## Semi-automatic thread-cutting machines REMS UNIMAT 75/77



For efficient thread cutting on bolts and pipes.



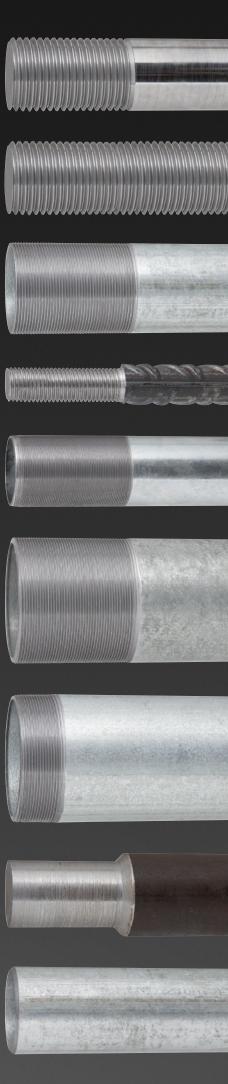
High operating efficiency
Piece and series production
Easy to operate
Short changeover times



- Bolts
- Pipes
- Rebar
- Metric bolt threads
- Straight pipe threads
- Tapered pipe threads
- Peeling
- Chamfering
- ISO 261 (DIN 13) 1) tolerance class medium (6g)

#### German quality product





Semi-automatic threading machine for efficient thread cutting on bolts, pipes and rebar.



## REMS Unimat – semi-automatic heavy-duty machine for efficient thread cutting on bolts and pipes. For industry, metalworking, installation.

Highly cost-effective due to rapid working speeds, short changeover times, low machine hour rates and simple operation.

For piece and series production. Relieves the burden on expensive turning machines and skilled workers.



To see for yourself how easy it is to use the machine, please visit:

#### www.youtube.de/remstools

#### 1 Working principle

Stationary material - rotating die head.

#### 2 Design

Compact, robust construction for continuous operation. Die head with regrindable tangential chaser dies in self-centring holder system. Die head moves forward automatically (no guide thread) after start cutting with feed lever and rack mechanism. Strong welded machine stand with large oil chamber and large removable chip drawer.

#### 3 Unimat 75 drive

Indestructible planetary gear with annulus gear for long threads up to  $\emptyset$  30 mm. Tried and tested high-torque, pole-reversible, three-phase hollow-shaft motor, with 2000/2300 W intake and overload protection, specially designed for thread cutting. Switch to reverse direction of rotation for right-hand and left-hand thread. High working velocity and two die head speeds (70 and 35 rpm).

#### Unimat 77 drive

Robust worm gear and double-reduction spur gear. Tried and tested high-torque, pole-reversible three-phase motor, with 2000/2300 W intake and overload protection, specially designed for thread cutting. Switch to reverse direction of rotation for right-hand and left-hand thread. Four die head speeds (50, 25, 16 and 8 rpm).

#### 4 Clamping fixture

Strong, distortion-resistant, universal vice with full clamping capacity and specially serrated and hardened jaws. Choice of manual or pedal-operated oil-hydraulic/pneumatic clamping (working pressure 6 bar). Accessories for Unimat 75: special clamping jaws for drawn material, stud bolts, hexagon head bolts and pipe nipples.

#### 5 Automatic lubrication cooling

Robust, tried and tested, electric lubricant pump with high delivery rate. The generous supply of thread-cutting oil guarantees clean-cut threads and lengthens the service life of the dies, gear and motor.

#### 6 Universal automatic die head

Just one universal automatic die head for all threads. Graduated spindle for precision adjustment of thread diameter. Die head closes automatically and opens automatically on reaching the set thread length. All the threads can be cut in one pass. Profiling attachment for tapered threads. Even more efficiency thanks to (several) quickchange universal automatic die heads instead of die set changeover.

#### 7 Threading dies

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 <  $500 \text{ N/mm}^2$  (MPa). HSS chasers for hard-to-machine material  $\geq 500 \text{ N/mm}^2$  (MPa). The chasers sit in a special holder system. Chasers and holders together form a threading set.

#### 8 Safety guard

The safety guard has an electric lock which prevents the machine from being switched on with the guard open and which stops the machine automatically when the guard is opened. Meets the safety and accident prevention regulations.

#### 9 Thread cutting on rebar (Unimat 75)

Special M chaser dies with additional bevelled face for cutting threads on rebar in a single pass. REMS Unimat 75 drive with oil-hydraulic/pneumatic vice for high clamping pressure.





### REMS Unimat 75 – for bolt and pipe threads and for threads on rebar

Semi-automatic thread-cutting machine for 6-72~mm / %-2%" bolt threads and 1/16-2%" / 16-63~mm pipe threads. Machine mounted on stand. Pole-reversible, three-phase hollow-shaft motor, 400 V, 50 Hz, 2000/2300 W, right-hand and left-hand rotation. Die head speeds of 70 and 35 rpm. Universal vice with full clamping capacity, choice of manual or oil-hydraulic/pneumatic operation. Automatic lubrication cooling. One universal automatic die head for all threads, automatic opening and closing action. Excluding cutting units and closing levers. Safety guard with electric lock. Setting gauge. Operating key. In transport case.

#### **REMS Unimat 75 Basic mS**

Manual vice Art.-No. 750003 R380

**REMS Unimat 75 Basic pS** 

Oil-hydraulic-pneumatic vice Art.-No. 750004 R380

Other voltages on request.

#### Accessories 1)

#### Chasers and holders (threading set)

Pipe thread R, tapered, right, ISO 7-1, EN 10226 (DIN 2999, BSPT)

Pipe thread G, straight, right, ISO 228-1 (DIN 259, BSPP)

Pipe thread NPT, tapered, right, Taper Pipe Thread ASME B1. 20.1  $\,$ 

Pipe thread NPSM, straight, right, Straight Pipe Thread ASME B1. 20.1

Steel conduit thread Pg, DIN 40430; Thread M for conduits for electrical installations, EN 60423

Thread M for rebar, ISO 261 (DIN 13); Metric bolt thread M, ISO 261 (DIN 13)

Bolt thread UNC, Unified Inch Screw Thread ASME B1.1

Whitworth bolt thread BSW; Bicycle screw thread Fg; Fine thread M

Threading sets for left-hand threads and tangential chaser dies can be supplied in HSS.

#### Universal automatic die head

excluding threading sets and closing lever Art.-No. 751000

Chamfering/peeling die head 45°, Ø 7-62 mm, with chamfering/

peeling chasers 45°, Ø 7–62 mm, HSS, with holders Art.-No. 751100

Chamfering/peeling die head 45°, Ø 7-62 mm,

without threading sets Art.-No. 751102

Chamfering/peeling chasers 45°, Ø 7–46 mm,

HSS, with holder Art.-No. 751096

Chamfering/peeling chasers 45°, Ø 40-62 mm,

HSS, with holder Art.-No. 751098

Chamfering/peeling chasers 45°, Ø 7-62 mm,

pack of 4, with holder Art.-No. 751097

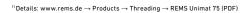
#### Closing lever for closing and opening the chasers

R	For tapered right-hand pipe thread	ArtNo. 751040 R90
R-L	For tapered left-hand pipe thread	ArtNo. 751050 R90
G	For straight right-hand pipe thread	ArtNo. 751060 R90
G-L	For straight left-hand pipe thread	ArtNo. 751070 R90
М	For all right-hand bolt threads	ArtNo. 751080 R90
M-L	For all left-hand bolt threads	ArtNo. 751090 R90

Special clamping jaws, pair, for drawn material, stud bolts,

hexagon head bolts and pipe nipples. Length of workpiece

in front of vice excluding thread min. 15 mm,  $\emptyset$  6 – 42 mm Art.-No. 753240





#### REMS Unimat 77 – for pipe threads up to 4"

Semi-automatic thread-cutting machine for  $\frac{1}{4}$  –  $\frac{4}{}^{\text{m}}$  pipe threads. Machine mounted on stand. Pole-reversible three-phase motor, 400 V, 50 Hz, 2000/2300 W, right-hand and left-hand rotation. Die head speeds of 50, 25, 16 and 8 rpm. Universal scroll chuck with 1 –  $\frac{4}{}^{\text{m}}$  clamping jaws, choice of manual or oil-hydraulic/pneumatic operation. Automatic lubrication cooling One universal automatic die head for all threads, automatic opening and closing action. Excluding cutting units and closing levers. Safety guard with electric lock. Setting gauge. Operating key. In transport case.

#### **REMS Unimat 77 Basic mS**

Manual vice Art.-No. 770003 R380

REMS Unimat 77 Basic pS

Oil-hydraulic-pneumatic vice Art.-No. 770004 R380

Other voltages on request.





#### Accessories 2)

#### Chasers and holders (threading set)

Pipe thread R, tapered, right, ISO 7-1 EN 10226 (DIN 2999, BSPT)
Pipe thread G, straight, right, ISO 228-1 (DIN 259, BSPP)
Pipe thread NPT, tapered, right, Taper Pipe Thread ASME B1.20.1
Pipe thread NPSM, straight, right, Straight Pipe Thread ASME B1.20.1

#### Threading sets for left-hand threads and tangential chasers can be supplied in HSS.

#### Universal automatic die head,

excluding threading sets and closing lever Art.-No. 771000

#### Closing lever for closing and opening chasers

R For tapered right-hand pipe thread Art.-No. 751040 R90
R-L For tapered left-hand pipe thread Art.-No. 751050 R90
G For straight right-hand pipe thread Art.-No. 751060 R90
G-L For straight left-hand pipe thread Art.-No. 751070 R90
Clamping jaws ¼ - ¾" (pack of 2) Art.-No. 773060



# REMS





#### Sale through specialist dealers.

#### **REMS Ireland**

Tel.: 01 8700 008 Email: IRL@rems.de www.rems.de

Representative: Gerry Phipps Mobile: 087 920 4068 Email: gerry.phipps@rems.de

#### Further accessories

#### Thread-cutting oils

REMS Sanitol and REMS Spezial. Specially developed for thread cutting. Very high lubricating and cooling action. Absolutely essential for clean-cut threads and longer service life of dies and machine.

#### **REMS Sanitol**

Synthetic, mineral oil free thread-cutting oil. Specially for drinking water supplies. For all materials.



#### **REMS Spezial**

High-alloyed mineral oil based thread-cutting oil. For all materials. For drinking water supplies, comply with local regulations! Mineral oil based thread cutting materials are not permitted for drinking water pipes in AUT, CHE, DEU, DNK and FRA for example.



#### Nipple cutting

Efficient processes with the REMS Nippelfix  $\frac{1}{2} - 2\frac{1}{2}$ " (REMS Unimat 75) or  $\frac{1}{2} - 4$ " (REMS Unimat 77) automatic pipe nipple chucks for internal clamping or with the REMS Nippelspanner % – 2"manual pipe nipple chuck for internal clamping (REMS Unimat 75/77).





Nippelfix

#### **REMS Herkules**

Height-adjustable stands with ball bearing for easy rotation and pulling and pushing movements in all directions.







Info Herkules XL









