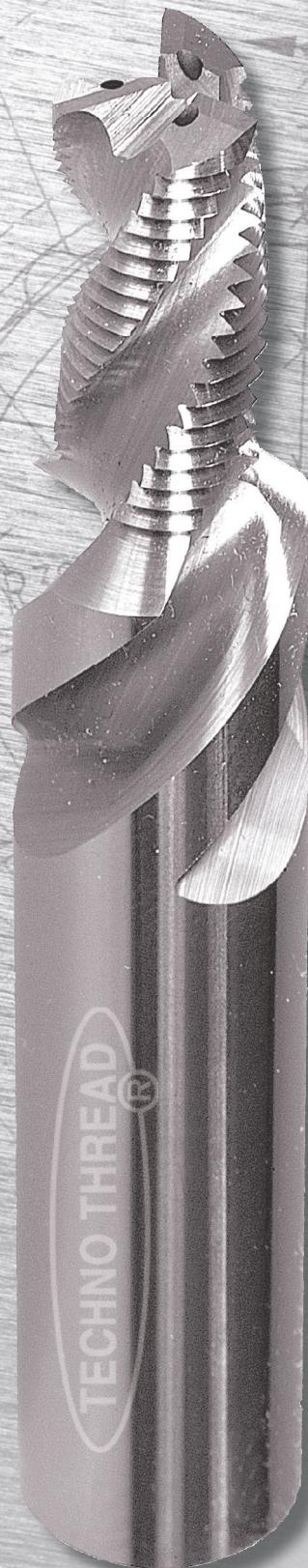


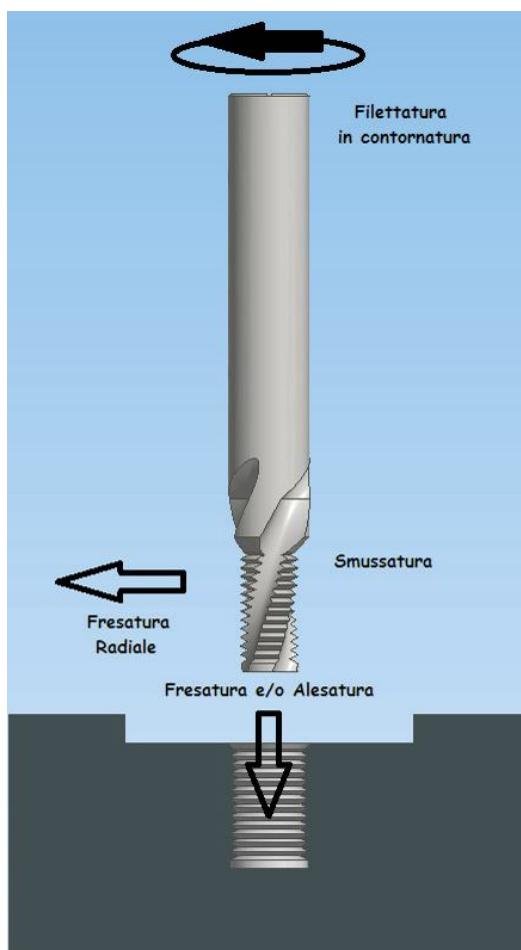
TECHNO THREAD
HPT®



MTH Ni₀

Utensile polivalente

Polyvalent tool



- Con un unico **utensile polivalente**, svincolandosi da quote rigide, si eseguono lavorazioni di fresatura radiale, smussatura, foratura o alesatura di fori da pressofusioni o fusioni, e relative filettature.
- With this **polyvalent tool**, releasing from fixed lengths, you can make operations of milling, chamfering, threading, drilling or reaming of die-casting holes.

Velocità di taglio e avanzamenti

Cutting speed and feed advance

Materiale	Gruppo materiale					
		Non rivestita - Uncoated				
		Vc	Fb		Fz	
1	1.1 Acciaio Dolce Magnetico - Magnetic Soft Iron					
	1.2 Acciaio da Costruzione - Structural Case Hardened Steel					
	1.3 Acciaio al Carbonio - Carbon Steel					
	1.4 Acciaio Legato - Alloy Steel					
	1.5 Acciaio Legato Temprato - Alloy Heat Treated Steel					
	1.6 Acciaio Legato Temprato - Alloy Heat Treated Steel					
	1.7 Acciaio Legato 45 HRC - Hardened Steel to 45 HRC					
	1.8 Acciaio Legato 58 HRC - Hardened Steel to 58 HRC					
2	2.1 Acciaio Inossidabile - Stainless steel					
	2.2 Austenico - Austenitic					
	2.3 Ferrico + Austenico - Ferritic Austenitic					
3	3.1 Ghisa lamellare - Grey Cast Iron	80-140	0,10	0,30	0,04	0,10
	3.2 Ghisa lamellare trattata - Grey Cast Iron heat treated					
	3.3 Ghisa sferoidale - Spher Cast Iron	80-140	0,10	0,30	0,04	0,10
	3.4 Ghisa sferoidale trattata - Sphere Cast Iron heat treated					
	3.5 Ghisa sfenoidale trattata - Sphere Cast Iron heat treated					
	3.6 Ghisa malleabile - Malleable Iron	80-140	0,10	0,40	0,04	0,10
	3.7 Ghisa Malleabile trattata - Malleable Iron treated					
4	4.1 Titanio Non Legato - Pure Titanium					
	4.2 Titanio Legato - Titanium Alloys					
	4.3 Titanio Legato - Titanium Alloys					
5	5.1 Nichel non legato - Pure Nickel					
	5.2 Nichel legato - Nickel alloys heat resistant					
	5.3 Nichel legato - Nickel alloys high heat resistant					
6	6.1 Rame non legato - Non-alloy copper					
	6.2 Ottone, Bronzo - Short chip brass, bronze, red brass	80-160	0,10	0,25	0,05	0,12
	6.3 Ottone a truciolo lungo - long chip brass					
	6.4 Bronzo alta resistenza - Cu-Al-Fe alloy (Ampco)	60-120	0,10	0,20	0,04	0,10
7	7.1 Alluminio MG non legato - Alu MG Non Alloy	100-250	0,10	0,30	0,03	0,12
	7.2 Alluminio Legato ≤ 5% Si - Alu Cast Alloy Si ≤ 5%	100-200	0,10	0,30	0,00	0,12
	7.3 Alluminio Legato ≥ 5% ≤ 10% Si - Alu Cast Alloy Si ≥ 5% ≤ 10%	100-200	0,10	0,30	0,03	0,12
	7.4 Alluminio Legato ≥ 10% Si - Alu Cast Alloy Si ≥ 10%	80-180	0,10	0,30	0,03	0,10
8	6.1 Termoplastici - Thermoplastics	60-120	0,15	0,40	0,04	0,10
	6.2 Plastiche termoindurenti - Thermosettings plastics	60-120	0,15	0,40	0,04	0,10
	6.3 Plastiche rinforzate - Fibre reinforced plastics	40-80	0,10	0,25	0,04	0,10

VC=Velocità di taglio in mm. Fz=Avanzamento al dente in mm.

VC=Cutting speed in mm. Fz=Milin feed in mm/tooth.

Velocità di taglio e avanzamenti

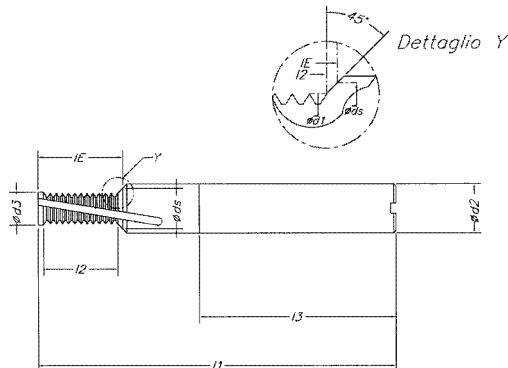
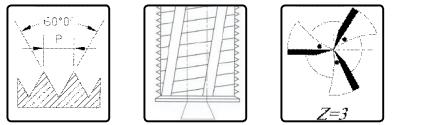
Cutting speed and feed advance

Materiale	Gruppo materiale				
		Rivestita X-TOP - Coated X-TOP			
		Vc	Fb	Fz	
1	1.1 Acciaio Dolce Magnetico - Magnetic Soft Iron				
	1.2 Acciaio da Costruzione - Structural Case Hardened Steel				
	1.3 Acciaio al Carbonio - Carbon Steel				
	1.4 Acciaio Legato - Alloy Steel				
	1.5 Acciaio Legato Temprato - Alloy Heat Treated Steel				
	1.6 Acciaio Legato Temprato - Alloy Heat Treated Steel				
	1.7 Acciaio Legato 45 HRC - Hardened Steel to 45 HRC				
	1.8 Acciaio Legato 58 HRC - Hardened Steel to 58 HRC				
2	2.1 Acciaio Inossidabile - Stainless steel				
	2.2 Austenico - Austenitic				
	2.3 Ferrico + Austenico - Ferritic Austenitic				
3	3.1 Ghisa lamellare - Grey Cast Iron	100-200	0,10	0,30	0,04
	3.2 Ghisa lamellare trattata - Grey Cast Iron heat treated				
	3.3 Ghisa sferoidale - Spher Cast Iron	100-200	0,10	0,30	0,04
	3.4 Ghisa sferoidale trattata - Sphere Cast Iron heat treated				
	3.5 Ghisa sfenoidale trattata - Sphere Cast Iron heat treated				
	3.6 Ghisa malleabile - Malleable Iron	100-200	0,10	0,40	0,04
	3.7 Ghisa Malleabile trattata - Malleable Iron treated				
4	4.1 Titanio Non Legato - Pure Titanium				
	4.2 Titanio Legato - Titanium Alloys				
	4.3 Titanio Legato - Titanium Alloys				
5	5.1 Nichel non legato - Pure Nickel				
	5.2 Nichel legato - Nickel alloys heat resistant				
	5.3 Nichel legato - Nickel alloys high heat resistant				
6	6.1 Rame non legato - Non-alloy copper				
	6.2 Ottone, Bronzo - Short chip brass, bronze, red brass	100-200	0,10	0,25	0,05
	6.3 Ottone a truciolo lungo - long chip brass				
	6.4 Bronzo alta resistenza - Cu-Al-Fe alloy (Ampco)	80-160	0,10	0,20	0,04
7	7.1 Alluminio MG non legato - Alu MG Non Alloy	100-400	0,10	0,30	0,03
	7.2 Alluminio Legato ≤ 5% Si - Alu Cast Alloy Si ≤ 5%	100-350	0,10	0,30	0,00
	7.3 Alluminio Legato ≥ 5% ≤ 10 Si - Alu Cast Alloy Si ≥ 5% ≤ 10	100-350	0,10	0,30	0,03
	7.4 Alluminio Legato ≥ 10% Si - Alu Cast Alloy Si ≥ 10%	80-280	0,10	0,30	0,03
8	6.1 Termoplastici - Thermoplastics	60-200	0,15	0,40	0,04
	6.2 Plastiche termoindurenti - Thermosettings plastics	60-200	0,15	0,40	0,04
	6.3 Plastiche rinforzate - Fibre reinforced plastics	40-120	0,10	0,25	0,04

VC=Velocità di taglio in mm. Fz=Avanzamento al dente in mm.

VC=Cutting speed in mm. Fz=Milin feed in mm/tooth.

- Fresa Lama, Svasa, Fora e Filetta,
con fori di lubrificazione.
 Spot facing, drilling, chamfering and threading mill,
with coolant holes.



MA 1.5 x Ø

M	P	I1	I2	I3	d1	d2	d3	ds	IE	Codice	Non rivestita Prezzo	Rivestita X-TOP Prezzo
5	0.80	55	7,15	36	4.04	6	4.20	5.3	8.64	TTMTH05080000	208,00	TTMTH05080002 219,00
6	1.00	62	9.05	36	4.80	8	5.00	6.3	10.75	TTMTH06100000	236,00	TTMTH06100002 249,00
8	1.25	74	11.32	40	6.50	10	6.75	8.3	13.41	TTMTH08125000	287,00	TTMTH08125002 304,00
10	1.50	79	15.08	45	8.20	12	8.50	10.3	17.56	TTMTH10150000	359,00	TTMTH10150002 381,00
12	1.75	89	17.6	45	9.90	14	10.25	12.3	20.46	TTMTH12175000	431,00	TTMTH12175002 446,00

MA 2 x Ø

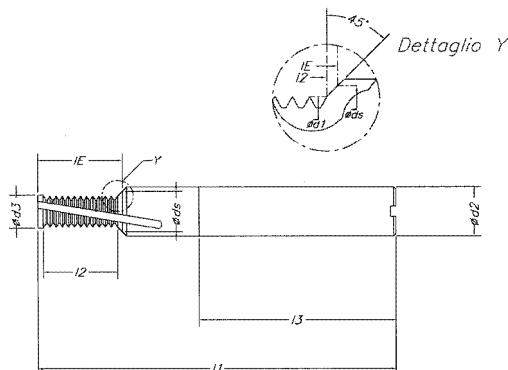
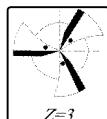
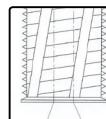
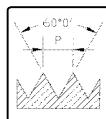
M	P	I1	I2	I3	d1	d2	d3	ds	IE	Codice	Non rivestita Prezzo	Rivestita X-TOP Prezzo
5	0.80	55	9.55	36	4.04	6	4.20	5.3	11.04	TTMTH05080001	218,00	TTMTH05080003 237,00
6	1.00	62	12.05	36	4.80	8	5.00	6.3	13.75	TTMTH06100001	243,00	TTMTH06100003 257,00
8	1.25	74	15.07	40	6.50	10	6.75	8.3	17.16	TTMTH08125001	298,00	TTMTH08125003 317,00
10	1.50	79	19.58	45	8.20	12	8.50	10.3	22.06	TTMTH10150001	369,00	TTMTH10150003 393,00
12	1.75	89	22.85	45	9.90	14	10.25	12.3	25.71	TTMTH12175001	440,00	TTMTH12175003 467,00

Altri diametri e misure a richiesta • Other size are available on request



Fresa Lama, Svasa, Fora e Filetta,
con fori di lubrificazione.

Spot facing, drilling, chamfering and threading mill,
with coolant holes.



MF 1.5 x Ø

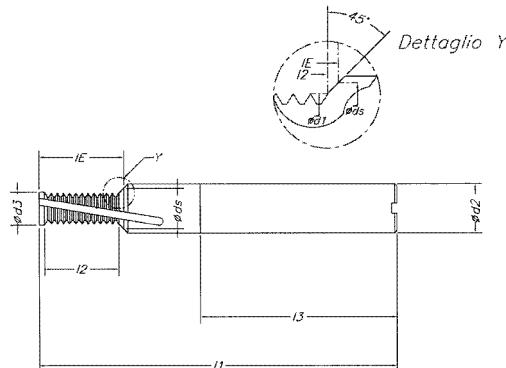
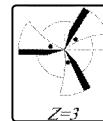
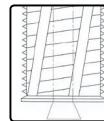
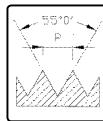
M	P	I1	I2	I3	d1	d2	d3	ds	IE	Codice	Non rivestita Prezzo	Rivestita X-TOP Prezzo
										€ Codice	€ Codice	
6	0.75	62	8.95	36	5.05	8	5.25	6.3	10.34	TTMTH06075004	236,00	TTMTH06075006 249,00
8	1.00	74	11.9	40	6.75	10	7.00	8.3	13.78	TTMTH08100004	287,00	TTMTH08100006 301,00
10	1.00	79	15.1	45	8.70	12	9.00	10.3	16.83	TTMTH10100004	358,00	TTMTH10100006 381,00
10	1.25	79	15.1	45	8.40	12	8.75	10.3	17.31	TTMTH10125004	358,00	TTMTH10125006 381,00
12	1.00	89	17.9	45	10.65	14	11.00	12.3	19.08	TTMTH12100004	431,00	TTMTH12100006 456,00
12	1.25	89	19.9	45	10.40	14	10.75	12.3	21.04	TTMTH12125004	431,00	TTMTH12125006 456,00
12	1.50	89	18.1	45	10.15	14	8.50	12.3	20.95	TTMTH12150004	431,00	TTMTH12150006 456,00

MF 2 x Ø

M	P	I1	I2	I3	d1	d2	d3	ds	IE	Codice	Non rivestita Prezzo	Rivestita X-TOP Prezzo
										€ Codice	€ Codice	
6	0.75	62	11.95	36	5.05	8	5.25	6.3	13.34	TTMTH06075005	243,00	TTMTH06075007 257,00
8	1.00	74	15.9	40	6.75	10	7.00	8.3	17.83	TTMTH08100005	298,00	TTMTH08100007 317,00
10	1.00	79	20.1	45	8.70	12	9.00	10.3	21.83	TTMTH10100005	369,00	TTMTH10100007 393,00
10	1.25	79	20.1	45	8.40	12	8.75	10.3	22.31	TTMTH10125005	369,00	TTMTH10125007 393,00
12	1.00	89	23.9	45	10.65	14	11.00	12.3	25.80	TTMTH12100005	441,00	TTMTH12100007 467,00
12	1.25	89	23.9	45	10.40	14	10.75	12.3	26.04	TTMTH12125005	441,00	TTMTH12125007 467,00
12	1.50	89	24.1	45	10.15	14	8.50	12.3	26.95	TTMTH12150005	441,00	TTMTH12150007 467,00

Altri diametri e misure a richiesta • Other size are available on request

- Fresa Lama, Svasa, Fora e Filetta,
con fori di lubrificazione.
 Spot facing, drilling, chamfering and threading mill,
with coolant holes.



GAS 1.5 x Ø

ØDmin filx1"	I1	I2	I3	d1	d2	d3	ds	IE	Non rivestita	Prezzo	Rivestita X-TOP	Prezzo	
									Codice	€	Codice	€	
1/8	28.00	79	14.44	45	8.5	12	8.8	10	16.24	TTMTH1/8GAS08	358,00	TTMTH1/8GAS10	381,00
1/4	19.00	102	18.61	48	11.40	16	11.80	13.5	21.15	TTMTH1/4GAS08	518,00	TTMTH1/4GAS10	548,00

GAS 2 x Ø

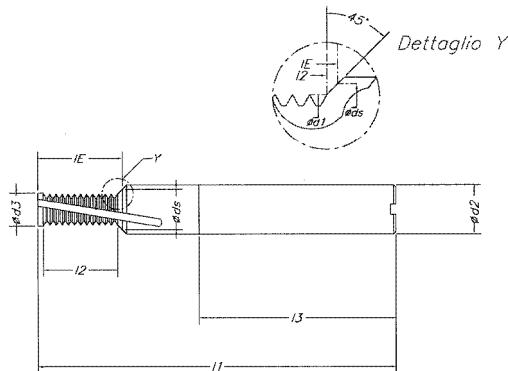
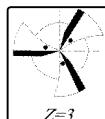
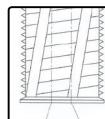
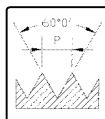
ØDmin filx1"	I1	I2	I3	d1	d2	d3	ds	IE	Non rivestita	Prezzo	Rivestita X-TOP	Prezzo	
									Codice	€	Codice	€	
1/8	28.00	79	18.98	45	8.5	12	8.8	10	20.79	TTMTH1/8GAS09	369,00	TTMTH1/8GAS11	393,00
1/4	19.00	102	25.3	48	11.40	16	11.80	13.5	27.15	TTMTH1/4GAS09	538,00	TTMTH1/4GAS11	568,00

Altri diametri e misure a richiesta • Other size are available on request



Fresa Lama, Svasa, Fora e Filetta,
con fori di lubrificazione.

Spot facing, drilling, chamfering and threading mill,
with coolant holes.



UNC 1.5 x Ø

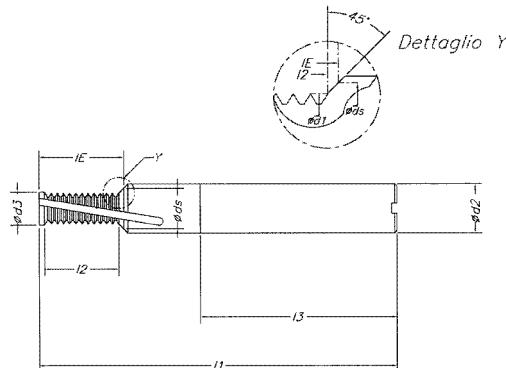
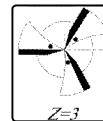
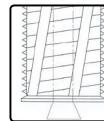
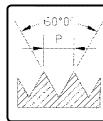
ØDmin filx1"	I1	I2	I3	d1	d2	d3	ds	IE	Non rivestita	Prezzo	Rivestita X-TOP	Prezzo	
									Codice	€	Codice	€	
n.12	24.00	62	7.45	36	4.21	6	4.5	5.79	9.23	TTMTH12UNC012	222,00	TTMTH12UNC014	234,00
1/4	20.00	62	8.95	36	4.85	8	5.20	6.65	11.18	TTMTH1/4UNC12	236,00	TTMTH1/4UNC14	249,00
5/16	18.00	74	11.35	40	6.25	10	6.60	8.25	13.78	TTMTH516UNC12	287,00	TTMTH516UNC14	304,00
3/8	16.00	80	14.35	45	7.65	12	8.00	9.83	16.99	TTMTH3/8UNC12	358,00	TTMTH3/8UNC14	381,00
7/16	14.00	80	16.4	45	9.00	12	9.40	11.43	19.34	TTMTH716UNC12	358,00	TTMTH716UNC14	381,00
1/2	13.00	89	17.7	45	10.35	14	10.75	13	20.89	TTMTH1/2UNC12	431,00	TTMTH1/2UNC14	456,00

UNC 2 x Ø

ØDmin filx1"	I1	I2	I3	d1	d2	d3	ds	IE	Non rivestita	Prezzo	Rivestita X-TOP	Prezzo	
									Codice	€	Codice	€	
n.12	24.00	62	10.65	36	4.21	6	4.5	5.79	12.38	TTMTH12UNC013	227,00	TTMTH12UNC015	242,00
1/4	20.00	62	12.75	36	4.85	8	5.20	6.65	14.85	TTMTH1/4UNC13	243,00	TTMTH1/4UNC15	257,00
5/16	18.00	74	15.6	40	6.25	10	6.60	8.25	17.60	TTMTH516UNC13	298,00	TTMTH516UNC15	317,00
3/8	16.00	80	19.15	45	7.65	12	8.00	9.83	21.74	TTMTH3/8UNC13	369,00	TTMTH3/8UNC15	393,00
7/16	14.00	80	21.85	45	9.00	12	9.40	11.43	24.79	TTMTH716UNC13	369,00	TTMTH716UNC15	393,00
1/2	13.00	89	25.5	45	10.35	14	10.75	13	28.69	TTMTH1/2UNC13	441,00	TTMTH1/2UNC15	467,00

Altri diametri e misure a richiesta • Other size are available on request

- Fresa Lama, Svasa, Fora e Filetta,
con fori di lubrificazione.
 Spot facing, drilling, chamfering and threading mill,
with coolant holes.



UNF 1.5 x Ø

ØDmin filx1"	I1	I2	I3	d1	d2	d3	ds	IE	Non rivestita	Prezzo	Rivestita X-TOP	Prezzo	
									Codice	€	Codice	€	
n.12	28.00	62	8.25	36	4.36	8	4.65	5.8	9.75	TTMTH12UNF016	236,00	TTMTH12UNF018	249,00
1/4	28.00	62	9.15	36	5.26	8	5.50	6.65	10.70	TTMTH1/4UNF16	236,00	TTMTH1/4UNF18	249,00
5/16	24.00	74	11.75	40	6.60	10	6.90	8.25	13.54	TTMTH516UNF16	287,00	TTMTH516UNF18	305,00
3/8	24.00	80	13.85	45	8.2	12	8.50	9.85	15.65	TTMTH3/8UNF16	358,00	TTMTH3/8UNF18	381,00
7/16	20.00	80	17.9	45	9.55	12	9.90	11.4	20.05	TTMTH716UNF16	358,00	TTMTH716UNF18	381,00
1/2	20.00	89	19.2	45	11.10	14	11.50	13	21.36	TTMTH1/2UNF16	431,00	TTMTH1/2UNF18	456,00

UNF 2 x Ø

ØDmin filx1"	I1	I2	I3	d1	d2	d3	ds	IE	Non rivestita	Prezzo	Rivestita X-TOP	Prezzo	
									Codice	€	Codice	€	
n.12	28.00	62	10.95	36	4.36	8	4.65	5.8	12.50	TTMTH12UNF017	243,00	TTMTH12UNF019	257,00
1/4	28.00	62	12.75	36	5.26	8	5.50	6.65	14.35	TTMTH1/4UNF17	243,00	TTMTH1/4UNF19	257,00
5/16	24.00	74	15.95	40	6.60	10	6.90	8.25	17.74	TTMTH516UNF17	298,00	TTMTH516UNF19	317,00
3/8	24.00	80	19.15	45	8.2	12	8.50	9.85	20.95	TTMTH3/8UNF17	369,00	TTMTH3/8UNF19	393,00
7/16	20.00	80	21.7	45	9.55	12	9.90	11.4	23.85	TTMTH716UNF17	369,00	TTMTH716UNF19	393,00
1/2	20.00	89	25.55	45	11.10	14	11.50	13	27.71	TTMTH1/2UNF17	440,00	TTMTH1/2UNF19	467,00

Altri diametri e misure a richiesta • Other size are available on request

