

Semi-automatic high-performance machine for efficient cutting of pipe threads. For industry, metalworking, installation.

Pipe threads	1/4–4"
Thread length	≤ 120 mm

REMS Unimat 77 – pipe threads up to 4". Tangential-chaser-threading-system.

Fast working, short resetting time. For single and series production.

Operating principle

Stationary material – rotating die head.

Design

Compact, rugged design for continuous use. Die head with regrindable tangential chasers in self centering holder system. After start-cutting with feed lever and rack mechanism self feeding action of die head (no guide thread). Welded, sturdy machine stand with large oil compartment and removeable chip drawer.

Drive

Robust worm gear and 2-stage spur gear. Proven and powerful pole-reversible three-phase motor, specially designed for threading, 2000/2300 W. Overload protection. Reverse switch for cutting right and left-hand threads. 4 spindle speeds 50, 25, 16, 8 rpm.

Clamping device

Self-centering universal vice for the complete range with specially toothed and hardened clamping jaws (1/4–3/4", 1–4"). Choice of manual or hydraulic clamping with operation by foot switch (working pressure 6 bar).

Automatic lubrication and cooling

Robust, proven oil pump with high pumping volume. Ample oil volume ensures longer life of chasers, gear and motor.

Universal automatic die head

Only **one** universal automatic die head for all threads. Fine adjustment of thread diameter with spindle and scale. Die head closes automatically and opens automatically when the required thread length is reached. After starting the thread via feed lever and rack the chaser-system initiates an automatic feed-forward of the die head. All threads can be cut in a single pass. Copying unit for tapered threads. Instead of changing the dies, additional quick-change die heads ensure shorter resetting time.

Chasers

The proven regrindable REMS tangential chasers with precise cutting geometry ensure an excellent start-cutting performance and clean threads. Tool steel chasers made of special hardened steel for material < 500 N/mm² (MPa). HSS chasers for hard-to-machine material ≥ 500 N/mm² (MPa). The chasers sit in a special holder system. Chasers and holders together form a threading set.

Thread-cutting oil

REMS Sanitol and REMS Spezial (page 49). Specially developed for threading. High cooling and lubricating effect. Essential for clean threads and longer service life of dies, tools and machines.

Nipple-threading

Efficient with the automatic internal clamping REMS Nippelfix 1/2–4" or with the manual internal clamping REMS Nippelspanner 3/8–2" (page 48).



German Quality Product

Machining examples



Info





Supply format

REMS Unimat 77 Basic. Semi-automatic threading machine for pipe threads ¼–4". Machine on stand. Pole-reversible 3~ induction motor, 400 V, 50 Hz, 2000/2300 W, right and left-hand rotation. Die head speed 50, 25, 16, 8 rpm. Universal vice with clamping jaws 1 – 4", choice of manual or hydraulic/pneumatic operation. Automatic lubrication. 1 universal automatic die head for all threads, opens and closes automatically. Without threading sets, without closing lever. Electrical locking system of safety cover. Adjustment gauge. Wrench. In transport case.

Description	Version	Art.-No.
REMS Unimat 77 Basic mS	manual clamping device	770003
REMS Unimat 77 Basic pS	Oil-hydraulic/pneumatic vice clamping device	770004

Other voltages on request.

Accessories

Chasers and holders (threading set)

Thread type	Size	Art.-No.
Pipe threads R tapered, right-hand ISO 7-1 (EN 10226, DIN 2999, BSPT)	R ¼–¾	771110
	R ½–¾	771120
	R 1–2	771130
	R 2½–4	771140
Pipe threads G parallel, right-hand ISO 228-1 (DIN 259, BSPP)	G ¼–¾	771160
	G ½–¾ HSS ¹⁾	771170
	G 1–2 HSS ¹⁾	771180
	G 2½–4 HSS ¹⁾	771190
Pipe threads NPT tapered, right-hand Taper Pipe Thread ASME B1.20.1	NPT ¼–¾	771210
	NPT ½–¾ HSS ¹⁾	771220
	NPT 1–2 HSS ¹⁾	771230
	NPT 2½–4 HSS ¹⁾	771240
Pipe threads NPSM parallel, right-hand Straight Pipe Thread ASME B1.20.1	NPSM ¼–¾	771260
	NPSM ½–¾ HSS ¹⁾	771270
	NPSM 1–2	771280

Chasers (set)

Thread type	Size	Art.-No.
Pipe threads R tapered, right-hand ISO 7-1 (EN 10226, DIN 2999, BSPT)	R ¼–¾	751502
	R ½–¾	751503
	R 1–4	771136
Pipe threads G parallel, right-hand ISO 228-1 (DIN 259, BSPP)	G ¼–¾	751506
	G ½–¾ HSS ¹⁾	751507
	G 1–4 HSS ¹⁾	771186
Pipe threads NPT tapered, right-hand Taper Pipe Thread ASME B1.20.1	NPT ¼–¾ HSS ¹⁾	751545
	NPT ½–¾ HSS ¹⁾	751546
	NPT 1–2 HSS ¹⁾	751547
	NPT 2½–4 HSS ¹⁾	771246
Pipe threads NPSM parallel, right-hand Straight Pipe Thread ASME B1.20.1	NPSM ¼–¾	751550
	NPSM ½–¾ HSS ¹⁾	751551
	NPSM 1–2	751552

Dies and chaser dies for other threads and HSS chaser dies for materials above 500 N/mm² (MPa) that are difficult to cut on request. Dies and HSS chaser dies with 50% surcharge on chaser dies. ¹⁾Some threading sets and chasers only available in HSS. Threading sets and chasers for left-hand threads 50% extra charge.

Description	Art.-No.
Universal automatic die head, without threading sets, without closing lever	771000
Closing lever for closing and opening the chasers	
R for taper pipe threads, right-hand	751040
R-L for taper pipe threads, left-hand	751050
G for cylindrical pipe threads, right-hand	751060
G-L for cylindrical pipe threads, left-hand	751070
Clamping jaws ¼–¾" (pack of 2)	773060

Thread-cutting oil see page 49.

Nipple holder see page 48.

REMS Herkules material supports, see page 104.

