

CODE	ØD	l1	n° fil. threads	P	d	L	Z	Ø Preforo Prehole	Tipo filetto Thread type
Y20000045075	4,5	12	16	0,75	6,0	50	3	5,2	MF6
Y20000045100	4,5	12	12	1,00	6,0	50	3	5,0-6,0	M6,M7
Y20000060075	6,0	15	20	0,75	6,0	50	3	7,2	MF8
Y20000060100	6,0	15	15	1,00	6,0	50	3	7	MF8
Y20000060125	6,0	15	12	1,25	6,0	50	3	6,8-7,8-8,8	M8,M9,MF10
Y20000080075	8,0	20	26	0,75	8,0	60	3	9,2-11,2	MF10,MF12
Y20000080100	8,0	20	20	1,00	8,0	60	3	9	MF10
Y20000080125	8,0	20	16	1,25	8,0	60	3	10,8	MF12
Y20000080150	8,0	20	13	1,50	8,0	60	3	8,5-9,5-10,5	M10,M11,MF12
Y20000080175	8,0	20	11	1,75	8,0	60	3	10,2	M12
Y20000100100	10,0	25	25	1,00	10,0	70	4	11	MF12
Y20000100125	10,0	25	20	1,25	10,0	70	4	12,8	MF14
Y20000100150	10,0	25	16	1,50	10,0	70	4	12,5	MF14
Y20000100200	10,0	25	12	2,00	10,0	70	4	12	M14
Y20000120100	12,0	30	30	1,00	12,0	75	4	13	MF14
Y20000120150	12,0	30	20	1,50	12,0	75	4	14,5	MF16
Y20000120200	12,0	30	15	2,00	12,0	75	4	14	M16
Y20000140100	14,0	35	35	1,00	14,0	85	4	15	MF16
Y20000140150	14,0	35	23	1,50	14,0	85	4	16,5	MF18
Y20000140200	14,0	35	17	2,00	14,0	85	4	16	MF18
Y20000140250	14,0	35	14	2,50	14,0	85	4	15,5	M18
Y20000160100	16,0	40	40	1,00	16,0	100	5	17-19	MF18,MF20
Y20000160150	16,0	40	26	1,50	16,0	100	5	18,5-20,5	MF20,MF22
Y20000160200	16,0	40	20	2,00	16,0	100	5	18-20	MF20,MF22
Y20000160250	16,0	40	16	2,50	16,0	100	5	17,5-19,5	M20,M22

Acciai non legati a basso tenore di carbonio Steel non-alloyed, low carbon steel	Acciai non legati bonificati Steel non-alloyed, hardening & quenching steel	Acciai per utensili altamente legati Tools steel high alloyed	Acciai temprati Hardened Steels ~40HRC	Acciai inossidabili ferritici e martensitici Stainless steel, ferritic steel, martensitic steel	Acciai inossidabili austenitici Stainless steel, austenitic steel	Ghisa Ghisa duttile Cast iron, Ductile cast iron	Ghisa sferoidale Spheroidal graphite iron	Leghe di alluminio Aluminium alloys	Leghe di rame Copper alloys	Materiali non ferrosi Non-ferrous material	Leghe di titanio Titanium alloys	Leghe resistenti al calore Heat-resisting alloy
○	○	○	○	○	○	○	○	○	○	○		

CODE	ØD	I1	n° fil. threads	P	d	L	Z	Ø Preforo Prehole	Tipo filetto Thread type
Y20000200100	20,0	40	40	1,00	20,0	100	5	21>	MF22>
Y20000200150	20,0	40	26	1,50	20,0	100	5	22,5>	MF24>
Y20000200200	20,0	40	20	2,00	20,0	100	5	22>	MF24>
Y20000200300	20,0	40	13	3,00	20,0	100	5	21>	MF24>

TM  
THREADS

TAPS

REAMERS

Y1200

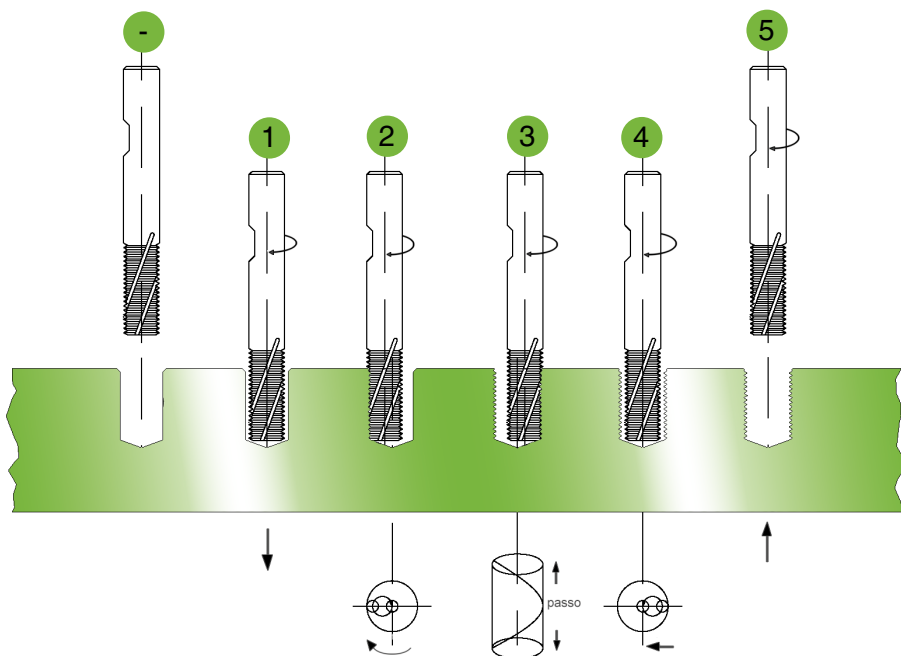
INFO

Acciai non legati a basso tenore di carbonio Steel non-alloyed, low carbon steel	Acciai non legati bonificati Steel non-alloyed, hardening & quenching steel	Acciai per utensili altamente legati Tools steel high alloyed	Acciai temprati Hardened Steels ~40HRC	Acciai inossidabili ferretici e martensitici Stainless steel, ferritic steel, martensitic steel	Acciai inossidabili austenitici Stainless steel, austenitic steel	Ghisa, Ghisa duttile Cast iron, Ductile cast iron	Ghisa sferoidale Spheroidal graphite iron	Leghe di alluminio Aluminium alloys	Leghe di rame Copper alloys	Materiali non ferrosi Non-ferrous material	Leghe di titanio Titanium alloys	Leghe resistenti al calore Heat-resisting alloy
○	○	○		○		○	○	○	○	○		

## Operazioni per fresatura in discordanza del filetto Example for thread alternate milling work

Qui sotto esponiamo la sequenza delle operazioni con fresatura in discordanza.

Here under we expose the sequence of the milling operations in discordanza.



1 - Posizionamento rapido.

1 - Fast positioning.

2 - Scostamento radiale al diametro nominale del filetto - entrata ad arco tangente.

2 - Radial removal to the nominal diameter of the thread - entered to tangent arc.

3 - Avanzamento del passo con simultanea rotazione dell'utensile attorno all'asse mediano filetto.

3 - Advancement of the footstep with simultaneous rotation of the tool around the axle median thread.

4 - Scostamento radiale al centro del foro - uscita arco tangente.

4 - Radial removal in the middle of the hole - exit by tangent arc.

5 - Fuoriuscita dal foro filettato (rapido).

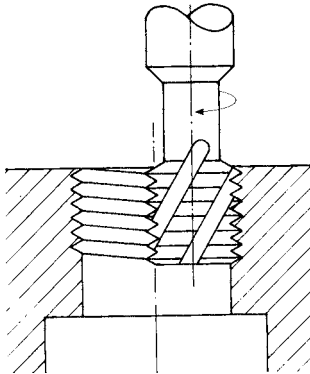
5 - Escaped by the threaded hole (fast).

## Sono possibili tutte le combinazioni All the combinations are possible

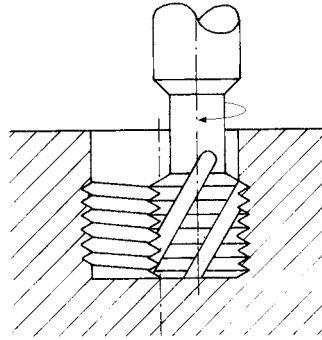
Poichè il taglio di questi utensili è destro, la direzione della rotazione è destra. Modificando l'avanzamento assiale sono possibili tutte le filettature sia in concordanza che in discordanza.

Since the cut of these tools is right, the direction of the rotation is right. Modifying the axial advancement they are possible all the threadings both in agreement and in discordance.

### ■ Filettatura destra interna Internal right threading

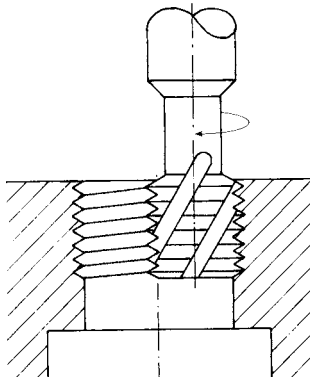


Foro passante Through hole  
Discordanza Discordanza

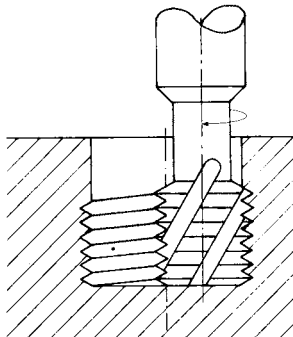


Foro cieco Dead hole  
Concordanza Agreement

### ■ Filettatura sinistra interna Internal left threading



Foro passante Through hole  
Concordanza Agreement



Foro cieco Dead hole  
Discordanza Discordanza

DRILLING  
 THREADS  
 TAPS  
 REAMERS  
 YONNEX  
 DRILLING

VALORI INDICATIVI PER FILETTATURA  
CON FRESE A FILETTARE IN METALLO DURO  
INDICATIVE VALUES FOR MILLING WITH CARBIDE THREADING MILLS

MATERIALI MATERIAL	Vc m/min.	Fz Ø6	Fz Ø8	Fz Ø10	Fz Ø12	Fz Ø14	Fz Ø16	Fz Ø18	Fz Ø20
Acciai fino a 700N/mm <sup>2</sup> - Steel < 700 N/mm <sup>2</sup>	90/200	0.035 / 0.1	0.04 / 0.12	0.045 / 0.15	0.05 / 0.18	0.06 / 0.21	0.07 / 0.25	0.08 / 0.28	0.09 / 0.35
Acciai da 700 a 900N/mm <sup>2</sup> - Steel 700- 900N/mm <sup>2</sup>	80/160	0.03 / 0.09	0.035 / 0.1	0.04 / 0.13	0.045 / 0.15	0.05 / 0.18	0.06 / 0.21	0.07 / 0.25	0.08 / 0.30
Acciai da 900 a 1200N/mm <sup>2</sup> - Steel 900-1200N/mm <sup>2</sup>	60/120	0.025 / 0.08	0.03 / 0.09	0.035 / 0.11	0.04 / 0.13	0.045 / 0.16	0.05 / 0.19	0.055 / 0.22	0.06 / 0.25
Acciai superiori a 1200 N/mm <sup>2</sup> - Steel >1200N/mm <sup>2</sup>	40/100	0.02 / 0.07	0.025 / 0.08	0.03 / 0.1	0.035 / 0.12	0.04 / 0.15	0.045 / 0.18	0.05 / 0.21	0.055 / 0.23
Acciai Inox buona lavorabilità - Stainless steel good working	25/80	0.025 / 0.08	0.03 / 0.09	0.035 / 0.11	0.04 / 0.13	0.045 / 0.16	0.05 / 0.19	0.055 / 0.22	0.06 / 0.25
Acciai Inox difficile lavorabilità - Stainless steel hard working	20/65	0.02 / 0.07	0.025 / 0.08	0.03 / 0.1	0.035 / 0.12	0.04 / 0.15	0.045 / 0.18	0.05 / 0.21	0.055 / 0.23
Ghisa Grigia bassa durezza - Gray Iron low hardness	80/180	0.035 / 0.1	0.04 / 0.12	0.045 / 0.15	0.05 / 0.18	0.06 / 0.21	0.07 / 0.25	0.08 / 0.28	0.09 / 0.35
Ghisa malleabile media durezza - Malleable Cast Iron	65/150	0.03 / 0.09	0.035 / 0.1	0.04 / 0.13	0.045 / 0.15	0.05 / 0.18	0.06 / 0.21	0.07 / 0.25	0.08 / 0.30
Ghisa nodulare alta durezza - Nodular Cast Iron	50/120	0.025 / 0.08	0.03 / 0.09	0.035 / 0.11	0.04 / 0.13	0.045 / 0.16	0.05 / 0.19	0.055 / 0.22	0.06 / 0.25
Ghisa di difficile lavorabilità - Cast Iron hard working	40/100	0.02 / 0.07	0.025 / 0.08	0.03 / 0.1	0.035 / 0.12	0.04 / 0.15	0.045 / 0.18	0.05 / 0.21	0.055 / 0.23
Alluminio con Si <15% - Aluminium Si < 15%	100/350	0.05 / 0.2	0.07 / 0.24	0.09 / 0.28	0.11 / 0.3	0.13 / 0.35	0.14 / 0.4	0.15 / 0.45	0.16 / 0.5
Alluminio con Si >15% - Aluminium Si > 15%	80/250	0.04 / 0.1	0.06 / 0.14	0.08 / 0.18	0.1 / 0.2	0.12 / 0.25	0.13 / 0.3	0.14 / 0.35	0.15 / 0.4
Ottone / Zinco - Brass / Zinc	80/180	0.03 / 0.09	0.035 / 0.1	0.04 / 0.13	0.045 / 0.15	0.05 / 0.18	0.06 / 0.21	0.07 / 0.25	0.08 / 0.30
Bronzo Cupro/Nickel - Bronze/Nickel	70/200	0.03 / 0.09	0.035 / 0.1	0.04 / 0.13	0.045 / 0.15	0.05 / 0.18	0.06 / 0.21	0.07 / 0.25	0.08 / 0.30
Titanio Ti/6Al/4V - Titanium	20/60	0.02 / 0.07	0.025 / 0.08	0.03 / 0.1	0.035 / 0.12	0.04 / 0.15	0.045 / 0.18	0.05 / 0.21	0.055 / 0.23