Semi-automatic thread-cutting machines
REMS Unimat 75
REMS Unimat 77
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) superscript 1 tolerance class medium (6g)

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

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\begin{align*}
\frac{1}{4} - 4" & \quad \text{Unimat 77} \\
\frac{1}{16} - 2\frac{1}{2}" & \quad \text{Unimat 75} \\
6 - 72 \text{ mm} & \quad \text{Unimat 75} \\
14 - 45 \text{ mm} & \quad \text{Unimat 75}
\end{align*}
\]
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.

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 Ø 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).

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) quick-change 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 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.

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


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.

Accessories¹)

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  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
M For all right-hand bolt threads  Art. No. 751080 R90
M-L For all left-hand bolt threads  Art. No. 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, Ø 6 – 42 mm  Art. No. 753240

¹) Details: www.rems.de → Products → Threading → REMS Unimat 75 (PDF)
REMS Unimat 77 – for pipe threads up to 4"


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

2) Details: www.rems.de → Products → Threading → REMS Unimat 77 (PDF)
Further accessories

Thread-cutting oils

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 ½—2½” (REMS Unimat 75) or ½—4” (REMS Unimat 77) automatic pipe nipple chucks for internal clamping or with the REMS Nippelspanner ¾—2” manual pipe nipple chuck for internal clamping (REMS Unimat 75/77).

REMS Herkules 3B
Height-adjustable stand with ball bearing for easy rotation and pulling and pushing movements in all directions.

Sale through specialist dealers.

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