00	11,00	4	16267	64,74
M20	2,50	140	25	16,00	12,00	4	40153	66,81

Ref. **3600**

MACHO RECTO MÁQUINA MÉTRICA MANGO REFORZADO

Reinforced Shank Metric Machine Straight Tap

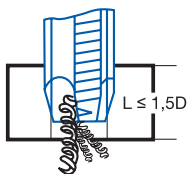
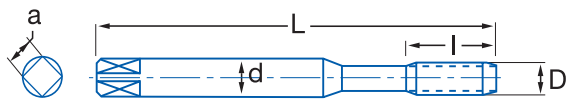
Taraud Droit Machine Métrique Queue Renforcée



HSSE 5%Co	M	DIN 371	A 6-8h	Tol. 6H		α $10^\circ \pm 2$	
--------------	---	------------	-----------	------------	--	------------------------------	--

Material		Vc
Grupo	Sub.	5% Co
1	1.1	10-14

Vc= m/min.



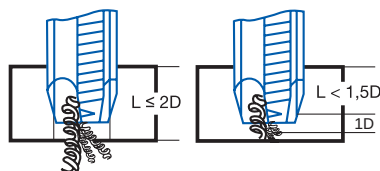
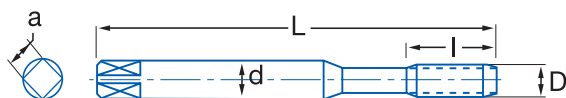
M	P	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
M3	0,50	56	11	3,50	2,70	3	76567	10,02
M4	0,70	63	13	4,50	3,40	3	76573	10,22
M5	0,80	70	16	6,00	4,90	3	76580	10,22
M6	1,00	80	19	6,00	4,90	3	76586	11,23
M8	1,25	90	22	8,00	6,20	3	76594	12,56
M10	1,50	100	24	10,00	8,00	3	76602	15,44

Ref. **3109**

MACHO RECTO MÁQUINA MÉTRICA ISO MANGO REFORZADO

Reinforced Shank ISO Standard Metric Machine Straight Tap

Taraud Droit Machine Metrique Norme ISO Queue Renforcée



Material		Vc
Grupo	Sub.	HSS
1	1.1	6-10
5	5.1	5-8
6	6.1	15-35
	6.2	14-20

Vc= m/min.

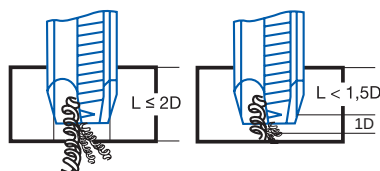
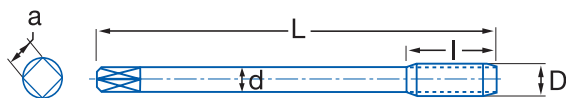
M	P	L mm	l mm	d mm	a mm	Z	Nº Art. HSS	€
M3	0,50	48	11	3,15	2,50	3	38180	6,56
M4	0,70	53	13	4,00	3,15	3	38182	6,56
M5	0,80	58	16	5,00	4,00	3	38373	6,56
M6	1,00	66	19	6,30	5,00	3	38185	6,56
M8	1,25	72	22	8,00	6,30	3	38187	8,76
M10	1,50	80	24	10,00	8,00	3	38188	11,14

Ref. **3207**

MACHO RECTO MÁQUINA MÉTRICA NORMA ISO

ISO Standard Metric Machine Straight Tap

Taraud Droit Machine Metrique Norme ISO



Material		Vc
Grupo	Sub.	HSS
1	1.1	6-10
5	5.1	5-8
6	6.1	15-35
	6.2	14-20

Vc= m/min.

M	P	L mm	l mm	d mm	a mm	Z	Nº Art. HSS	€
M12	1,75	89	29	9,00	7,10	3	38189	14,32
M14	2,00	95	30	11,20	9,00	3	38190	17,12
M16	2,00	102	32	12,50	10,00	3	38191	21,27
M18	2,50	112	37	14,00	11,20	3	38192	32,02
M20	2,50	112	37	14,00	11,20	3	38193	35,79
M22	2,50	118	38	16,00	12,50	3	38194	41,38
M24	3,00	130	45	18,00	14,00	3	38195	46,75
M27	3,00	135	45	20,00	16,00	3	38196	57,57
M30	3,50	138	48	20,00	16,00	3	38197	85,53

Ref. **3157**

MACHO HELICOIDAL MÁQUINA MÉTRICA ISO M. REFORZADO

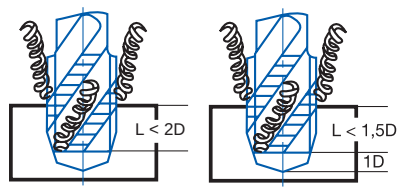
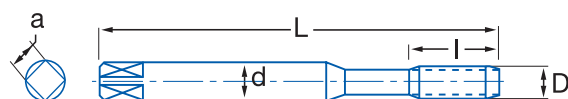
Reinforced Shank ISO Standard Metric Machine Spiral Tap

Taraud Hélicoïdal Machine Metrique Norme ISO Queue Renforcée



Material		Vc
Grupo	Sub.	HSS
1	1.1	6-10
5	5.1	5-8
6	6.1	15-35
	6.2	14-20

Vc= m/min.



M	P	L mm	l mm	d mm	a mm	Z	Nº Art. HSS	€
M3	0,50	48	11	3,15	2,50	3	38198	7,90
M4	0,70	53	13	4,00	3,15	3	38201	7,90
M5	0,80	58	16	5,00	4,00	3	38206	7,90
M6	1,00	66	19	6,30	5,00	3	38209	8,08
M8	1,25	72	22	8,00	6,30	3	38214	9,06
M10	1,50	80	24	10,00	8,00	3	38216	11,68

Ref. **3247**

MACHO HELICOIDAL MÁQUINA MÉTRICA NORMA ISO

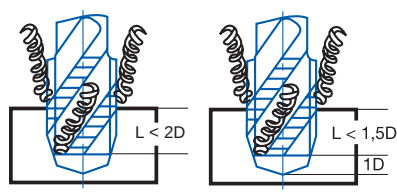
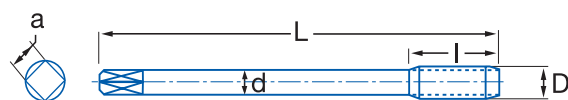
ISO Standard Metric Machine Spiral Tap

Taraud Hélicoïdal Machine Metrique Norme ISO



Material		Vc
Grupo	Sub.	HSS
1	1.1	6-10
5	5.1	5-8
6	6.1	15-35
	6.2	14-20

Vc= m/min.



M	P	L mm	l mm	d mm	a mm	Z	Nº Art. HSS	€
M12	1,75	89	29	9,00	7,10	3	38226	15,17
M14	2,00	95	30	11,20	9,00	3	38228	20,73
M16	2,00	102	32	12,50	10,00	3	38229	24,05

Ref. **3036**

JUEGO MACHOS MANO MÉTRICA COBALTO INOX

STAINLESS Cobalt Metric Hand Tap Set

Jeu de Tarauds à Main Métrique Cobalt INOX



HSSE
5%Co

DIN
352
1998-09

C
2-3h

Tol.
6H

Vaporizado
Vaporized
Vaporisée



α
6 - 8°



N°1 Desbaste
Roughing
Ebauche

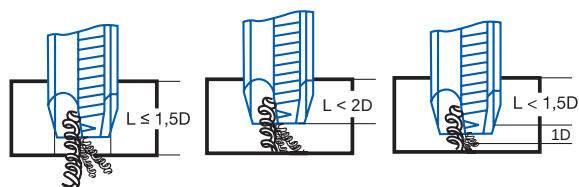
N°2 Semidesbaste
Semiroughing
Semi-Ebauche

N°3 Acabado
Finishing
Finition

N°1-N°2 Con guía
Guided
Avec Guide

Grupo 2
Subgr.
2.1/2.2

Grupo 3
Subgr.
3.1/3.2



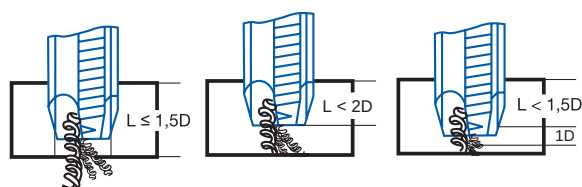
M	P	L mm	l mm	d mm	ϕ a mm	Z	N° Art. 5% Co	€
M3	0,50	40	11	3,50	2,70	3	16404	27,08
M4	0,70	45	13	4,50	3,40	3	16405	27,08
M5	0,80	50	16	6,00	4,90	3	16406	28,19
M6	1,00	56	19	6,00	4,90	3	16407	28,19
M8	1,25	63	22	6,00	4,90	3	16408	32,74
M10	1,50	70	24	7,00	5,50	3	16409	42,11
M12	1,75	75	29	9,00	7,00	3	16410	60,28
M14	2,00	80	30	11,00	9,00	4	16411	66,75
M16	2,00	80	32	12,00	9,00	4	16412	91,48
M18	2,50	95	40	14,00	11,00	4	16413	124,95
M20	2,50	95	40	16,00	12,00	4	16414	138,72

Ref. **3030**

JUEGO MACHOS MANO MÉTRICA

Metric Hand Tap Set

Jeu de Tarauds à Main Métrique



HSS	DIN 352 1998-09	C 2-3h	Tol. 6H		α $10^\circ \pm 2$	
Nº1 Desbaste Roughing Ebauche		Nº2 Semidesbaste Semiroughing Semi-Ebauche		Nº3 Acabado Finishing - Finition (Ref. 3010)		
Grupo 1 Subgr. 1.1		Grupo 5 Subgr. 5.1		Grupo 3 Subgr. 3.1/3.2		Grupo 6 Subgr. 6.1/6.2/6.3

M	P	L mm	I mm	d mm	a mm	Z	Nº Art. HSS	€
M2	0,40	36	11	2,80	2,10	3	62531	25,88
M2,5	0,45	40	12	2,80	2,10	3	62534	25,88
M3	0,50	40	11	3,50	2,70	3	62537	14,66
M3,5	0,60	45	13	4,00	3,00	3	62540	17,25
M4	0,70	45	13	4,50	3,40	3	62543	14,66
M4,5	0,75	50	16	6,00	4,90	3	62546	25,88
M5	0,80	50	16	6,00	4,90	3	62549	15,53
M6	1,00	56	19	6,00	4,90	3	62552	15,53
M7	1,00	56	19	6,00	4,90	3	62555	18,97
M8	1,25	56	22	6,00	4,90	4	62561	18,97
M9	1,25	63	22	7,00	5,50	3	62567	31,05
M10	1,50	70	24	7,00	5,50	4	62573	23,31
M11	1,50	70	24	8,00	6,20	3	62576	38,82
M12	1,75	75	28	9,00	7,00	3	62579	32,77
M13	1,75	75	28	9,00	7,00	4	62582	59,50
M14	2,00	80	30	11,00	9,00	4	62585	36,24

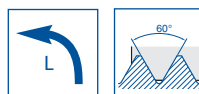
M	P	L mm	I mm	d mm	a mm	Z	Nº Art. HSS	€
M15	2,00	80	32	12,00	9,00	4	62588	72,45
M16	2,00	80	32	12,00	9,00	4	62591	51,42
M18	2,50	95	34	14,00	11,00	4	62594	68,14
M20	2,50	95	34	16,00	12,00	4	62597	76,77
M22	2,50	100	34	18,00	14,50	4	62603	102,66
M24	3,00	110	38	18,00	14,50	4	62606	120,31
M27	3,00	110	38	20,00	16,00	4	62609	154,83
M30	3,50	125	45	22,00	18,00	4	62612	198,37
M33	3,50	125	50	25,00	20,00	4	62615	250,14
M36	4,00	150	56	28,00	22,00	4	62618	319,12
M39	4,00	150	60	32,00	24,00	4	62621	357,11
M42	4,50	150	60	32,00	24,00	4	62624	446,80
M45	4,50	160	65	36,00	29,00	6	73760	515,81
M48	5,00	180	70	36,00	29,00	6	62627	621,04
M52	5,00	180	70	40,00	32,00	6	76382	753,89

Ref. **3031**

JUEGO MACHOS MANO MÉTRICA CORTE IZQUIERDA

Left Cutting Metric Hand Tap Set

Jeu de Tarauds à Main Métrique Coupe à Gauche



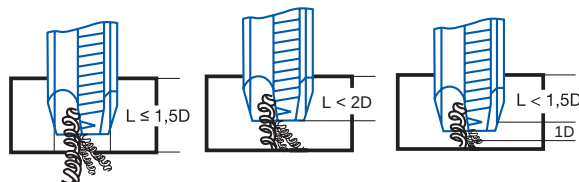
M	P	L mm	I mm	d mm	a mm	Z	Nº Art. HSS	€
M3	0,50	40	11	3,50	2,70	3	23302	30,17
M3,5	0,60	45	13	4,00	3,00	3	23303	35,50
M4	0,70	45	13	4,50	3,40	3	23304	30,17
M4,5	0,75	50	16	6,00	4,90	3	23305	53,27
M5	0,80	50	16	6,00	4,90	3	23306	31,97
M6	1,00	50	19	6,00	4,90	3	23307	31,97
M7	1,00	50	19	6,00	4,90	3	23308	39,05
M8	1,25	56	22	6,00	4,90	3	23309	39,05

M	P	L mm	I mm	d mm	a mm	Z	Nº Art. HSS	€
M9	1,25	63	22	7,00	5,50	3	23310	63,93
M10	1,50	70	24	7,00	5,50	3	23311	47,94
M11	1,50	70	24	8,00	6,20	3	23312	79,89
M12	1,75	75	29	9,00	7,00	4	23313	67,45
M14	2,00	80	30	11,00	9,00	4	23314	74,58
M16	2,00	80	32	12,00	9,00	4	23315	105,84
M18	2,50	95	40	14,00	11,00	4	23316	140,26
M20	2,50	95	40	16,00	12,00	4	23317	158,00

Ref. **3020****JUEGO MACHOS MANO MÉTRICA FINA**

Metric Fine Hand Tap Set

Jeu de Tarauds à Main Métrique Pas Fin


Nº1 Desbaste
Roughing
Ebauche

Nº3 Acabado
Finishing - Finition
(Ref. 3010)

Grupo 1

Subgr. 1.1

Grupo 5

Subgr. 5.1

Grupo 3

Subgr. 3.1/3.2

Grupo 6

Subgr. 6.1/6.2/6.3

NEW!

MF	P	L mm	l mm	d mm	a mm	Z	Nº Art. HSS	€
MF4	0,50	45	10	4,50	4,90	3	62336	29,16
MF5	0,50	50	12	6,00	4,90	3	62342	29,02
MF5	0,75	50	12	6,00	4,90	3	62345	29,34
MF6	0,50	50	14	6,00	4,90	3	62351	20,72
MF6	0,75	50	14	6,00	4,90	3	62354	17,55
MF7	0,75	50	14	6,00	4,90	3	62360	26,72
MF8	0,50	50	19	6,00	4,90	3	62366	39,75
MF8	0,75	50	19	6,00	4,90	3	62369	24,12
MF8	1,00	56	20	6,00	4,90	3	62372	17,49
MF9	1,00	63	20	7,00	5,50	3	75090	29,67
MF10	0,50	63	20	7,00	5,50	4	21727	37,91
MF10	0,75	63	20	7,00	5,50	3	76309	44,86
MF10	1,00	63	20	7,00	5,50	3	62378	18,84
MF10	1,25	70	24	7,00	5,50	3	62381	19,08
MF11	0,75	63	20	8,00	6,20	4	16118	92,95
MF11	1,00	63	20	8,00	6,20	3	76311	41,37
MF11	1,25	63	20	8,00	6,20	3	75298	41,37
MF12	0,75	70	22	9,00	7,00	4	76312	51,37
MF12	1,00	70	20	8,00	7,00	3	62387	32,94
MF12	1,25	70	22	9,00	7,00	3	62390	33,01
MF12	1,50	70	22	9,00	7,00	3	62393	28,13
MF13	0,75	70	22	11,00	9,00	4	56832	92,95
MF13	1,00	70	20	11,00	9,00	4	76314	58,84
MF13	1,25	70	22	11,00	9,00	4	76315	51,98
MF13	1,50	70	22	11,00	9,00	4	62399	51,98
MF14	0,75	70	22	11,00	9,00	4	56833	91,50
MF14	1,00	70	20	11,00	9,00	4	62402	58,84
MF14	1,25	70	20	11,00	9,00	4	62405	40,30
MF14	1,50	70	20	11,00	9,00	4	62408	31,32
MF14	1,75	80	30	11,00	9,00	4	10875	120,14
MF15	1,00	70	20	12,00	9,00	4	76318	82,34
MF15	1,25	70	22	12,00	9,00	4	76319	75,04
MF15	1,50	70	20	12,00	9,00	4	75299	76,28
MF16	1,00	70	20	12,00	9,00	4	62414	82,38
MF16	1,25	70	20	12,00	9,00	4	76320	86,73
MF16	1,50	70	20	12,00	9,00	4	62417	39,20
MF17	1,00	70	22	12,00	9,00	4	76321	110,59
MF17	1,25	70	22	12,00	9,00	4	56834	110,59
MF17	1,50	70	22	12,00	9,00	4	62420	110,59
MF18	1,00	80	22	14,00	11,00	4	62423	91,62
MF18	1,25	80	22	14,00	11,00	4	76323	109,01
MF18	1,50	80	22	14,00	11,00	4	62426	51,78

MF	P	L mm	l mm	d mm	a mm	Z	Nº Art. HSS	€
MF18	2,00	80	22	14,00	11,00	4	62429	97,74
MF19	1,00	80	22	14,00	11,00	4	10831	160,52
MF19	1,25	80	22	14,00	11,00	4	56835	160,39
MF19	1,50	80	22	14,00	11,00	4	76326	160,52
MF19	2,00	80	22	14,00	11,00	4	56837	191,21
MF20	1,00	80	22	16,00	12,00	4	76327	121,36
MF20	1,25	80	22	16,00	12,00	4	74816	160,52
MF20	1,50	80	22	16,00	12,00	4	62435	64,90
MF20	2,00	80	22	16,00	12,00	4	62438	101,77
MF21	1,00	80	22	16,00	12,00	4	56838	207,44
MF21	1,25	80	22	16,00	12,00	4	56840	207,44
MF21	1,50	80	22	16,00	12,00	4	75300	164,04
MF22	1,00	80	22	18,00	14,50	4	76330	136,03
MF22	1,25	80	22	18,00	14,50	4	74601	160,52
MF22	1,50	80	22	18,00	14,50	4	62441	70,78
MF22	2,00	80	22	18,00	14,50	4	62444	113,33
MF23	1,00	80	22	18,00	14,50	4	56841	207,24
MF23	1,50	80	22	18,00	14,50	4	56842	207,24
MF24	1,00	90	22	18,00	14,50	4	76333	127,38
MF24	1,25	90	22	18,00	14,50	4	62447	207,44
MF24	1,50	90	22	18,00	14,50	4	62450	90,34
MF24	2,00	90	22	18,00	14,50	4	62453	152,08
MF25	1,00	90	22	18,00	14,50	4	76334	181,50
MF25	1,25	90	22	18,00	14,50	4	56843	295,53
MF25	1,50	90	22	18,00	14,50	4	75301	178,33
MF25	2,00	90	22	18,00	14,50	4	56844	303,98
MF26	1,00	90	22	18,00	14,50	4	56846	158,60
MF26	1,50	90	22	18,00	14,50	4	75302	172,13
MF26	2,00	90	22	18,00	14,50	4	56847	174,60
MF27	1,00	90	22	20,00	16,00	4	76338	174,62
MF27	1,50	90	22	20,00	16,00	4	76339	189,78
MF27	2,00	90	22	20,00	16,00	4	75303	210,82
MF28	1,00	90	22	20,00	16,00	4	76340	295,81
MF28	1,50	90	22	20,00	16,00	4	76341	191,20
MF30	1,00	90	22	22,00	18,00	4	76342	183,54
MF30	1,50	90	22	22,00	18,00	4	76343	198,32
MF30	2,00	90	22	22,00	18,00	4	75304	228,60
MF32	1,50	90	22	22,00	18,00	4	76345	228,95
MF33	1,50	100	25	25,00	20,00	4	76348	269,10
MF33	2,00	100	25	25,00	20,00	4	75305	339,86
MF34	1,50	100	25	28,00	22,00	4	76349	280,48
MF35	1,50	100	25	28,00	22,00	4	76350	280,48

Ref. **3020**

JUEGO MACHOS MANO MÉTRICA FINA

Metric Fine Hand Tap Set

Jeu de Tarauds à Main Métrique Pas Fin

MF	P	L mm	I mm	d mm	a mm	Z	Nº Art. HSS	€	MF	P	L mm	I mm	d mm	a mm	Z	Nº Art. HSS	€
MF36	1,50	100	25	28,00	22,00	4	76351	308,92	MF42	3,00	125	33	32,00	24,00	6	76362	542,40
MF36	2,00	125	33	28,00	22,00	4	76140	395,31	MF45	1,50	110	25	36,00	29,00	6	76363	427,35
MF36	3,00	125	33	28,00	22,00	4	76352	453,52	MF45	2,00	125	33	36,00	29,00	6	76364	651,18
MF38	1,50	100	25	28,00	22,00	4	76353	347,44	MF45	3,00	125	33	36,00	29,00	6	76365	698,13
MF38	2,00	125	40	28,00	22,00	4	75306	413,01	MF48	1,50	140	33	36,00	29,00	6	76366	481,56
MF39	1,50	110	25	32,00	24,00	4	76354	453,52	MF48	2,00	140	33	36,00	29,00	6	76367	789,07
MF39	2,00	125	33	32,00	24,00	4	76355	541,66	MF48	3,00	140	33	36,00	29,00	6	76368	789,11
MF39	3,00	125	33	32,00	24,00	4	76356	453,52	MF50	1,50	140	40	36,00	29,00	6	76369	526,64
MF40	1,50	110	25	32,00	24,00	6	76357	408,13	MF52	1,50	140	40	40,00	32,00	6	76370	558,68
MF40	2,00	110	25	32,00	24,00	6	76358	398,62	MF52	2,00	140	40	40,00	32,00	6	77643	803,75
MF40	3,00	125	40	32,00	24,00	6	76359	394,92	MF52	3,00	140	40	40,00	32,00	6	76372	746,23
MF42	2,00	125	33	32,00	24,00	6	76361	542,40									

Ref. **3021**

JUEGO MACHOS MANO MÉTRICA FINA CORTE IZQUIERDA

Left Cutting Metric Fine Hand Tap Set

Jeu de Tarauds à Main Métrique Pas Fin Coupe à Gauche



HSS	DIN 2181	C 2-3h	Tol. 6H		α 10° ± 2	Nº1 Desbaste Roughing Ebauche	Nº3 Acabado Finishing - Finition (Ref. 3010)		
-----	----------	--------	---------	--	------------------	-------------------------------------	--	--	--

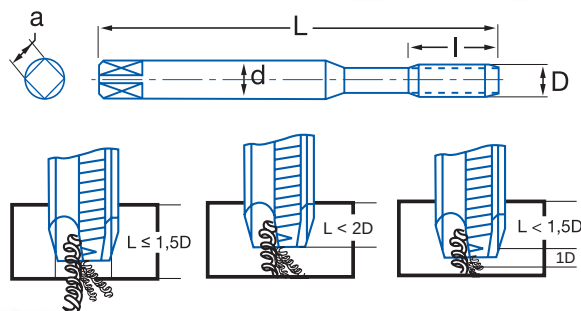
Grupo 1 Subgr. 1.1	Grupo 5 Subgr. 5.1	Grupo 3 Subgr. 3.1/3.2	Grupo 6 Subgr. 6.1/6.2/6.3
-----------------------	-----------------------	---------------------------	-------------------------------

M	P	L mm	I mm	d mm	a mm	Z	Nº Art. HSS	€
MF8	1,00	56	22	6,00	4,90	3	18877	34,98
MF10	1,00	63	20	7,00	5,50	3	22028	37,67
MF10	1,25	70	24	7,00	5,50	3	21874	38,17
MF12	1,25	70	22	9,00	7,00	3	34029	66,01
MF12	1,50	70	22	9,00	7,00	3	34030	56,28
MF14	1,25	70	22	11,00	9,00	4	38318	80,59
MF14	1,50	70	22	11,00	9,00	4	10531	62,65
MF16	1,50	70	22	12,00	9,00	4	13143	78,39
MF20	1,50	80	22	16,00	12,00	4	19101	129,82

Ref. **3010****MACHO ÚNICO MANO MÉTRICA**

Metric Hand Single Tap

Taraud à Main Unique Métrique



HSS

DIN
352Tol.
6H α
 $10^\circ \pm 2$ 

Grupo 1

Subgr. 1.1

Grupo 5

Subgr. 5.1

Grupo 3

Subgr.
3.1/3.2

Grupo 6

Subgr.
6.1/6.2/6.3Nº3 Acabado
Finishing - Finition
(Ref. 3010)Nº 1 / Nº 2
bajo demanda
upon request sur demande**NEW!**

MF	P	L mm	I mm	d mm	a mm	Z	Nº Art. HSS	€
M3	0,50	40	11	3,50	2,70	3	76389	5,02
M3,5	0,60	45	13	4,00	3,00	3	76391	5,93
M4	0,70	45	13	4,50	3,40	3	76394	5,02
M4,5	0,75	50	16	6,00	4,90	3	76397	8,87
M5	0,50	50	12	6,00	4,90	3	59484	15,41
M5	0,75	50	12	6,00	4,90	3	59485	14,60
M5	0,80	50	16	6,00	4,90	3	76400	5,33
M6	0,50	50	14	6,00	4,90	3	59486	10,60
M6	1,00	50	19	6,00	4,90	3	75383	5,33
M7	1,00	50	19	6,00	4,90	3	76408	6,51
M8	0,50	50	19	6,00	4,90	4	59487	16,44
M8	0,75	50	19	6,00	4,90	4	59488	13,01
M8	1,25	56	22	6,00	4,90	4	75449	6,51
M9	1,25	63	22	7,00	5,50	3	76414	10,64
M10	0,50	63	20	7,00	5,50	4	59489	18,95
M10	0,75	63	20	7,00	5,50	4	59490	18,51
M10	1,50	70	24	7,00	5,50	4	74995	7,99
M11	0,75	63	20	8,00	6,20	4	59491	45,71
M11	1,00	63	20	8,00	6,20	4	59492	16,46
M11	1,25	63	22	8,00	6,20	4	59493	16,59
M11	1,50	70	24	8,00	6,20	3	76422	13,32
M12	0,75	70	22	9,00	7,00	4	59494	26,33
M12	1,75	75	29	9,00	7,00	3	74996	11,25
M13	0,75	70	22	11,00	9,00	4	59495	46,67
M13	1,00	70	20	11,00	9,00	4	59496	26,42
M13	1,25	70	22	11,00	9,00	4	59497	26,64
M13	1,50	70	22	11,00	9,00	4	59498	26,68
M14	0,75	70	22	11,00	9,00	4	59499	46,13
M14	1,75	80	30	11,00	9,00	4	59500	60,08
M14	2,00	80	30	11,00	9,00	4	76436	12,43
M15	1,00	70	20	12,00	9,00	4	59501	35,65
M15	1,25	70	22	12,00	9,00	4	59503	38,15
M16	1,00	70	22	12,00	9,00	4	59504	34,03
M16	1,25	70	22	12,00	9,00	4	59505	35,83
M16	2,00	80	32	12,00	9,00	4	76444	17,63
M17	1,00	70	22	12,00	9,00	4	59506	54,84
M17	1,25	70	22	12,00	9,00	4	59507	55,05
M17	1,50	70	22	12,00	9,00	4	59562	25,83
M18	1,00	80	22	14,00	11,00	4	59508	37,83
M18	1,25	80	22	14,00	11,00	4	59509	53,62
M18	2,00	80	22	14,00	11,00	4	59510	41,10
M18	2,50	95	40	14,00	11,00	4	76452	23,37
M19	1,25	80	22	14,00	11,00	4	59511	78,88
M19	1,50	80	22	14,00	11,00	4	59512	80,27
M19	2,00	80	22	14,00	11,00	4	59513	95,60
M20	1,00	80	22	16,00	12,00	4	59514	50,38

MF	P	L mm	I mm	d mm	a mm	Z	Nº Art. HSS	€
M20	1,25	80	22	16,00	12,00	4	59515	78,95
M20	2,00	80	22	16,00	12,00	4	59516	42,59
M20	2,50	95	40	16,00	12,00	4	76478	26,32
M21	1,00	80	22	16,00	12,00	4	59517	102,87
M21	1,25	80	22	16,00	12,00	4	59518	102,02
M21	1,50	80	22	16,00	12,00	4	59519	82,01
M22	1,00	80	22	18,00	14,50	4	59521	55,73
M22	1,25	80	22	18,00	14,50	4	59522	80,27
M22	2,50	100	40	18,00	14,50	4	76486	35,22
M23	1,00	80	22	18,00	14,50	4	59523	102,77
M23	1,50	80	22	18,00	14,50	4	59524	101,93
M24	1,25	90	22	18,00	14,50	4	59525	103,72
M24	2,00	90	22	18,00	14,50	4	59526	62,83
M24	3,00	110	50	18,00	14,50	4	76493	41,27
M25	1,00	90	22	18,00	14,50	4	59527	90,01
M25	1,25	90	22	18,00	14,50	4	59528	145,35
M25	2,00	90	22	18,00	14,50	4	59561	151,98
M26	1,00	90	22	18,00	14,50	4	59529	79,30
M26	1,50	90	22	18,00	14,50	4	59530	71,09
M26	2,00	90	22	18,00	14,50	4	59531	87,30
M27	1,00	90	22	20,00	16,00	4	59532	88,33
M27	1,50	90	22	20,00	16,00	4	59533	78,77
M27	3,00	110	50	20,00	16,00	4	76505	53,13
M28	1,00	90	22	20,00	16,00	4	59534	146,69
M28	1,50	90	22	20,00	16,00	4	59535	78,98
M30	1,00	90	22	22,00	18,00	4	16388	110,17
M30	1,50	90	22	22,00	18,00	4	59536	81,92
M30	3,50	125	56	22,00	18,00	4	76512	68,05
M33	1,50	100	25	25,00	20,00	4	59537	111,13
M33	2,00	100	25	25,00	20,00	4	59538	132,14
M33	3,50	125	56	25,00	20,00	4	76519	85,81
M34	1,50	100	25	28,00	22,00	4	59539	120,26
M35	1,50	100	25	28,00	22,00	4	59540	133,37
M36	1,50	100	25	28,00	22,00	4	59541	128,81
M36	3,00	125	40	28,00	22,00	4	59542	224,88
M36	4,00	150	63	28,00	22,00	4	76525	109,49
M38	1,50	100	25	28,00	22,00	4	59543	144,90
M38	2,00	125	40	28,00	22,00	4	59544	206,51
M39	1,50	110	25	32,00	24,00	4	59545	194,34
M39	2,00	125	40	32,00	24,00	4	59546	192,74
M39	3,00	125	40	28,00	22,00	4	59547	190,67
M39	4,00	150	63	32,00	24,00	4	76531	122,50
M40	1,50	110	25	32,00	24,00	4	59548	171,59
M40	2,00	125	40	32,00	24,00	4	59549	196,04
M40	3,00	125	40	32,00	24,00	4	59550	197,46
M42	1,50	110	25	32,00	24,00	4	14781	227,03

Ref. **3010**

MACHO ÚNICO MANO MÉTRICA

Metric Hand Single Tap

Taraud à Main Unique Métrique

MF	P	L mm	I mm	d mm	a mm	Z	N° Art. HSS	€
M42	2,00	125	40	32,00	24,00	4	59551	228,02
M42	3,00	125	40	32,00	24,00	4	59552	224,29
M42	4,50	150	63	32,00	24,00	4	76538	153,27
M45	1,50	110	25	36,00	29,00	6	16389	256,49
M45	2,00	125	40	36,00	29,00	6	59553	267,02
M45	3,00	125	40	36,00	29,00	6	59554	271,47
M45	4,50	160	70	36,00	29,00	6	76542	176,95
M48	1,50	140	40	36,00	29,00	6	16390	289,08

MF	P	L mm	I mm	d mm	a mm	Z	N° Art. HSS	€
M48	2,00	140	40	36,00	29,00	6	59555	357,18
M48	3,00	140	40	36,00	29,00	6	59556	323,28
M48	5,00	180	75	36,00	29,00	6	76546	213,04
M50	1,50	140	40	36,00	29,00	6	59557	259,00
M52	1,50	140	40	40,00	32,00	6	59558	277,05
M52	2,00	140	40	40,00	32,00	6	59559	401,87
M52	3,00	140	40	40,00	32,00	6	59560	367,00
M52	5,00	180	75	40,00	32,00	6	76551	258,61

Ref. **3023**

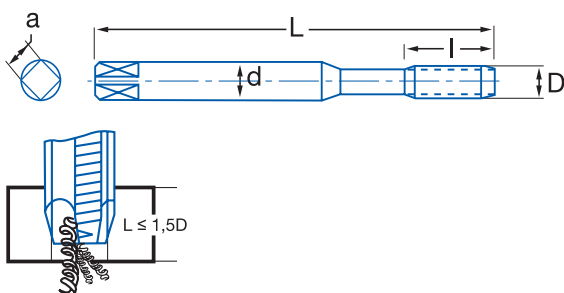
MACHO MANO PERFIL ROSCA COMPLETA

Whole Thread Profile Hand Tap

Taraud À Main Profil Filetage Complet



HSS	DIN 352	Tol. 6H	α $10^\circ \pm 2$	4-6h	60°	Grupo 1 Subgr. 1.1	Grupo 5 Subgr. 5.1	Grupo 3 Subgr. 3.1/3.2	Grupo 6 Subgr. 6.1/6.2/6.3
-----	---------	---------	---------------------------	------	------------	-----------------------	-----------------------	---------------------------	-------------------------------



Macho único que finaliza la rosca completa en agujeros pasantes. Espesor material <1,5 mm. Viruta media/larga.

Single tap for whole thread finishing in through holes. Material thickness <1,5 mm. Medium/long chip removal.

Guidage et filetage complet sur trous débouchants. Épaisseur matériel <1,5 mm. Copeaux moyens/longs.

M	P	L mm	I mm	d mm	a mm	Z	N° Art. HSS	€
M3	0,50	40	11	3,50	2,70	3	46263	7,53
M4	0,70	45	13	4,50	3,40	3	46264	7,53
M5	0,80	50	16	6,00	4,90	3	46265	8,00
M6	1,00	50	19	6,00	4,90	3	46266	8,00
M8	1,25	56	22	6,00	4,90	4	46267	9,77
M10	1,50	70	24	7,00	5,50	4	46268	11,99
M12	1,75	75	29	9,00	7,00	4	46269	16,88
M16	2,00	80	32	12,00	9,00	4	46270	26,45
M20	2,50	95	40	16,00	12,00	4	46271	39,48

NOVEDAD
AHORRO
SAVING
NEW PRODUCT
NOUVEAUTÉ
ÉCONOMIQUE

Ref. **3405****JUEGO MACHOS MANO MÉTRICA**

Metric Hand Tap Set

Jeu de Tarauds à Main Métrique

Cont.	Nº Art. HSS	€
Juegos Machos / Tap Sets / Jeux Tarauds M3-M4-M5-M6-M8-M10-M12		
Brocas / Twist Drills / Forets mm 2,5-3,3-4,2-5,0-6,8-8,5-10,2	69624	108,81
Gira-Machos / Tap-Wrench / Porte-Tarauds M1-M12		

Ref. **3406****JUEGO MACHOS MANO MÉTRICA**

Metric Hand Tap Set

Jeu de Tarauds à Main Métrique

Mod. 0 - Cont.	Nº Art. HSS	€
Juegos Machos / Tap Sets / Jeux Tarauds M3-M4-M5-M6-M8-M10-M12		
Gira-Machos / Tap-Wrench / Porte-Tarauds M1-M12		
Gira-Machos / Tap-Wrench / Porte-Tarauds Crique M3-M10 Ratchet		
Cojinetes / Dies / Filières M3-M4-M5-M6-M8-M10-M12	70527	155,61
Porta-Cojinetes / Die Holder / Porte-Filières 25x9		
Galga / Gauge / Gabarit 1 pc		
Destornillador / Screwdriver / Tournevis 1 pc		

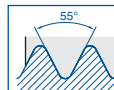
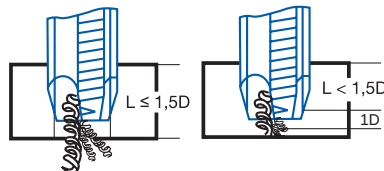
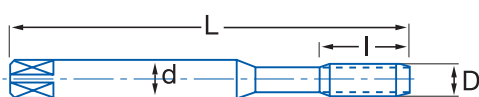


Mod. 1 - Cont.	Nº Art. HSS	€
Juegos Machos / Tap Sets / Jeux Tarauds M3-M4-M5-M6-M8-M10-M12-M14-M16-M18-M20		
Gira-Machos / Tap-Wrench / Porte-Tarauds M1-M12, M5-M20		
Gira-Machos / Tap-Wrench / Porte-Tarauds Crique M3-M10 + M5-M12 Ratchet		
Cojinetes / Dies / Filières M3-M4-M5-M6-M8-M10-M12-M14-M16-M18-M20	38404	365,21
Porta-Cojinetes / Die Holder / Porte-Filières 20x5, 20x7, 25x9, 30x11, 38x14, 45x18		
Galga / Gauge / Gabarit 1 pc		
Destornillador / Screwdriver / Tournevis 1 pc		



Mod. 2 - Cont.	Nº Art. HSS	€
Juegos Machos / Tap Sets / Jeux Tarauds M3-M4-M5-M6-M8-M10-M12		
Gira-Machos / Tap-Wrench / Porte-Tarauds M1-M10, M4-M12		
Gira-Machos / Tap-Wrench / Porte-Tarauds Crique M3-M10 Ratchet		
Cojinetes / Dies / Filières M3-M4-M5-M6-M8-M10-M12	38981	182,61
Porta-Cojinetes / Die Holder / Porte-Filières 20x5, 20x7, 25x9, 30x11, 38x14		
Galga / Gauge / Gabarit 1 pc		
Destornillador / Screwdriver / Tournevis 1 pc		
Brocas / Twist Drills / Forets mm 2,5-3,3-4,2-5,0-6,8-8,5-10,2		

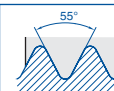
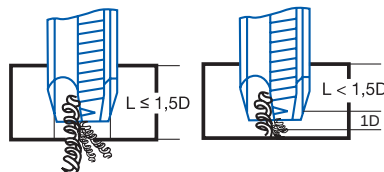
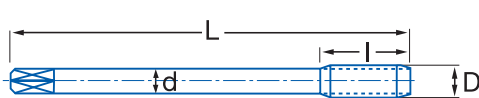


Ref. **3112****MACHO RECTO MÁQUINA WHITWORTH**Whitworth Machine Straight Tap
Taraud Droit Machine WhitworthHSSE
5%CoDIN
371 α
 $10^\circ \pm 2$ Rosca Whitworth cilíndrica
Straight Whitworth Thread
Filetage Whitworth Cylindrique

Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
	3.1	7-10
3	3.2	4-7
	5.1	5-8
5	5.2	8-12
	6.1	15-35
6	6.2	14-20
	6.3	12-15

Vc= m/min.

W	Hilos Threads Filets	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
W3/32	48	50	9	2,80	2,10	3	75415	20,47
W1/8	40	56	11	3,50	2,70	3	75413	17,08
W5/32	32	63	13	4,50	3,40	3	75129	17,08
W3/16	24	70	15	6,00	4,90	3	75414	17,08
W7/32	24	80	16	6,00	4,90	3	75418	25,97
W1/4	20	80	17	7,00	5,50	3	75412	19,49
W5/16	18	90	20	8,00	6,20	3	75458	17,47
W3/8	16	100	22	9,00	7,00	3	75456	25,30

Ref. **3212****MACHO RECTO MÁQUINA WHITWORTH**Whitworth Machine Straight Tap
Taraud Droit Machine WhitworthHSSE
5%CoDIN
376 α
 $10^\circ \pm 2$ Rosca Whitworth cilíndrica
Straight Whitworth Thread
Filetage Whitworth Cylindrique

Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
	3.1	7-10
3	3.2	4-7
	5.1	5-8
5	5.2	8-12
	6.1	15-35
6	6.2	14-20
	6.3	12-15

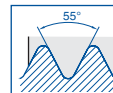
Vc= m/min.

W	Hilos Threads Filets	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
W3/8	16,00	100	22	7,00	5,50	3	70395	25,30
W7/16	14,00	100	22	8,00	6,20	3	70396	33,32
W1/2	12,00	110	24	9,00	7,00	3	70398	31,99
W9/16	12,00	110	26	11,00	9,00	3	70399	45,87
W5/8	11,00	110	27	12,00	9,00	3	70401	43,41
W3/4	10,00	125	30	14,00	11,00	4	70402	58,07
W7/8	9,00	140	32	18,00	14,50	4	70416	78,63
W1"	8,00	160	36	18,00	14,50	4	70404	98,88
W1"1/8	7,00	180	40	22,00	18,00	4	70450	128,26
W1"1/4	7,00	180	40	22,00	18,00	4	70452	186,17
W1"3/8	6,00	200	50	28,00	22,00	4	70453	306,09
W1"1/2	6,00	200	50	32,00	24,00	4	70455	332,31
W1"5/8	5,00	220	58	36,00	29,00	4	70456	464,00
W1"7/8	4,50	220	58	36,00	29,00	4	70458	605,98

Ref. **3102**

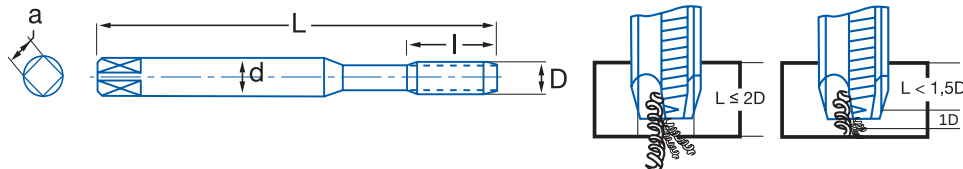
MACHO RECTO MÁQUINA WHITWORTH MANGO REFORZADO

Reinforced Shank Whitworth Machine Straight Tap
Taraud Droit Machine Whitworth Queue Renforcée



Rosca Whitworth cilíndrica
Straight Whitworth Thread
Filetage Whitworth Cylindrique

HSSE 5%Co	DIN 371	B 3,5-5h	GUN	α 10-12°
--------------	------------	-------------	-----	--------------------



Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
3	3.1	7-10
	3.2	4-7
5	5.1	5-8
	5.2	8-12
6	6.1	15-35
	6.2	14-20
	6.3	12-15

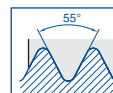
Vc= m/min.

W	Hilos Threads	Filets	L mm	I mm	d mm	a mm	Z	Nº Art. 5% Co	€
W1/8	40		56	11	3,50	2,70	3	62897	18,87
W5/32	32		63	13	4,50	3,40	3	62915	18,87
W3/16	24		70	15	6,00	4,90	3	62903	18,87
W1/4	20		80	17	7,00	5,50	3	62894	21,48
W5/16	18		90	20	8,00	6,20	3	62912	25,14
W3/8	16		100	22	9,00	7,00	3	73766	27,78

Ref. **3202**

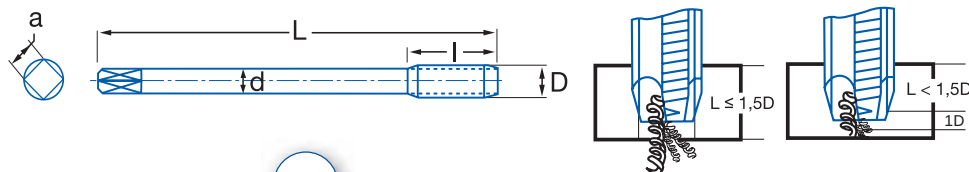
MACHO RECTO MÁQUINA WHITWORTH

Whitworth Machine Straight Tap
Taraud Droit Machine Whitworth



Rosca Whitworth cilíndrica
Straight Whitworth Thread
Filetage Whitworth Cylindrique

HSSE 5%Co	DIN 376	B 3,5-5h	GUN	α 10-12°
--------------	------------	-------------	-----	--------------------



Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
3	3.1	7-10
	3.2	4-7
5	5.1	5-8
	5.2	8-12
6	6.1	15-35
	6.2	14-20
	6.3	12-15

Vc= m/min.

NEW!

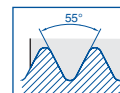
W	Hilos Threads	Filets	L mm	I mm	d mm	a mm	Z	Nº Art. 5% Co	€
W1/4	20		80	17	4,50	3,40	3	59861	16,52
W5/16	18		90	20	6,00	4,90	3	14979	19,34
W3/8	16		100	22	7,00	5,50	3	70420	21,38
W7/16	14		100	22	8,00	6,20	3	70446	26,99
W1/2	12		110	24	9,00	7,00	3	70417	28,26
W9/16	12		110	26	11,00	9,00	3	70447	38,82
W5/8	11		110	27	12,00	9,00	3	70443	36,68
W3/4	10		125	30	14,00	11,00	4	70419	54,71
W7/8	9		140	32	18,00	14,50	4	70444	66,54
W1"	8		160	36	18,00	14,50	4	70449	83,66

Ref. **3152**

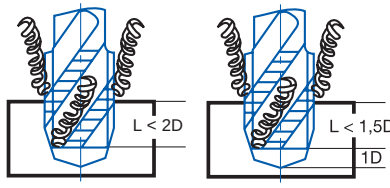
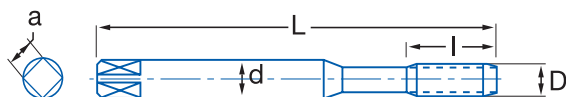
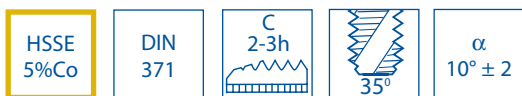
MACHO HELICOIDAL MÁQUINA WHITWORTH M. REFORZADO

Reinforced Shank Whitworth Machine Spiral Tap

Taraud Hélicoïdal Machine Whitworth Queue Renforcée



Rosca Whitworth cilíndrica
Straight Whitworth Thread
Filetage Whitworth Cylindrique



Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
	3.1	7-10
3	3.2	4-7
	5.1	5-8
5	5.2	8-12
	6.1	15-35
6	6.2	14-20
	6.3	12-15

Vc= m/min.

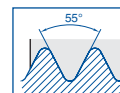
W	Hilos Threads	Filets	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
W1/8	40		56	5	3,50	2,70	3	63152	21,48
W5/32	32		63	7	4,50	3,40	3	63170	21,48
W3/16	24		70	8	6,00	4,90	3	63161	21,48
W1/4	20		80	10	7,00	5,50	3	63149	24,24
W5/16	18		90	12	8,00	6,20	3	63167	28,42
W3/8	16		100	14	9,00	7,00	3	63158	32,47

Ref. **3252**

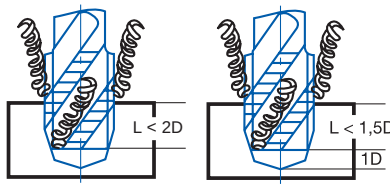
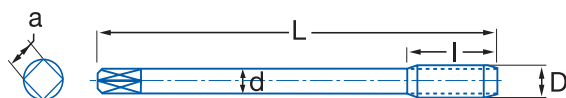
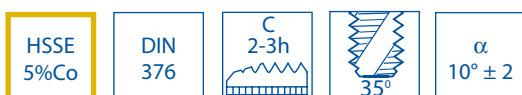
MACHO HELICOIDAL MÁQUINA WHITWORTH

Whitworth Machine Spiral Tap

Taraud Hélicoïdal Machine Whitworth



Rosca Whitworth cilíndrica
Straight Whitworth Thread
Filetage Whitworth Cylindrique



Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
	3.1	7-10
3	3.2	4-7
	5.1	5-8
5	5.2	8-12
	6.1	15-35
6	6.2	14-20
	6.3	12-15

Vc= m/min.



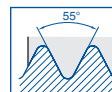
W	Hilos Threads	Filets	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
W3/16	24		70	8	3,50	2,70	3	59857	16,52
W1/4	20		80	13	4,50	3,40	3	59858	22,38
W5/16	18		90	14	6,00	4,90	3	59859	26,24
W3/8	16		100	16	7,00	5,50	3	70408	28,97
W7/16	14		100	16	8,00	6,20	3	70411	41,72
W1/2	12		110	18	9,00	7,00	3	70405	39,99
W9/16	12		110	20	11,00	9,00	3	70413	56,86
W5/8	11		110	20	12,00	9,00	4	70410	54,22
W3/4	10		125	25	14,00	11,00	4	70407	72,64
W7/8	9		140	27	18,00	14,50	4	10909	77,53
W1"	8		160	30	18,00	14,50	4	70414	123,34

Ref. **3032**

JUEGO MACHOS MANO WHITWORTH

Whitworth Hand Tap Set

Jeu de Tarauds à Main Whitworth



Rosca Whitworth cilíndrica
Straight Whitworth Thread
Filetage Whitworth Cylindrique

HSS

DIN
352

C
2-3h



α
 $10^\circ \pm 2$

Nº1 Desbaste
Roughing
Ebauche

Nº2 Semidesbaste
Semiroughing
Semi-Ebauche

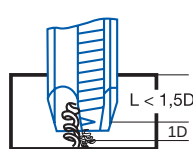
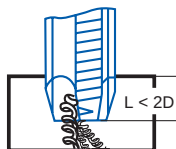
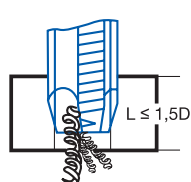
Nº3 Acabado
Finishing - Finition
(Ref. 3012)

Grupo 1
Subgr. 1.1

Grupo 5
Subgr. 5.1

Grupo 3
Subgr.
3.1/3.2

Grupo 6
Subgr.
6.1/6.2/6.3



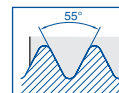
NEW!

W	Hilos Threads	Filets	L mm	l mm	d mm	a mm	Z	Nº Art. HSS	€
W3/32	48,00		36	10	2,80	2,10	3	62663	28,59
W1/8	40,00		40	12	3,50	2,70	3	62642	23,26
W5/32	32,00		45	14	4,50	3,40	3	62675	23,26
W3/16	24,00		50	18	6,00	4,90	3	62660	23,26
W7/32	24,00		50	18	6,00	4,90	3	62684	35,16
W1/4	20,00		50	19	6,00	4,90	3	62633	26,47
W5/16	18,00		56	22	6,00	4,90	4	62669	31,51
W3/8	16,00		70	24	7,00	5,50	4	62654	34,86
W7/16	14,00		70	24	8,00	6,20	4	62681	45,66
W1/2	12,00		75	29	9,00	7,00	4	62630	50,45
W9/16	12,00		80	30	11,00	9,00	4	62687	68,15
W5/8	11,00		80	32	12,00	9,00	4	62666	78,83
W3/4	10,00		95	40	14,00	11,00	4	62645	112,21
W7/8	9,00		100	40	18,00	14,50	4	62678	139,35
W1"	8,00		110	50	18,00	14,50	4	62693	172,06
W1"1/8	7,00		132	56	22,00	18,00	4	62702	255,07
W1"1/4	7,00		132	56	22,00	18,00	4	62699	301,69
W1"3/8	6,00		150	63	28,00	22,00	4	42713	375,21
W1"1/2	6,00		150	63	32,00	24,00	4	62696	451,72
W1"5/8	5,00		160	70	32,00	24,00	4	59880	581,77
W1"3/4	5,00		160	70	36,00	29,00	6	59881	716,03
W1"7/8	4,50		190	80	36,00	29,00	6	59882	924,80
W2"	4,50		190	80	40,00	32,00	6	59883	970,87

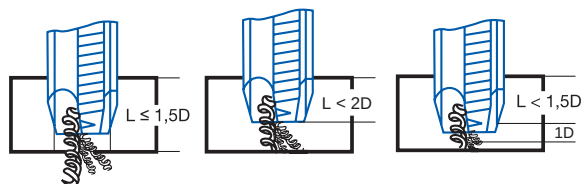
Ref. **3012****MACHO ÚNICO MANO WHITWORTH**

Whitworth Hand Tap

Taraud à Main Whitworth

Rosca Whitworth cilíndrica
Straight Whitworth Thread
Filetage Whitworth Cylindrique

HSS

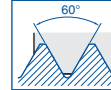
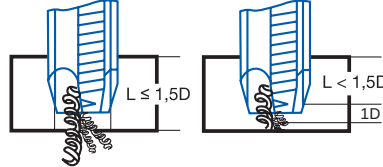
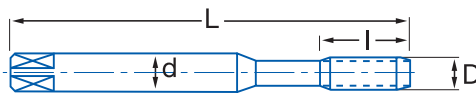
DIN
352 α
 $10^\circ \pm 2$ Nº3 Acabado
Finishing
FinitionGrupo 1
Subgr. 1.1Grupo 5
Subgr. 5.1Grupo 3
Subgr.
3.1/3.2Grupo 6
Subgr.
6.1/6.2/6.3

W	Hilos Threads Filets	L mm	l mm	d mm	a mm	Z	Nº Art. HSS	€
W3/32	48,00	40	9	2,80	2,10	3	75404	9,53
W1/8	40,00	40	14	3,50	2,70	3	75401	7,76
W5/32	32,00	45	17	4,50	3,40	3	75069	7,76
W3/16	24,00	50	19	6,00	4,90	3	74825	7,76
W7/32	24,00	50	19	6,00	4,90	3	75409	11,72
W1/4	20,00	50	20	6,00	4,90	3	75400	8,81
W5/16	18,00	56	20	6,00	4,90	4	75406	10,52
W3/8	16,00	63	22	7,00	5,50	4	75403	11,62
W7/16	14,00	70	22	8,00	6,20	4	75408	15,23
W1/2	12,00	75	25	9,00	7,00	4	75399	16,81
W9/16	12,00	80	26	11,00	9,00	4	75448	22,69
W5/8	11,00	80	27	12,00	9,00	4	75405	26,28
W3/4	10,00	95	32	14,00	11,00	4	75402	37,41
W7/8	9,00	100	32	18,00	14,50	4	75407	46,45
W1"	8,00	110	36	18,00	14,50	4	75410	57,36
W1" 1/8	7,00	125	40	22,00	18,00	4	76255	85,02
W1" 1/4	7,00	125	40	22,00	18,00	4	76259	102,39
W1" 3/8	6,00	150	50	28,00	22,00	4	76264	127,93
W1" 1/2	6,00	150	50	32,00	24,00	4	76269	154,04
W1" 5/8	5,00	150	56	32,00	24,00	4	76274	200,98
W1" 3/4	5,00	160	58	36,00	29,00	4	76280	247,26
W1" 7/8	4,50	180	65	36,00	29,00	4	76286	319,37
W2"	4,50	180	65	40,00	32,00	4	76291	335,29

Ref. **3114****MACHO RECTO MÁQUINA UNC MANGO REFORZADO**

Reinforced Shank UNC Machine Straight Tap

Taraud Droit Machine UNC Queue Renforcée

Rosca americana unificada cilíndrica
Unified Thread Standard
Filetage unifiéHSSE
5%CoDIN
371Tol.
2B α
 $10^\circ \pm 2$ 

Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
	3.1	7-10
3	3.2	4-7
	5.1	5-8
5	5.2	8-12
	6.1	15-35
6	6.2	14-20
	6.3	12-15

Vc= m/min.

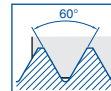
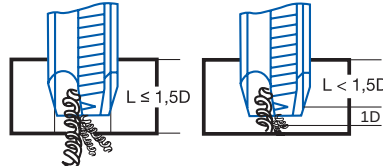
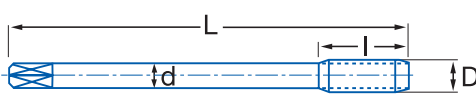
UNC	Hilos Threads	Filets	L mm	l mm	d mm	a mm	Z	N° Art. 5% Co	€
UNC N°5	40		56	11	3,50	2,70	3	75615	23,32
UNC N°6	32		56	13	4,00	3,00	3	75616	22,18
UNC N°8	32		63	13	4,50	3,40	3	75617	22,18
UNC N°10	24		70	16	6,00	4,90	3	75618	23,32
UNC N°12	24		80	17	6,00	4,90	3	75619	24,46
UNC 1/4	20		80	19	7,00	5,50	3	75507	20,69
UNC 5/16	18		90	22	8,00	6,20	3	16693	23,83
UNC 3/8	16		90	22	9,00	7,00	3	75509	27,24

Ref. 3114 bajo demanda / upon request / sur demande

Ref. **3214****MACHO RECTO MÁQUINA UNC**

UNC Machine Straight Tap

Taraud Droit Machine UNC

Rosca americana unificada cilíndrica
Unified Thread Standard
Filetage unifiéHSSE
5%CoDIN
376Tol.
2B α
 $10^\circ \pm 2$ 

Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
	3.1	7-10
3	3.2	4-7
	5.1	5-8
5	5.2	8-12
	6.1	15-35
6	6.2	14-20
	6.3	12-15

Vc= m/min.

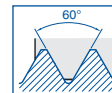
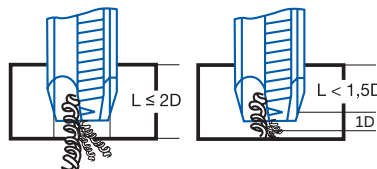
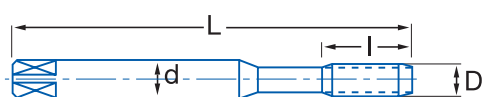
UNC	Hilos Threads	Filets	L mm	l mm	d mm	a mm	Z	N° Art. 5% Co	€
UNC 7/16	14		100	24	8,00	6,20	3	70485	36,72
UNC 1/2	13		110	29	9,00	7,00	3	70486	40,27
UNC 9/16	12		110	30	11,00	9,00	3	70488	54,87
UNC 5/8	11		110	32	12,00	9,00	3	70489	53,25
UNC 3/4	10		125	34	14,00	11,00	3	70491	70,51
UNC 7/8	9		140	34	18,00	14,50	3	70492	92,74
UNC 1"	8		160	38	18,00	14,50	3	70494	121,77
UNC 1 1/8"	7		180	45	22,00	18,00	4	75339	147,68

Ref. 3214 bajo demanda / upon request / sur demande

Ref. **3134****MACHO RECTO MÁQUINA UNC MANGO REFORZADO**

Reinforced Shank UNC Machine Straight Tap

Taraud Droit Machine UNC Queue Renforcée

Rosca americana unificada cilíndrica
Unified Thread Standard
Filetage unifiéHSSE
5%CoDIN
371Tol.
2B α
10-14°

Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
	3.1	7-10
3	3.2	4-7
	5.1	5-8
5	5.2	8-12
	6.1	15-35
6	6.2	14-20
	6.3	12-15

Vc= m/min.

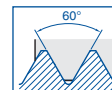
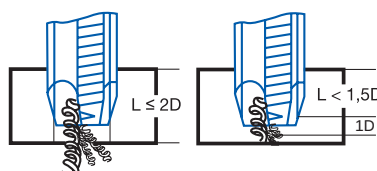
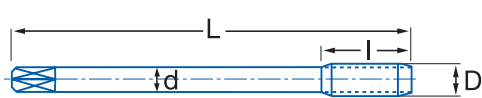
UNC	Hilos Threads Filets	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
UNC N°5	40	56	9	3,50	2,70	3	75627	27,95
UNC N°6	32	56	11	4,00	3,00	3	75628	26,64
UNC N°8	32	63	12	4,50	3,40	3	75629	26,64
UNC N°10	24	70	13	6,00	4,90	3	75630	27,95
UNC N°12	24	80	15	6,00	4,90	3	75631	29,32
UNC 1/4	20	80	15	7,00	5,50	3	75527	22,58
UNC 5/16	18	90	18	8,00	6,20	3	75531	26,32
UNC 3/8	16	90	20	9,00	7,00	3	75529	28,41

Ref. 3134 bajo demanda / upon request / sur demande

Ref. **3234****MACHO RECTO MÁQUINA UNC**

UNC Machine Straight Tap

Taraud Droit Machine UNC

Rosca americana unificada cilíndrica
Unified Thread Standard
Filetage unifiéHSSE
5%CoDIN
376Tol.
2B α
10-14°

Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
	3.1	7-10
3	3.2	4-7
	5.1	5-8
5	5.2	8-12
	6.1	15-35
6	6.2	14-20
	6.3	12-15

Vc= m/min.

UNC	Hilos Threads Filets	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
UNC 7/16	14	100	20	8,00	6,20	3	70521	40,31
UNC 1/2	13	110	23	9,00	7,00	3	70512	44,18
UNC 9/16	12	110	25	11,00	9,00	3	70522	60,17
UNC 5/8	11	110	25	12,00	9,00	3	70516	58,60
UNC 3/4	10	125	30	14,00	11,00	3	70513	77,52
UNC 7/8	9	140	30	18,00	14,50	3	70519	101,93
UNC 1"	8	160	36	18,00	14,50	3	70524	133,90

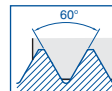
Ref. 3234 bajo demanda / upon request / sur demande

Ref. **3154**

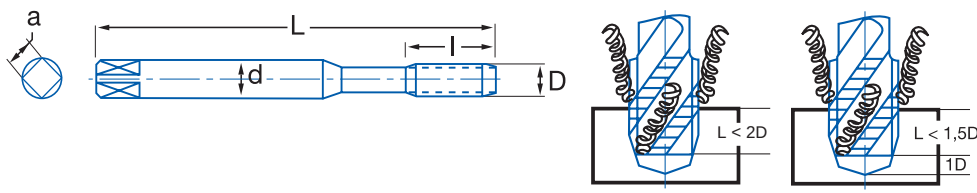
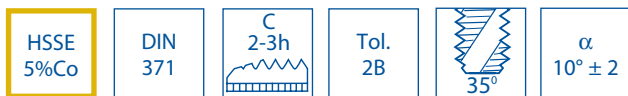
MACHO HELICOIDAL MÁQUINA UNC MANGO REFORZADO

Reinforced Shank UNC Machine Spiral Tap

Taraud Hélicoïdal Machine UNC Queue Renforcée



Rosca americana unificada cilíndrica
Unified Thread Standard
Filetage unifié



Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
	3.1	7-10
3	3.2	4-7
	5.1	5-8
5	5.2	8-12
	6.1	15-35
6	6.2	14-20
	6.3	12-15

Vc= m/min.

UNC	Hilos Threads	Filets	L mm	l mm	d mm	a mm	Z	N° Art. 5% Co	€
UNC N°6	32		56	7	4	3,00	3	75634	30,36
UNC N°10	24		70	8	6	4,90	3	75636	31,85
UNC 1/4	20		80	10	7	5,20	3	75537	30,70
UNC 5/16	18		90	13	8	6,20	3	75541	34,65
UNC 3/8	16		90	15	9	7,00	3	75539	38,99

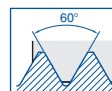
Ref. 3154 bajo demanda / upon request / sur demande

Ref. **3254**

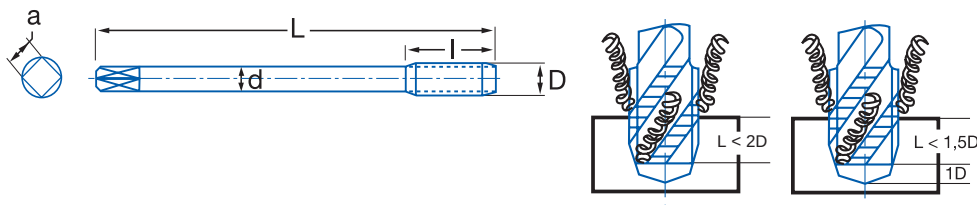
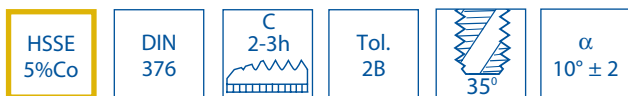
MACHO HELICOIDAL MÁQUINA UNC

UNC Machine Spiral Tap

Taraud Hélicoïdal Machine UNC



Rosca americana unificada cilíndrica
Unified Thread Standard
Filetage unifié



Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
	3.1	7-10
3	3.2	4-7
	5.1	5-8
5	5.2	8-12
	6.1	15-35
6	6.2	14-20
	6.3	12-15

Vc= m/min.

UNC	Hilos Threads	Filets	L mm	l mm	d mm	a mm	Z	N° Art. 5% Co	€
UNC 7/16	14		100	18	8	6,20	3	70507	47,28
UNC 1/2	13		110	20	9	7,00	3	70495	51,69
UNC 9/16	12		110	20	11	9,00	3	70509	70,16
UNC 5/8	11		110	20	12	9,00	3	70500	68,27
UNC 3/4	10		125	25	14	11,00	4	70497	90,40
UNC 7/8	9		140	25	18	14,50	4	70506	141,45
UNC 1"	8		160	30	18	14,50	4	70510	177,45

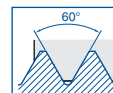
Ref. 3254 bajo demanda / upon request / sur demande

Ref. **3034**

JUEGO MACHOS MANO UNC

UNC Hand Tap Set

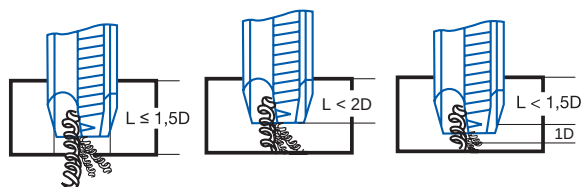
Jeu de Tarauds à Main UNC



Rosca americana unificada cilíndrica
Unified Thread Standard
Filetage unifié

HSS	DIN 352	C 2-3h	DIN 352		Tol. 2B	α 10° ± 2	Nº1 Desbaste Roughing Ebauche	Nº2 Semidesbaste Semiroughing Semi-Ebauche	Nº3 Acabado Finishing - Finition (Ref. 3004)
-----	---------	--------	---------	--	---------	------------------	-------------------------------------	--	--

Grupo 1 Subgr. 1.1	Grupo 5 Subgr. 5.1	Grupo 3 Subgr. 3.1/3.2	Grupo 6 Subgr. 6.1/6.2/6.3
-----------------------	-----------------------	---------------------------	-------------------------------



UNC	Hilos Threads	Filets	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
UNC Nº5	40		40	12	3,50	2,40	3	75594	43,06
UNC Nº6	32		45	14	4,00	3,00	3	75596	43,06
UNC Nº8	32		45	14	4,50	3,40	3	75597	43,06
UNC Nº10	24		50	16	6,00	4,90	3	75598	43,06
UNC Nº12	24		50	18	6,00	4,90	3	75599	43,06
UNC 1/4	20		56	19	6,00	4,90	3	62732	43,06
UNC 5/16	18		56	22	6,00	4,90	3	62744	46,51
UNC 3/8	16		63	24	7,00	5,50	3	62738	52,52
UNC 7/16	14		70	24	8,00	6,20	3	62750	68,48
UNC 1/2	13		75	29	9,00	7,00	3	75115	78,78
UNC 9/16	12		80	30	11,00	9,00	4	62753	93,03
UNC 5/8	11		80	32	12,00	9,00	4	62741	128,30
UNC 3/4	10		95	40	14,00	11,00	4	62735	174,65
UNC 7/8	9		100	40	18,00	14,50	4	62747	215,16
UNC 1"	8		110	50	18,00	14,50	4	62756	290,57

Macho único Ref. 3004 bajo demanda

Single Tap Ref. 3004 upon request

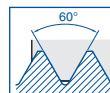
Taraud Ref. 3004 sur demande

Ref. **3224**

MACHO RECTO MÁQUINA UNF-SAE

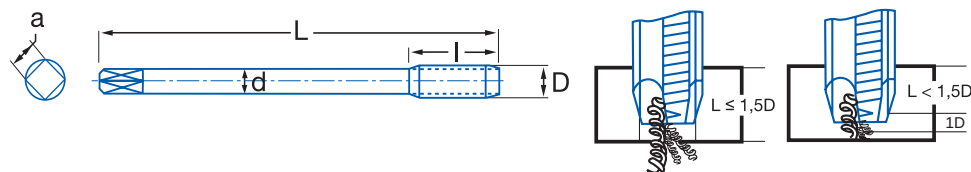
UNF-SAE Machine Straight Tap

Taraud Droit Machine UNF-SAE



Rosca americana unificada cilíndrica
Unified Thread Standard
Filetage unifié

HSSE 5%Co	DIN 374	C 2-3h	Tol. 2B		α $10^\circ \pm 2$
--------------	------------	-----------	------------	--	------------------------------



Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
	3.1	7-10
3	3.2	4-7
	5.1	5-8
5	5.2	8-12
	6.1	15-35
6	6.2	14-20
	6.3	12-15

Vc= m/min.

UNC	Hilos Threads	Filets	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
UNF 5/16	24		90	22	6,00	4,90	3	22576	16,33
UNF 3/8	24		90	20	7,00	5,50	3	20655	17,56
UNF 7/16	20		100	20	8,00	6,20	3	22578	24,14
UNF 1/2	20		100	22	9,00	7,00	3	22579	25,71
UNF 9/16	18		100	22	11,00	9,00	3	70543	31,60
UNF 5/8	18		100	22	12,00	9,00	3	70537	35,55
UNF 3/4	16		110	25	14,00	11,00	3	70534	45,50
UNF 7/8	14		125	25	18,00	14,50	3	70540	57,24

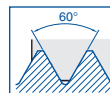
Ref. 3224 bajo demanda / upon request / sur demande

Ref. **3204**

MACHO RECTO MÁQUINA UNF-SAE

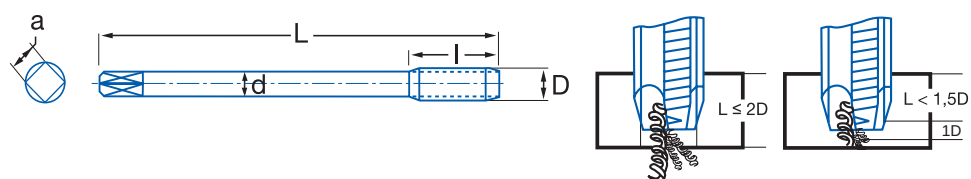
UNF-SAE Machine Straight Tap

Taraud Droit Machine UNF-SAE



Rosca americana unificada cilíndrica
Unified Thread Standard
Filetage unifié

HSSE 5%Co	DIN 374	B 3,5-5h	Tol. 2B		α $10-14^\circ$
--------------	------------	-------------	------------	--	---------------------------



Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
	3.1	7-10
3	3.2	4-7
	5.1	5-8
5	5.2	8-12
	6.1	15-35
6	6.2	14-20
	6.3	12-15

Vc= m/min.



UNC	Hilos Threads	Filets	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
UNF 1/4	28		80	15	4,50	3,40	3	75744	17,29
UNF 5/16	24		90	18	6,00	4,90	3	75751	19,90
UNF 3/8	24		90	20	7,00	5,50	3	62933	20,31
UNF 7/16	20		100	20	8,00	6,20	3	70461	29,39
UNF 1/2	20		100	22	9,00	7,00	3	70465	31,31
UNF 9/16	18		100	22	11,00	9,00	3	70467	38,41
UNF 5/8	18		100	22	12,00	9,00	3	70468	43,24
UNF 3/4	16		100	25	14,00	11,00	3	70470	55,39
UNF 7/8	14		125	24	18,00	14,50	3	59872	61,73
UNF 1"	12		140	26	18,00	14,50	3	59873	80,88

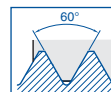
Ref. 3204 bajo demanda / upon request / sur demande

Ref. **3244**

MACHO HELICOIDAL MÁQUINA UNF-SAE

UNF-SAE Machine Spiral Tap

Taraud Hélicoïdal Machine UNF-SAE



Rosca americana unificada cilíndrica
Unified Thread Standard
Filetage unifié

HSSE
5%Co

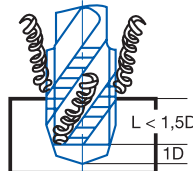
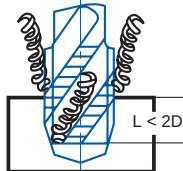
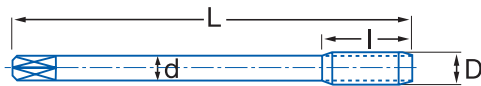
DIN
374



Tol.
2B



α
 $10^\circ \pm 2$



Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
	3.1	7-10
3	3.2	4-7
	5.1	5-8
5	5.2	8-12
	6.1	15-35
6	6.2	14-20
	6.3	12-15

Vc= m/min.

UNC	Hilos Threads	Filets	L mm	l mm	d mm	a mm	Z	N° Art. 5% Co	€
UNF 5/16	24		90	12	6	4,90	3	70459	28,29
UNF 3/8	24		90	13	7	5,50	3	70471	32,54
UNF 7/16	20		100	15	8	6,20	3	70479	42,78
UNF 1/2	20		100	16	9	7,00	3	70474	45,53
UNF 9/16	18		100	17	11	9,00	3	70480	56,36
UNF 5/8	18		100	19	12	9,00	3	70477	62,97
UNF 3/4	16		110	21	14	11,00	4	70476	80,55
UNF 7/8	14		125	23	18	14,50	4	70473	123,21

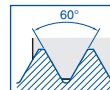
Ref. 3244 bajo demanda / upon request / sur demande

Ref. **3024**

JUEGO MACHOS MANO UNF-SAE

UNF-SAE Hand Tap Set

Jeu de Tarauds à Main UNF-SAE



Rosca americana unificada cilíndrica
Unified Thread Standard
Filetage unifié



Nº1 Desbaste
Roughing
Ebauche

Nº3 Acabado
Finishing - Finition
(Ref. 3014)

Grupo 1
Subgr. 1.1

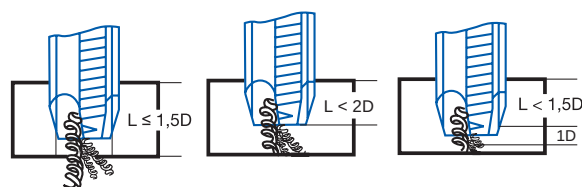
Grupo 5
Subgr. 5.1

Grupo 3
Subgr. 3.1/3.2

Grupo 6
Subgr. 6.1/6.2/6.3

Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
	3.1	7-10
3	3.2	4-7
	5.1	5-8
5	5.2	8-12
	6.1	15-35
6	6.2	14-20
	6.3	12-15

Vc= m/min.



UNC	Hilos Threads Filets	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
UNF Nº5	44	36	11	3,50	2,70	3	75601	34,23
UNF Nº6	40	40	12	4,00	3,00	3	75602	32,81
UNF Nº8	36	40	12	4,50	3,40	3	75603	32,81
UNF Nº10	32	45	14	6,00	4,90	3	75604	32,81
UNF Nº12	28	50	14	6,00	4,90	3	75605	34,23
UNF 1/4	28	50	18	6,00	4,90	3	62462	27,52
UNF 5/16	24	56	22	6,00	4,90	3	62477	30,08
UNF 3/8	24	63	22	7,00	5,50	3	62471	34,04
UNF 7/16	20	63	22	8,00	6,20	3	62483	45,21
UNF 1/2	20	75	24	9,00	7,00	3	62459	46,18
UNF 9/16	18	80	28	11,00	9,00	4	62486	60,22
UNF 5/8	18	80	28	12,00	9,00	4	62474	77,76
UNF 3/4	16	95	32	14,00	11,00	4	62465	104,53
UNF 7/8	14	100	32	18,00	14,50	4	62480	134,28
UNF 1"	12	110	40	18,00	14,50	4	62489	178,09
UNF 1"1/4	12	132	56	22,00	18,00	4	76158	346,87

Macho único Ref. 3014 bajo demanda

Single Tap Ref. 3014 upon request

Taraud Ref. 3014 sur demande

Ref. **3126**

MACHO RECTO MÁQUINA GAS (BSP) INOX MANGO REFORZADO

Reinforced Shank Stainless Gas (BSP) Metric Machine Straight Tap

Taraud Droit Machine Gaz (BSP) Inox Queue Renforcée



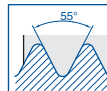
HSSE
5%Co

TIN

DIN
5156



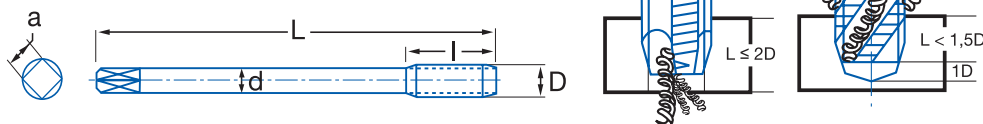
Tol.
2B



Rosca de tubo cilíndrica
Straight Pipe Thread
Filetage tubes cylindriques

Material		Vc
Grupo	Sub.	TIN
2	2.1	8-12
	2.2	5-8

Vc= m/min.



G	Hilos Threads	Filets	L mm	l mm	d mm	a mm	Z	Nº Art. TIN	€
G1/8	28		90	20	7	5,50	3	28636	44,05
G1/4	19		100	22	11	9,00	3	28635	59,36
G3/8	19		100	22	12	9,00	3	28638	70,46
G1/2	14		125	25	16	12,00	3	28634	87,72
G5/8	14		125	25	18	14,50	4	28639	103,49
G3/4	14		140	28	20	16,00	4	28637	139,34
G1"	11		160	30	25	20,00	4	28641	216,19
G1"1/2	11		190	32	36	29,00	6	28642	779,23

Ref. **3136**

MACHO RECTO MÁQUINA GAS (BSP) INOX

Stainless Gas (BSP) Metric Machine Straight Tap

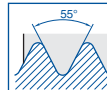
Taraud Droit Machine Gaz (BSP) Inox



HSSE
5%Co

TIN

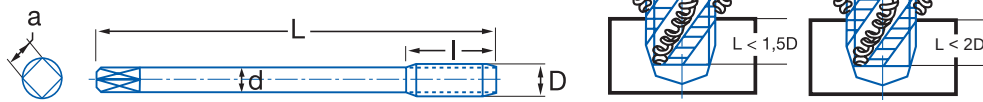
DIN
5156



Rosca de tubo cilíndrica
Straight Pipe Thread
Filetage tubes cylindriques

Material		Vc
Grupo	Sub.	TIN
2	2.1	8-12
	2.2	5-8

Vc= m/min.

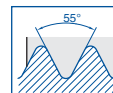
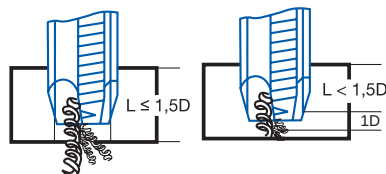
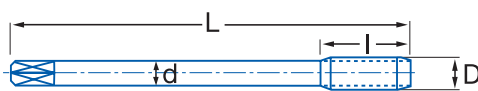


G	Hilos Threads	Filets	L mm	l mm	d mm	a mm	Z	Nº Art. TIN	€
G1/8	28		90	20	7	5,50	3	28647	42,43
G1/4	19		100	22	11	9,00	3	28646	60,89
G3/8	19		100	22	12	9,00	3	28649	72,67
G1/2	14		125	25	16	12,00	4	28645	91,71
G3/4	14		140	28	20	16,00	4	28648	143,55
G1"	11		160	30	25	20,00	5	28652	222,77

Ref. **3116****MACHO RECTO MÁQUINA GAS (BSP)**

Gas (BSP) Machine Straight Tap

Taraud Droit Machine Gaz (BSP)

HSSE
5%CoDIN
5156 α
 $10^\circ \pm 2$ Rosca de tubo cilíndrica
Straight Pipe Thread
Filetage tubes cylindriques

Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
	3.1	7-10
3	3.2	4-7
	5.1	5-8
5	5.2	8-12
	6.1	15-35
6	6.2	14-20
	6.3	12-15

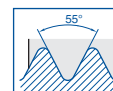
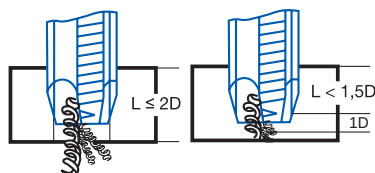
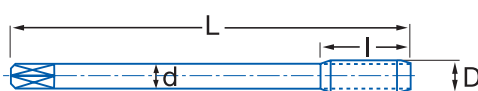
Vc= m/min.

G	Hilos Threads Filets	L mm	I mm	d mm	a mm	Z	Nº Art. 5% Co	€
G1/8	28	90	20	7	5,50	3	75467	28,67
G1/4	19	100	22	11	9,00	3	75466	39,61
G3/8	19	100	22	12	9,00	3	75143	47,41
G1/2	14	125	25	16	12,00	3	75465	59,92
G5/8	14	125	25	18	14,50	4	75469	74,67
G3/4	14	140	28	20	16,00	4	75468	93,83
G7/8	14	150	28	22	18,00	4	77647	137,57
G1"	11	160	30	25	20,00	4	75470	145,57
G1"1/8	11	170	30	28	22,00	4	76197	222,38
G1"1/4	11	170	30	32	24,00	4	76205	260,75
G1"1/2	11	190	32	36	29,00	5	76219	414,14
G1"3/4	11	190	32	40	32,00	5	76227	492,23
G2"	11	220	40	45	35,00	5	76233	627,22

Ref. **3106****MACHO RECTO MÁQUINA GAS (BSP)**

Gas (BSP) Machine Straight Tap

Taraud Droit Machine Gaz (BSP)

HSSE
5%CoDIN
5156 α
 $10^\circ \pm 2$ Rosca de tubo cilíndrica
Straight Pipe Thread
Filetage tubes cylindriques

Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
	3.1	7-10
3	3.2	4-7
	5.1	5-8
5	5.2	8-12
	6.1	15-35
6	6.2	14-20
	6.3	12-15

Vc= m/min.

G	Hilos Threads Filets	L mm	I mm	d mm	a mm	Z	Nº Art. 5% Co	€
G1/8	28	90	20	7	5,50	3	75479	32,65
G1/4	19	100	22	11	9,00	3	62936	43,98
G3/8	19	100	22	12	9,00	3	75481	52,19
G1/2	14	125	25	16	12,00	3	75478	65,87
G3/4	14	140	28	20	16,00	4	75480	103,21
G1"	11	160	30	25	20,00	4	75483	160,13
G1"1/2	11	190	32	36	29,00	6	76221	577,19

Ref. **3156**

MACHO HELICOIDAL MÁQUINA GAS (BSP)

Gas (BSP) Machine Spiral Tap

Taraud Hélicoïdal Machine Gaz (BSP)

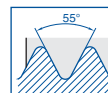


HSSE
5%Co

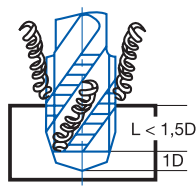
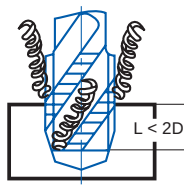
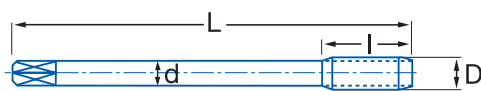
DIN
5156



α
 $10^\circ \pm 2$



Rosca de tubo cilíndrica
Straight Pipe Thread
Filetage tubes cylindriques



Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
	3.1	7-10
3	3.2	4-7
	5.1	5-8
5	5.2	8-12
	6.1	15-35
6	6.2	14-20
	6.3	12-15

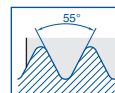
Vc= m/min.

G	Hilos Threads Filets	L mm	I mm	d mm	a mm	Z	Nº Art. 5% Co	€
G1/8	28	90	20	7	5,50	3	63188	34,64
G1/4	19	100	22	11	9,00	3	63185	49,74
G3/8	19	100	22	12	9,00	3	75142	59,35
G1/2	14	125	25	16	12,00	4	75484	74,90
G3/4	14	140	28	20	16,00	4	75485	117,23
G1"	11	160	30	25	20,00	5	75487	181,92

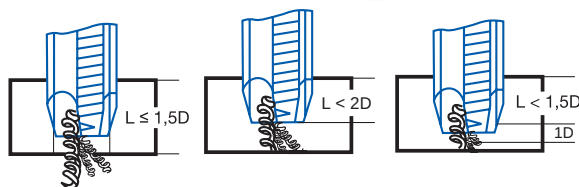
Ref. **3026****JUEGO MACHOS MANO GAS (BSP)**

Gas (BSP) Hand Tap Set

Jeu Tarauds à Main Gaz (BSP)

Rosca de tubo cilíndrica
Straight Pipe Thread
Filetage tubes cylindriques

HSS

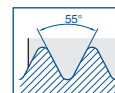
DIN
5157 α
 $10^\circ \pm 2$ N°1 Desbaste
Roughing
EbaucheN°3 Acabado
Finishing
FinitionGrupo 1
Subgr. 1.1Grupo 5
Subgr. 5.1Grupo 3
Subgr.
3.1/3.2Grupo 6
Subgr.
6.1/6.2/6.3

G	Hilos Threads	Filets	L mm	l mm	d mm	 a mm	 Z	N° Art. HSS	€
G1/8	28	63	20	7	5,50	4	62510	23,86	
G1/4	19	70	22	11	9,00	4	62504	33,55	
G3/8	19	70	22	12	9,00	4	62516	42,16	
G1/2	14	80	22	16	12,00	4	62498	59,16	
G5/8	14	80	22	18	14,50	4	62522	75,68	
G3/4	14	90	22	20	16,00	4	62513	92,37	
G7/8	14	90	22	22	18,00	4	62525	123,21	
G1"	11	100	25	25	20,00	4	62528	146,38	
G1" 1/8	11	125	40	28	22,00	4	76195	270,68	
G1" 1/4	11	125	40	32	24,00	6	76203	295,00	
G1" 3/8	11	125	40	36	29,00	6	76211	400,70	
G1" 1/2	11	140	40	36	29,00	6	74823	445,87	
G1" 3/4	11	140	40	40	32,00	6	76225	741,26	
G2"	11	160	40	45	35,00	6	76231	821,70	

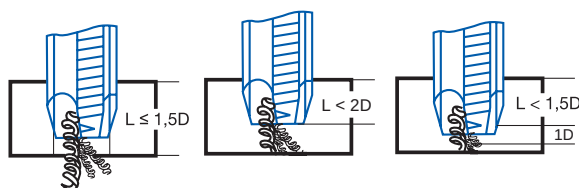
Ref. **3016****MACHO ÚNICO MANO GAS (BSP)**

Gas (BSP) Hand Tap

Taraud à Main Gaz (BSP)

Rosca de tubo cilíndrica
Straight Pipe Thread
Filetage tubes cylindriques

HSS

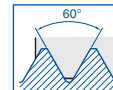
DIN
5157 α
 $10^\circ \pm 2$ N°3 Acabado
Finishing
FinitionGrupo 1
Subgr. 1.1Grupo 5
Subgr. 5.1Grupo 3
Subgr.
3.1/3.2Grupo 6
Subgr.
6.1/6.2/6.3

G	Hilos Threads	Filets	L mm	l mm	d mm		a mm	 Z	Nº Art. HSS	€
G1/8	28	63	20	17	5,50	4	75461	11,94		
G1/4	19	70	22	11	9,00	4	75460	16,79		
G3/8	19	70	22	12	9,00	4	75462	21,09		
G1/2	14	80	22	16	12,00	4	75459	29,57		
G5/8	14	80	22	18	14,50	4	75463	37,84		
G3/4	14	90	22	20	16,00	4	75106	46,17		
G7/8	14	90	22	22	18,00	4	76246	61,60		
G1"	11	100	25	25	20,00	4	75464	73,19		
G1" 1/8	11	125	40	28	22,00	4	76196	135,33		
G1" 1/4	11	125	40	32	24,00	4	76204	147,49		
G1" 3/8	11	125	40	36	29,00	6	76212	200,36		
G1" 1/2	11	140	40	36	29,00	6	76218	222,93		
G1" 3/4	11	140	40	40	32,00	6	76226	370,62		
G2"	11	160	40	45	35,00	6	76232	410,85		

Ref. **3209**

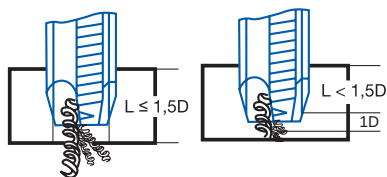
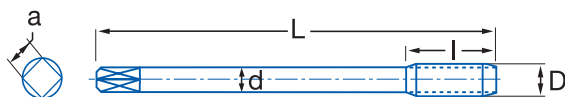
MACHO RECTO MÁQUINA UN

UN Machine Straight Tap
Taraud Droit Machine UN



Rosca americana unificada cilíndrica
Unified Thread Standard
Filetage unifié

HSSE 5%Co	DIN 374	C 2-3h	Tol. 2B		α $10^\circ \pm 2$
--------------	------------	-----------	------------	--	------------------------------



Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
	1.2	7-10
3	3.1	4-7
	3.2	5-8
5	5.1	8-12
	5.2	15-35
6	6.1	14-20
	6.2	12-15
	6.3	

Vc= m/min.

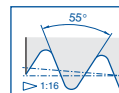
UN	Hilos Threads	Filets	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
UN 1"1/8	8		180	45	22	18,00	4	38311	174,32
UN 1"1/4	8		180	45	22	18,00	4	38312	224,89
UN 1"3/8	8		200	56	28	22,00	4	38313	255,11
UN 1"1/2	8		200	56	28	22,00	5	38314	334,95
UN 1"5/8	8		200	56	28	22,00	5	38315	391,81
UN 1"3/4	8		200	56	28	22,00	5	38316	477,29
UN 2"	8		225	50	40	32,00	5	38317	511,41

Ref. **3019**

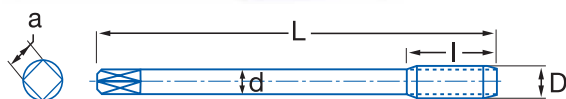
MACHO ÚNICO MANO BSPT (RC)

BSPT (RC) Hand Single Tap

Taraud à Main BSPT (RC)

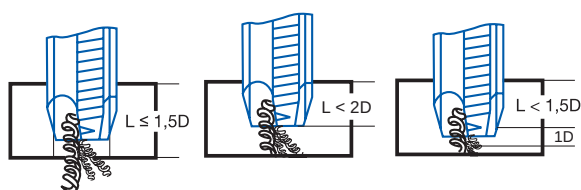


Rosca británica para tubo cónica
British Standard Pipe Taper
Raccord BSPT



HSS	DIN 5157	C 2-3h		α $10^\circ \pm 2$	Nº3 Acabado Finishing Finition
-----	----------	-----------	--	------------------------------	--------------------------------------

Grupo 1 Subgr. 1.1	Grupo 5 Subgr. 5.1	Grupo 3 Subgr. 3.1/3.2	Grupo 6 Subgr. 6.1/6.2/6.3
-----------------------	-----------------------	------------------------------	----------------------------------



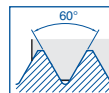
BSPT	Hilos Threads	Filets	L mm	l mm	d mm	a mm	Z	Nº Art. HSS	€
B1/8	28		65	19	7	5,50	3	38254	22,13
B1/4	19		70	25	11	9,00	4	38255	31,20
B3/8	19		75	25	12	9,00	5	38256	43,32
B1/2	14		80	31	16	12,00	5	38257	60,65
B5/8	14		80	36	18	14,00	5	38258	110,99
B3/4	14		85	33	20	17,00	5	76138	102,93
B7/8	14		100	36	22	17,00	6	38259	184,98
B1"	11		110	38	25	21,50	6	38260	156,70

Ref. **3025**

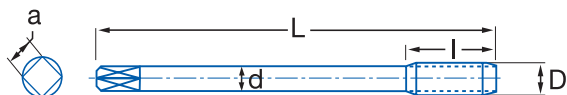
JUEGO MACHOS MANO UNEF

UNEF Hand Tap Set

Jeu de Tarauds à Main UNEF



Rosca americana unificada cilíndrica
Unified Thread Standard
Filetage unifié



HSS

DIN
2181



Tol.
2B



α
 $10^\circ \pm 2$



Nº1 Desbaste
Roughing
Ebauche

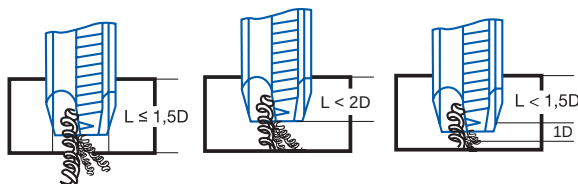
Nº3 Acabado
Finishing
Finition

Grupo 1
Subgr. 1.1

Grupo 5
Subgr. 5.1

Grupo 3
Subgr.
3.1/3.2

Grupo 6
Subgr.
6.1/6.2/6.3



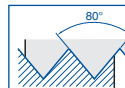
UNEF	Hilos Threads Filets	L mm	l mm	d mm	a mm	Z	Nº Art. HSS	€
UNEF 1/4	32	50	18	6	4,90	3	38269	69,72
UNEF 5/16	32	56	22	6	4,90	3	75857	77,89
UNEF 3/8	32	63	22	7	5,50	3	75863	89,11
UNEF 7/16	28	63	22	8	6,20	4	38270	113,43
UNEF 1/2	28	75	24	9	7,00	4	75876	128,18
UNEF 9/16	24	80	28	11	9,00	4	16853	149,95
UNEF 5/8	24	80	28	12	9,00	4	38271	208,70
UNEF 3/4	20	95	32	14	11,00	4	38272	309,05
UNEF 1"	20	110	40	18	14,50	4	38273	442,21

Ref. **3011**

MACHO ÚNICO MANO PG

PG Hand Single Tap

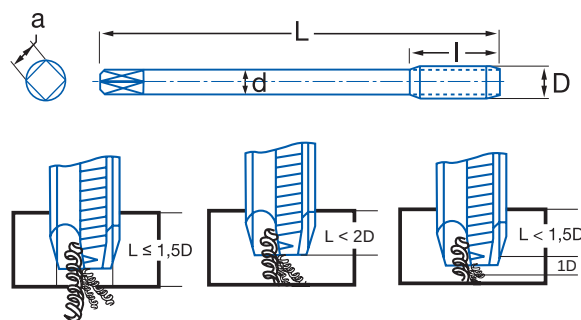
Taraud à Main PG



Rosca para tubos eléctricos en acero
Steel Electric Pipe Thread
Filetage tubes électriques en acier

HSS	DIN 40432	C 2-3h		α $10^\circ \pm 2$	Nº3 Acabado Finishing Finition
-----	-----------	--------	--	------------------------------	--------------------------------------

Grupo 1 Subgr. 1.1	Grupo 5 Subgr. 5.1	Grupo 3 Subgr. 3.1/3.2	Grupo 6 Subgr. 6.1/6.2/6.3
-----------------------	-----------------------	---------------------------	-------------------------------

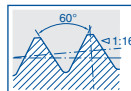


PG	D mm	Hilos Threads	Filets Filets	L mm	l mm	d mm	a mm	Z	Nº Art. HSS	€
PG 07	12,50	20		70	22	9	7,00	4	38291	23,28
PG 09	15,20	18		70	22	12	9,00	4	38292	29,58
PG 11	18,60	18		80	22	14	11,00	4	38293	41,09
PG 13,5	20,40	18		80	22	16	12,00	4	38294	45,06
PG 16	22,50	18		80	22	18	14,50	4	38295	54,10
PG 21	28,30	16		90	22	22	18,00	5	38296	79,57
PG 29	37,00	16		100	25	28	22,00	5	38297	157,97
PG 36	47,00	16		140	40	36	29,00	6	38298	263,88
PG 42	54,00	16		140	40	40	32,00	8	38299	313,38
PG 48	59,30	16		160	40	45	35,00	8	38300	395,20

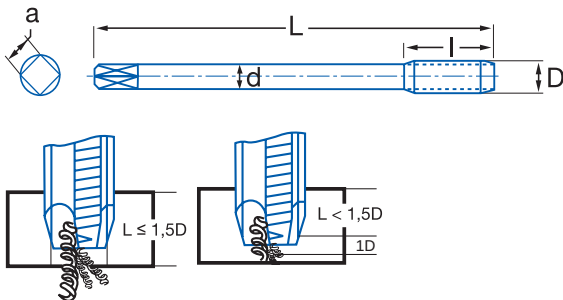
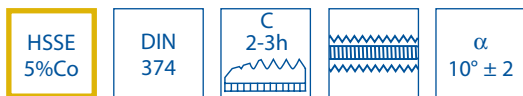
Ref. **3107**

MACHO RECTO MÁQUINA NPT

NPT Machine Straight Tap
Taraud Droit Machine NPT



Rosca americana no estanca para tubo (Briggs)
Briggs Standard Pipe Tap
Taraud pour Tubes Standard Briggs



Material		Vc
Grupo	Sub.	5%Co
1	1.1	6-10
3	3.1	7-10
	3.2	4-7
5	5.1	5-8
	5.2	8-12
6	6.1	15-35
	6.2	14-20
	6.3	12-15

Vc= m/min.

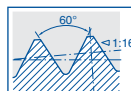
NPT	Hilos Threads	Filets	L mm	l mm	d mm	a mm	Z	Nº Art. 5% Co	€
NPT 1/8	27,00		90	18,00	8	6,20	4	77890	33,31
NPT 1/4	18,00		100	27,00	11	9,00	4	15165	46,71
NPT 3/8	18,00		100	27,00	12	9,00	5	75872	60,02
NPT 1/2	14,00		125	35,00	16	12,00	5	15830	78,14
NPT 3/4	14,00		140	35,00	20	16,00	5	77892	121,06
NPT 1"	11,50		160	44,50	25	20,00	6	17937	157,34
NPT 1 1/2"	11,50		190	44,50	36	29,00	6	17941	338,31
NPT 2"	11,50		225	44,50	45	35,00	8	17946	530,60

Ref. 3107 bajo demanda / upon request / sur demande

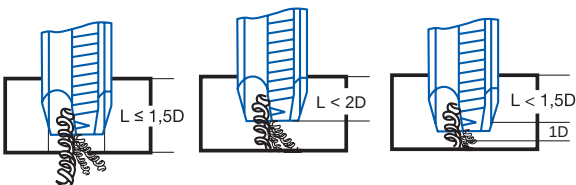
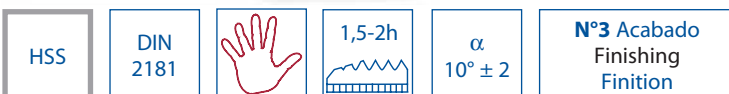
Ref. **3017**

MACHO ÚNICO MANO NPT

NPT Hand Single Tap
Taraud à Main NPT



Rosca americana no estanca para tubo (Briggs)
Briggs Standard Pipe Tap
Taraud pour Tubes Standard Briggs



NPT	Hilos Threads	Filets	L mm	l mm	d mm	a mm	Z	Nº Art. HSS	€
NPT 1/8	27,00		65	19	8	6,20	4	62315	25,74
NPT 1/4	18,00		70	25	11	9,00	4	62309	36,11
NPT 3/8	18,00		75	25	12	9,00	5	62327	49,81
N1/2	14,00		80	31	16	12,00	5	62303	69,71
NPT 3/4	14,00		100	33	20	16,00	5	62321	106,51
NPT 1"	11,50		110	38	25	20,00	6	62330	118,66
NPT 1 1/4"	11,50		125	41	32	24,00	6	17945	194,55
NPT 1 1/2"	11,50		140	42	36	29,00	6	17944	295,59
NPT 2"	11,50		160	44	45	35,00	8	76063	461,43

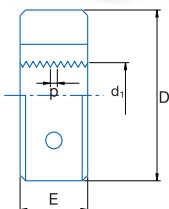
Ref. 3017 bajo demanda / upon request / sur demande

Ref. **3540**

COJINETE MÁQUINA MÉTRICA

Metric Machine Die

Filière à Machine Métrique



HSS

Métrica

DIN
223



Tol.
6g

α
10 - 17°

Chafilán Entrada 1,75h
Chamfer 1,75 threads
Chanfrein 1,75 filets

Rompe Virutas $\geq$ M4
Chip Breaker $\geq$ M4
Brise copeaux $\geq$ M4

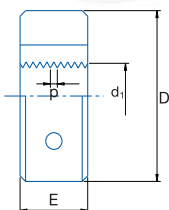
d1	P	D mm	E mm	Nº Art. HSS	€
M2	0,40	16	5	76867	27,72
M2,5	0,45	16	5	76869	27,72
M3	0,50	20	5	77259	23,44
M3,5	0,60	20	5	77260	27,72
M4	0,70	20	5	77263	23,44
M5	0,80	20	5	76882	23,44
M6	1,00	20	7	76888	23,44
M7	1,00	25	9	76891	25,57
M8	1,25	25	9	76895	25,57
M9	1,25	25	9	76898	34,10
M10	1,50	30	11	76903	34,10
M11	1,50	30	11	76907	44,74
M12	1,75	38	14	76912	36,24
M14	2,00	38	14	76922	36,24
M16	2,00	45	18	76930	49,03
M18	2,50	45	18	76938	49,03
M20	2,50	45	18	76946	49,03
M22	2,50	55	22	76954	72,43
M24	3,00	55	22	76961	72,43
M27	3,00	65	25	76972	108,65
M30	3,50	65	25	76979	108,65
M33	3,50	65	26	76986	112,93

Ref. **3536**

COJINETE MANO MÉTRICA INOX

Stainless Metric Hand Die

Filière à Main Métrique Inox



HSSE
5%Co

DIN
22568

Máquina
Machine

Tol.
6g

Métrica

α
10 - 17°

Chafilán Entrada 2,25h
Chamfer 2,25 threads
Chanfrein 2,25 filets

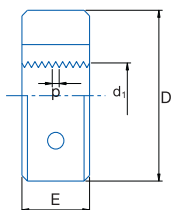
Grupo 2
Subgr.
2.1/2.2

d1	P	D mm	E mm	Nº Art. 5% Co	€
M3	0,50	20	5	34255	18,52
M4	0,70	20	5	34256	18,52
M5	0,80	20	7	34257	18,52
M6	1,00	20	7	34258	21,69
M7	1,00	25	9	55515	23,35
M8	1,25	25	9	34259	23,35
M10	1,50	30	11	34260	27,30
M12	1,75	38	14	34261	40,39
M14	2,00	38	14	34262	40,39
M16	2,00	45	18	34263	56,01
M18	2,50	45	18	34264	56,01
M20	2,50	45	18	34265	56,01

Ref. **3500****COJINETE MANO MÉTRICA**

Metric Hand Die

Filière à Main Metrique



HSS

Métrica

DIN
223Tol.
6g α
10 - 17°

Chafilán Entrada 1,75h
Chamfer 1,75 threads
Chanfrein 1,75 filets

NEW!

Cont. 7 pcs

N° Art.
HSS

€

Cojinetes / Dies / Filières

DIN 223: M3-M4-M5-M6-M8-M10-M12

56518

158,03

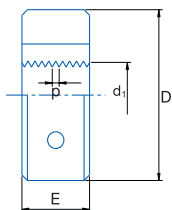
d1	P	D mm	E mm	N° Art. HSS	€
M2	0,40	16	5	63191	23,09
M2,5	0,45	16	5	75001	23,09
M3	0,50	20	5	63194	19,53
M3,5	0,60	20	5	63197	23,09
M4	0,70	20	5	63200	19,53
M4,5	0,75	20	7	77028	21,32
M5	0,80	20	7	63203	19,53
M6	1,00	20	7	63206	19,53
M7	1,00	25	9	63209	21,32
M8	1,25	25	9	63215	21,32
M9	1,25	25	9	63218	28,41
M10	1,50	30	11	63227	28,41
M11	1,50	30	11	63230	37,29
M12	1,75	38	14	63242	30,18
M14	2,00	38	14	63260	30,18
M16	2,00	45	18	63272	40,83

d1	P	D mm	E mm	N° Art. HSS	€
M18	2,50	45	18	63284	40,83
M20	2,50	45	18	63293	40,83
M22	2,50	55	22	63302	60,37
M24	3,00	55	22	63311	60,37
M27	3,00	65	25	63314	90,55
M30	3,50	65	25	63317	90,55
M33	3,50	65	26	77090	94,11
M36	4,00	65	25	77097	94,11
M39	4,00	75	30	77103	143,79
M42	4,50	75	30	77110	143,79
M45	4,50	90	36	77115	225,47
M48	5,00	90	36	77119	225,47
M52	5,00	90	36	77124	225,47

Ref. **3500****COJINETE MANO MÉTRICA FINA**

Metric Fine Hand Die

Filière à Main Metrique Pas Fin



HSS

Métrica
FinaDIN
223Tol.
6g α
10 - 17°

Chafilán Entrada 1,75h
Chamfer 1,75 threads
Chanfrein 1,75 filets

d1	P	D mm	E mm	N° Art. HSS	€
MF4	0,50	20	5	77025	31,74
MF5	0,50	20	5	77029	34,09
MF6	0,50	20	7	77034	34,09
MF6	0,75	20	7	77035	30,61
MF8	0,50	25	9	77038	33,19
MF8	0,75	25	9	77039	33,19
MF8	1,00	25	9	63212	33,19
MF9	1,00	25	9	77041	36,92
MF10	0,75	30	11	77043	51,65
MF10	1,00	30	11	63221	40,60
MF10	1,25	30	11	63224	44,05
MF11	1,00	30	11	77045	50,51
MF11	1,25	30	11	77046	55,09
MF12	1,00	38	10	63233	51,36
MF12	1,25	38	10	63236	51,36
MF12	1,50	38	10	63239	45,91
MF14	1,00	38	10	63251	52,70
MF14	1,25	38	10	63254	56,12

d1	P	D mm	E mm	N° Art. HSS	€
MF14	1,50	38	10	63257	47,99
MF15	1,50	38	10	77053	65,78
MF16	1,00	45	14	63266	71,29
MF16	1,50	45	14	63269	65,92
MF18	1,00	45	14	77057	74,54
MF18	1,50	45	14	63278	65,92
MF18	2,00	45	14	63281	74,54
MF20	1,00	45	14	77061	74,21
MF20	1,50	45	14	63287	68,03
MF20	2,00	45	14	63290	74,75
MF22	1,00	55	16	77066	101,35
MF22	1,50	55	16	63296	87,21
MF22	2,00	55	16	63299	97,00
MF24	1,00	55	16	77069	97,00
MF24	1,50	55	16	77070	87,21
MF24	2,00	55	16	63308	97,01
MF25	1,50	55	16	77073	118,52
MF26	1,50	55	16	77076	119,90

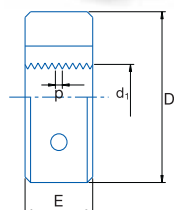
d1	P	D mm	E mm	N° Art. HSS	€
MF27	1,50	65	18	77656	131,84
MF27	2,00	65	18	77079	143,42
MF30	1,50	65	18	77083	131,82
MF30	2,00	65	18	75310	147,22
MF32	1,50	65	18	77085	139,32
MF33	1,50	65	18	77088	131,84
MF35	1,50	65	18	77093	142,68
MF36	1,50	65	18	75311	135,05
MF36	2,00	65	18	77095	143,56
MF40	1,50	75	20	77104	213,07
MF42	2,00	75	20	77108	313,18
MF45	1,50	90	22	77112	280,18
MF50	1,50	90	22	77120	280,18
MF52	1,50	90	22	77121	280,18

Ref. **3501**

COJINETE MANO MÉTRICA CORTE IZQUIERDA

Left Cutting Metric Hand Die

Filière à Main Métrique Coupe à Gauche



HSS

Métrica

DIN
223



Tol.
6g

α
10 - 17°



NEW!

Chaflán Entrada 1,75h
Chamfer 1,75 threads
Chanfrein 1,75 filets

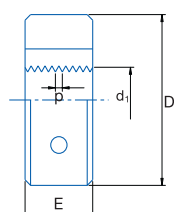
d1	P	D mm	E mm	Nº Art. HSS	€
M2	0,40	16,00	5	59875	46,18
M3	0,50	25	5	23318	39,05
M4	0,70	25	5	23319	39,05
M5	0,80	25	7	23320	39,05
M6	1,00	50	7	23321	39,05
M7	1,00	25	9	11007	42,64
M8	1,00	25	9	10941	66,38
M8	1,25	25	9	23322	42,61
M10	1,50	38	11	23323	56,82
M11	1,50	30	11	59876	74,58
M12	1,75	38	14	23324	60,37
M14	2,00	38	14	23325	60,37
M16	2,00	45	18	23326	81,66
M18	2,50	45	18	23327	81,66
M20	2,50	45	18	23328	81,66

Ref. **3510**

COJINETE MANO MÉTRICA ISO

ISO Metric Hand Die

Filière à Main Metrique ISO



HSS

ISO
529



Tol.
6g

α
10 - 17°

Forma
A
Form

d1	P	D mm	E mm	Nº Art. HSS	€
M3	0,50	25,4	9,5	38230	7,53
M4	0,70	25,4	9,5	38231	7,53
M5	0,80	25,4	9,5	38232	7,53
M6	1,00	25,4	9,5	38233	7,53
M7	1,00	25,4	9,5	38234	8,84
M8	1,25	25,4	9,5	38235	7,96
M10	1,50	25,4	9,5	38237	10,14
M12	1,75	25,4	9,5	38238	10,14

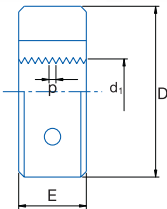
d1	P	D mm	E mm	Nº Art. HSS	€
M8	1,25	38,1	12,7	38239	23,59
M10	1,50	38,1	12,7	38240	24,57
M12	1,75	38,1	12,7	38242	24,57
M14	2,00	38,1	12,7	38243	24,57
M16	2,00	38,1	12,7	38244	24,57
M18	2,50	38,1	12,7	38245	36,36
M20	2,50	38,1	12,7	38246	36,36

d1	P	D mm	E mm	Nº Art. HSS	€
M18	2,50	50,8	15,9	38250	44,22
M20	2,50	50,8	15,9	38251	44,22
M22	2,50	50,8	15,9	38252	44,22
M24	3,00	50,8	15,9	38253	46,18

Ref. **3502**

COJINETE MANO WHITWORTH

Whitworth Hand Die
Filière à Main Whitworth



HSS

W

DIN
223



α
10 - 17°

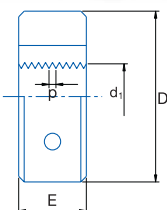
Chaflán Entrada 1,75h
Chamfer 1,75 threads
Chanfrein 1,75 filets

d1	P	D mm	E mm	N° Art. HSS	€
W3/32	48	16	5	63344	36,29
W1/8	40	20	5	63329	29,31
W5/32	32	20	7	63356	30,54
W3/16	24	20	7	63341	30,54
W7/32	24	20	7	63365	40,04
W1/4	20	20	7	63323	29,31
W5/16	18	25	9	63350	30,54
W3/8	16	30	11	63335	44,24
W7/16	14	30	11	63362	44,24
W1/2	12	38	14	63320	44,24
W9/16	12	38	14	63368	52,97
W5/8	11	45	18	63347	64,34
W3/4	10	45	18	63332	64,34
W7/8	9	55	22	63359	94,62
W1"	8	55	22	63374	94,62
W1" 1/8	7	65	25	63383	148,93

Ref. **3534**

COJINETE MANO UNC

UNC Hand Die
Filière à Main UNC



HSS

UNC

DIN
223



Tol.
2A

α
10 - 17°

Chaflán Entrada 1,75h
Chamfer 1,75 threads
Chanfrein 1,75 filets

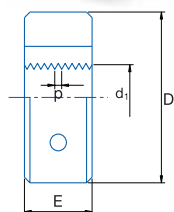
d1	P	D mm	E mm	N° Art. HSS	€
UNC 1/4	20	20	7	75557	34,17
UNC 5/16	18	25	9	75561	35,75
UNC 3/8	16	30	11	75559	52,63
UNC 7/16	14	30	11	75563	52,63
UNC 1/2	13	38	14	75556	54,19
UNC 9/16	12	38	14	75564	56,70
UNC 5/8	11	45	18	75560	74,44
UNC 3/4	10	45	18	75558	74,44
UNC 7/8	9	55	22	75562	97,31
UNC 1"	8	55	22	75565	97,31

Ref. **3504**

COJINETE MANO UNF-SAE

UNF-SAE Hand Die

Filière à Main UNF-SAE



HSS

DIN
223



UNF-
SAE

Tol.
2A

α
10 - 17°

Chaflán Entrada 1,75h
Chamfer 1,75 threads
Chanfrein 1,75 filets

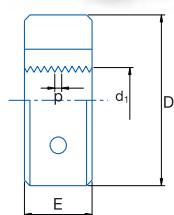
d1	P	D mm	E mm	N° Art. HSS	€
UNF N°4	48	16	5	75688	32,67
UNF N°5	44	20	5	75689	32,67
UNF N°6	40	20	7	75690	32,67
UNF N°8	36	20	7	75691	32,67
UNF N°10	32	20	7	75692	32,67
UNF N°12	28	20	7	75693	32,67
UNF 1/4	28	20	7	63422	32,67
UNF 5/16	24	25	9	63434	35,75
UNF 3/8	24	30	11	63428	50,16
UNF 7/16	20	30	11	63440	50,16
UNF 1/2	20	38	10	63419	52,63
UNF 9/16	18	38	10	75747	56,70
UNF 5/8	18	45	14	63431	72,49
UNF 3/4	16	45	14	63425	72,49
UNF 7/8	14	55	16	63437	97,31

Ref. **3506**

COJINETE MANO GAS (BSP)

Gas (BSP) Hand Die

Filière à Main Gas (BSP)



HSS

Gas
(BSP)

DIN
24231



Tol.
A

α
10 - 17°

Chaflán Entrada 1,75h
Chamfer 1,75 threads
Chanfrein 1,75 filets

d1	P	D mm	E mm	N° Art. HSS	€
G1/8	28	30	11	63461	38,70
G1/4	19	38	10	63455	38,70
G3/8	19	45	14	63467	50,07
G1/2	14	45	14	63452	50,07
G3/4	14	55	16	63464	103,76
G5/8	14	55	16	75496	76,39
G7/8	14	65	18	76252	108,61
G1"	11	65	18	63470	108,61
G1" 1/8	11	75	20	76202	198,94
G1" 1/4	11	75	20	76210	198,94

Ref. **3519**

COJINETE MANO BSPT (RC)

BSPT (RC) Hand Die

Filière à Main BSPT (RC)



HSS

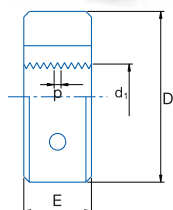
BSPT
(RC)

DIN
24231



α
10 - 17°

Chaflán Entrada 1,75h
Chamfer 1,75 threads
Chanfrein 1,75 filets



d1	P	D mm	E mm	N° Art. HSS	€
BSPT 1/8	28	30	11	38263	70,78
BSPT 1/4	19	38	14	38262	70,78
BSPT 3/8	19	45	18	38265	92,19
BSPT 1/2	14	55	22	38261	92,19
BSPT 5/8	14	55	22	38266	177,65
BSPT 3/4	14	55	22	38264	174,08
BSPT 7/8	14	65	22	38267	231,86
BSPT 1"	11	65	22	38268	185,49

Ref. **3505**

COJINETE MANO UNEF

UNEF Hand Die

Filière à Main UNEF



HSS

UNEF

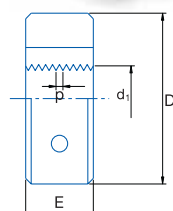
DIN
22568



Tol.
2A

α
10 - 17°

Chaflán Entrada 1,75h
Chamfer 1,75 threads
Chanfrein 1,75 filets

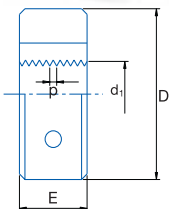


d1	P	D mm	E mm	N° Art. HSS	€
UNEF 1/4	32	20	7	38275	72,37
UNEF 5/16	32	25	9	38279	72,37
UNEF 3/8	32	30	11	38277	112,36
UNEF 7/16	28	30	11	38280	112,36
UNEF 1/2	28	38	10	38274	112,36
UNEF 9/16	24	38	10	15217	112,36
UNEF 5/8	24	45	14	38278	180,08
UNEF 3/4	20	45	14	38276	180,08
UNEF 1"	20	55	16	38281	220,10

Ref. **3509**

COJINETE MANO PG

PG Hand Die
Filière à Main PG



HSS

PG

DIN
40434



α
10 - 17°

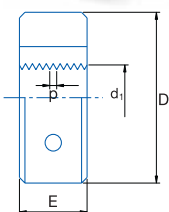
Chafilán Entrada 1,75h
Chamfer 1,75 threads
Chanfrein 1,75 filets

PG	d1 mm	P	D mm	E mm	N° Art. HSS	€
PG 07	12,50	20	38	10	38301	42,98
PG 09	15,20	18	45	14	38302	42,98
PG 11	18,60	18	45	14	38303	53,84
PG 13,50	20,40	18	45	14	38304	53,84
PG 16	22,50	18	55	16	38305	69,41
PG 21	28,30	16	65	18	38306	98,66
PG 29	37,00	16	65	18	38307	98,66
PG 36	47,00	16	90	22	38308	252,84
PG 42	57,00	16	105	22	38309	252,84
PG 48	59,30	16	105	22	38310	335,32

Ref. **3507**

COJINETE MANO NPT

NPT Hand Die
Filière à Main NPT



HSS

NPT

DIN
22568



α
10 - 17°

Chafilán Entrada 1,75h
Chamfer 1,75 threads
Chanfrein 1,75 filets

d1	P	D mm	E mm	N° Art. HSS	€
NPT 1/8	27,00	30	11	76043	60,77
NPT 1/4	18,00	38	14	77707	60,77
NPT 3/8	18,00	45	18	22395	79,22
NPT 1/2	14,00	45	18	45894	79,22
NPT 3/4	14,00	55	22	76052	144,87
NPT 1"	11,50	65	25	63476	174,20
NPT 1"1/4	11,50	75	26	22456	216,44
NPT 1"1/2	11,50	90	27	22460	301,96
NPT 2"	11,50	105	28	22475	420,39

Ref. 3507 bajo demanda / upon request / sur demande

Ref. **3185**

MACHO MÁQUINA TUERCAS

Screw Machine Tap

Taraud Machine Filières pour Boulons



HSSE
5%Co

DIN
357

Tol.
6H*

*Otras Tol. bajo demanda
*Other Tol. upon request
*Autres Tol. sur demande

Entrada Cónica 18h
Tapered Chamfer 18 threads
Entrée conique 18f



M	P	L mm	I mm	a mm	Z	Nº Art. 5% Co	€
M3	0,50	70	22		3	16332	18,32
M4	0,70	90	25	2,10	3	16333	18,32
M5	0,80	100	28	2,70	3	16334	18,32
M6	1,00	11	32	3,50	3	16335	18,32
M7	1,00	110	36	4,30	3	16336	23,30
M8	1,25	125	40	4,90	3	16337	21,65
M10	1,50	140	45	5,50	3	16338	25,33
M12	1,75	180	50	7,00	3	16339	41,49
M14	2,00	200	56	9,00	3	16340	51,03
M16	2,00	200	63	9,00	3	16342	65,60
M18	2,50	220	63	11,00	3	59877	70,62
M20	2,50	250	70	12,00	3	16343	97,73
M22	2,50	280	80	14,50	3	59878	104,75
M24	3,00	280	80	14,50	3	59879	123,56

Ref. **3099**

BROCA-MACHO

Tap Drill

Foret Taraudeur



HSSE
5%Co

Tol.
6H

Broca-Macho
Tap Drill
Foret Taraudeur

M	P	D Broca Drill Foret mm	L mm	I Broca Drill Foret mm	I Macho Tap Taraud mm	d mm	a mm	Nº Art. 5% Co	€
M3	0,50	2,50	56	16,00	11,00	3,00	2,40	63294	27,97
M4	0,70	3,30	63	18,00	14,00	4,00	3,00	63297	27,97
M5	0,80	4,20	71	20,00	18,00	5,00	3,80	63300	31,32
M6	1,00	5,00	80	22,00	22,00	6,00	4,90	63303	42,33
M8	1,25	6,80	95	26,00	25,00	8,00	6,20	63306	53,30
M10	1,50	8,50	106	30,00	31,00	10,00	8,00	63309	72,44
M12	1,75	10,20	115	32,00	35,00	12,00	9,00	63312	76,84

Ref. **3415**

ACEITE ROSCADO

Threading Oil

Lubrifiant Taraudage

Viscosidad a 40°C
Viscosity / Viscosité:
33 cSt

Test Reichert 1,5 Kg:
< 4 mm²

No Soluble
Not Soluble
Non Soluble



Cont. L	Nº Art.	€	Cont. L	Nº Art.	€	Cont. L	Nº Art.	€	Cont. L	Nº Art.	€
0,50	21541	10,92	5,00	21597	87,31	0,40	14923	13,90	12x0,40	23102	158,41
			20,00	59403	300,43						

Ref. **3191**

GIRA-MACHOS

Tap Wrench
Porte-Taraud



DIN
1814

Mod.	Uso Use Usage	L mm	Cuadradillo Square / Carré mm	Nº Art.	€
000	M1-M8	125	2,10-4,90	69826	11,51
010	M1-M10	180	2,10-5,50	69828	12,56
015	M1-M12	200	2,10-7,00	69829	13,71
020	M4-M12	280	3,40-7,00	69831	16,80
030	M5-M20	375	4,90-12,00	69832	24,50
040	M11-M27	500	6,20-16,00	69834	40,63
050	M13-M32	750	7,00-20,00	69835	80,42
060	M25-M52	1250	16,00-32,00	26694	161,72

Nº 060 Acero / Steel / Acier

Ref. **3912**

GIRA-MACHOS CRIQUÉ

Tap Wrench
Porte-Taraud



"T" +
Criqué

NEW!

Mod.	d mm	L mm	Cap. mm	Nº Art.	€
01	M3-M10	85	2,4-5,5	25340	20,45
02	M5-M12	100	4,5-8,0	25341	27,78
10	M3-M10	250	2,4-5,5	25342	32,25
20	M5-M12	300	4,5-8,0	25343	38,48

Ref. **3900**

GALGA

Pitch Gauge
Jauge



Cap. M	Cap. W	Nº Art.	€
0,25-6,00	4G-62G	44612	7,20

NEW!

Ref. **3194**

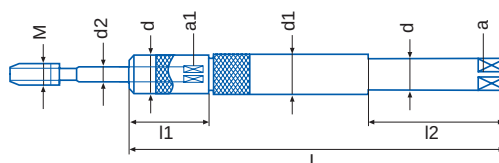
ALARGADOR MACHOS MÁQUINA

Machine Tap Extension
Extension Tarauds Machine



CNC

Apto para escariadores
Suitable for Reamers
Conseillé pour Alésoirs



M	M	d2	a1	d1	d	a	L	l1	N° Art.	€
371	376	mm	mm	mm	mm	mm	mm	mm		
M2-M2,6	M4	2,80	2,10	6,10	6	4,90	130	22	10784	148,82
M3	M4,5-M5	3,50	2,70	7,50	6	4,90	130	23	11299	148,82
M4	M6	4,50	3,40	8,40	6	4,90	130	23	11794	171,15
M4,5-M6	M8	6,00	4,90	12,10	7	5,50	130	26	11832	171,15
M7	M9-M10	7,00	5,50	12,10	7	5,50	130	26	11875	174,57
M8	M11	8,00	6,20	13,00	8	6,20	130	30	12092	176,31
M9	M12	9,00	7,00	15,00	9	7,00	130	31	12104	176,31
M10		10,00	8,00	15,00	10	8,00	130	33	12107	176,31
	M14	11,00	9,00	18,00	11	9,00	130	36	12113	190,42
	M16	12,00	9,00	18,00	12	9,00	130	36	12116	190,42
M2-M2,6	M4	2,80	2,10	6,10	6	4,90	230	22	12122	161,73
M3	M4,5-M5	3,50	2,70	7,50	6	4,90	230	23	12125	161,73
M4	M6	4,50	3,40	8,40	6	4,90	230	23	12128	185,99
M4,5-M6	M8	6,00	4,90	12,10	7	5,50	230	26	12137	185,99
M7	M9-M10	7,00	5,50	12,10	7	5,50	230	26	12140	189,71
M8	M11	8,00	6,20	13,00	8	6,20	230	30	12143	191,61
M9	M12	9,00	7,00	15,00	9	7,00	230	31	12174	191,61
M10		10,00	8,00	15,00	10	8,00	230	33	12177	191,61
	M14	11,00	9,00	18,00	11	9,00	230	36	12180	206,93
	M16	12,00	9,00	18,00	12	9,00	230	36	12183	206,93

Ref. **3190**

ALARGADOR MACHOS MANO

Hand Tap Extension
Extension Tarauds à Main



DIN
377

M	W	G	L	l	a	N° Art.	€
			mm	mm	mm		
M1-M2,6	1/16-3/32		60	60	2,10	12994	6,78
M3	1/8		80	60	2,70	12997	6,78
M3,5			90	60	3,00	12999	6,78
M4	5/32		95	60	3,40	13003	7,23
M4,5	3/16		100	60	3,80	13006	7,23
M5-M8	7/32-5/16		110	60	4,90	13024	7,74
M9-M10	3/8	1/8	115	60	5,50	13026	7,87
M11	7/16		120	60	6,20	13009	9,83
M12	1/2		125	60	7,00	13012	10,27
M13-M16	9/16-5/8	1/4-3/8	135	60	9,00	13030	12,44
M18	11/16-3/4		150	60	11,00	13015	16,32
M20	13/16	1/2	155	60	12,00	12448	17,35
M22-M26	7/8-15/16	5/8	175	60	14,50	12451	29,40
M27-M28	1"	3/4	185	60	16,00	12457	31,75
M30-M32	1"1/8	7/8	195	60	18,00	12459	37,61
M33	1"1/4	1	210	60	20,00	12463	43,30
M34-M38	1"3/8	1"1/8	220	60	22,00	12465	58,38
M39-M42	1"1/2-1"5/8	1"1/4	235	60	24,00	12469	73,51
M45-M50	1"3/4-1"7/8	1"3/8-2"	265	60	29,00	12472	111,95
M52	2"	2"1/4	285	60	32,00	12475	145,22

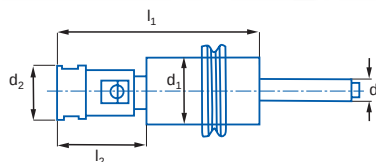
Ref. **3193**

PORTA-MACHOS COMPENSACION RADIAL/AXIAL*

Radial/Axial Compensation Tap Holder*

Porte-Tarauds Compensation Rayon / Axe*

NEW!



Cap.	d1 mm	d2 mm	d mm	l1 mm	l2 mm	N° Art.	€
M3-M12	45	29	20	96	44	20031	1325,00

Ref. 3193 bajo demanda / upon request / sur demande



*Para evitar la rotura de machos en máquinas automáticas

*For avoiding broken taps in automatic machines

*Pour éviter les ruptures de tarauds sur machines automatiques

Ref. **3195**

ADAPTADOR PORTA-MACHOS

Tap Holder Adaptor

Adaptateur Porte-Tarauds

NEW!



M 371	M 376	d2 mm	a1 mm	N° Art.	€
M3	M5	3,50	2,70	20183	129,57
M4	M6	4,50	3,40	20185	129,57
M4,5-M6	M8	6,00	4,90	20186	129,57
M8	M11	8,00	6,20	20742	129,57
	M12	9,00	7,00	21231	129,57
M10		10,00	8,00	21253	129,57

Ref. 3195 bajo demanda / upon request / sur demande

Ref. **3181****PORTA-COJINETES**Die Holder
Porte FilièresDIN
225

Mod.	D mm	E mm	L mm	M/MF	W	G	N° Art.	€
000	16	5	160	M1-M2,6	W1/16-W3/32		69792	7,03
010	20	5	200	M3-M4	W1/8-W5/32		69790	8,00
020	20	7	200	M4,5-M6	W3/16-W1/4		69798	8,00
030	25	9	224	M7-M9	W5/16	G1/16	69799	9,17
040	30	11	280	M10-M11	W3/8-W7/16	G1/8	69811	11,95
050	38	14	315	M12-M15	W1/2-W9/16		69813	14,45
060	38	10	315	MF12-MF15		G1/4	69814	14,45
070	45	18	450	M16-M20	W5/8-W3/4		69816	17,88
080	45	14	450	MF16-MF20		G3/8-G1/2	69817	17,88
090	55	22	560	M22-M24	W7/8-W1		69819	24,03
100	55	16	560	MF21-MF26		G5/8-G3/4	69795	24,03
110	65	25	630	M27-M36	W1 1/8 - W1 3/8		69796	33,70
120	65	18	630	MF27-MF36		G7/8-G1	30484	33,70
130	75	30	920	M39-M42	W1 1/2 - W1 5/8		32600	110,07
140	75	20	920	MF38-MF42		G1 1/8 - G1 1/4	43515	110,07
150	90	36	950	M45-M52	W1 3/4 - W2		43516	160,40
160	90	22	950	MF45-MF52		G1 1/2	43517	160,40

Ref. **3184****PORTA-COJINETES ISO 529**ISO 529 Die Holder
Porte Filières ISO 529DIN
225**NEW!**

D mm	E mm	M	W	N° Art.	€
25,40	9,50	M3-M12	W1/8-W1/2	43317	9,13
38,10	12,70	M8-M20	W5/16-W3/4	43318	13,64
50,80	15,90	M18-M24	W11/16-W1	43319	19,71

Ref. **3409****EXTRACTOR TORNILLOS**Screw Extractor
Extracteur Vis**INSTRUCCIONES USO:**

- 1- Taladrar un Agujero Central con la Broca apropiada
- 2- Girar el Extractor hacia la izquierda hasta extraer el Tornillo

DIRECTIONS FOR USE:

- 1- Drill a Central Hole using a proper Drill
- 2- Turn Left the Extractor until the Screw is out

INSTRUCTIONS D'EMPLOI:

- 1- Percez un trou central avec le foret convenable
- 2- Tournez l'Extracteur à gauche jusqu'à sortir la vis



Mod.	P/ Tornillo F/ Screw P/ Vis	P/ Tornillo F/ Screw P/ Vis	D mm	a mm	N° Art.	€
010	M3-M6	1/8-1/4	2,50	2,70	40639	2,73
020	M6-M8	1/4-5/16	3,00	3,80	40641	2,73
030	M8-M11	5/16-7/16	4,50	4,90	40642	2,86
040	M11-M14	7/16-9/16	6,00	7,00	40644	4,03
050	M15-M18	9/16-3/4	8,00	9,00	40645	6,31
060	M18-M24	3/4-1	11,00	12,00	40647	10,03

P/ Tornillo F/ Screw P/ Vis	P/ Tornillo F/ Screw P/ Vis	N° Art.	€
M3-M24	1/8-1	75905	18,66