

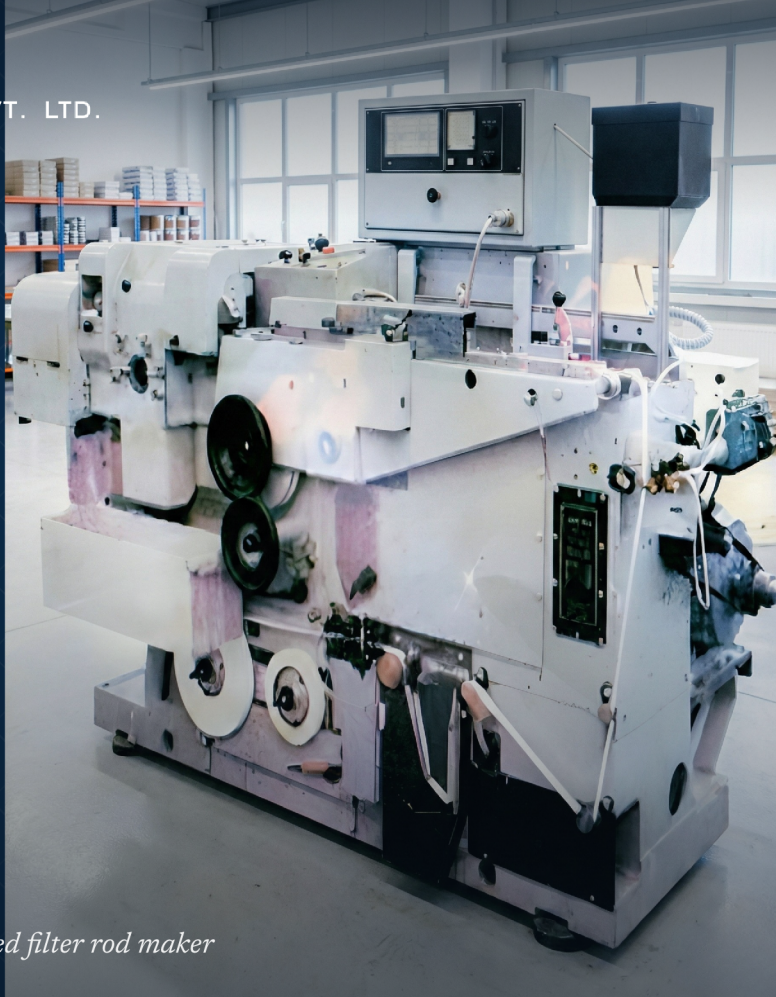


Fig. 01 – PM4 high-speed filter rod maker

CIGARETTE MAKING · FILTER ROD MAKER

PM4 High-Speed Filter Rod Maker

Molins PM Series · The Upstream Machine Your Tippers Depend On

The precision machine that forms the filter rods a whole cigarette line runs on — shaping cellulose-acetate tow into uniform, ready-to-tip filter rods at 2,500 a minute.

Conditioned filter tow is gathered in the garniture, wrapped, sealed and cut to length — one continuous, fully automatic cycle feeding your tippers and assemblers.

VFD and PLC control, a synchronized tow-processing unit and a 2K single-knife cut-off deliver uniform rod density, accurate lengths and minimal dusting.

EST. 1960

ISO 9001:2015

50+ COUNTRIES

1,000+ INSTALLATIONS

2,500

RODS / MIN

175

M/MIN ROD SPEED

52–120

MM ROD LENGTH

Upstream

LINE STAGE

THE PROCESS

Open · Form · Seal · Cut · Deliver

From filter tow to a finished rod

Cellulose-acetate tow becomes a continuous, wrapped filter rod and is cut to length in one automatic loop.

01	Open Tow	Cellulose-acetate filter tow is opened and conditioned, with plasticiser added to bond the fibres.
02	Form Rod	The conditioned tow is gathered and shaped into a continuous rod inside the garniture and wrapped in plug-wrap paper.
03	Seal	The plug-wrap seam is glued and sealed, locking the tow into a stable, uniform filter rod.
04	Cut	A 2K single-knife cut-off slices the continuous rod into clean, accurate multiple-length filter rods.
05	Deliver	Finished rods are delivered to a catcher, tray-filler or conveyor to feed downstream tippers and assemblers.

ENGINEERED FOR PRECISION

Synchronized tow processing

A dedicated tow-processing unit, mechanically driven via an extension shaft, keeps formation perfectly in sync.

2K single-knife cut-off

Clean, accurate cuts up to 2,500 per minute for consistent rod length at full speed.

Expander drum & 3-folder garniture

Stable rod formation with uniform density and low dusting, batch after batch.

Electronic monitoring

Sensors detect rod break-outs and ensure safety, low rejection and dependable uptime.

GOOD TO KNOW

Where it sits in the line

The PM4 is upstream — it makes the filter rods a plug assembler / tipper later attaches to tobacco rods on a filter-cigarette line.

Filter material

Cellulose-acetate tow as standard; paper-type filter material on variants built for it.

1960

The PM4 belongs to the Molins PM – "Plug Maker" – filter-rod family: the upstream machine that forms the rods every tipper needs. MOI has built on this proven lineage since 1960.

SPECIFICATIONS

PM4

Technical Specifications

PERFORMANCE

Output capacity	2,500 rods/min (70 mm)
Rod speed	175 m/min (max)
Max cut-off speed	2,500 cuts/min
Filter material	Cellulose-acetate tow

FORMAT RANGE

Rod length	52 – 120 mm
Rod diameter	5.0 – 9.0 mm

BUILD & UTILITIES

Line stage	Upstream rod maker
Control	VFD + PLC
Cut-off system	2K single-knife
Power supply	415 V, 3-Phase, 50 Hz
Power requirement	5 kW
Footprint (LxWxH)	2.36 × 2.36 × 1.30 m
Weight	≈ 1,700 kg

WHY MANUFACTURERS CHOOSE IT

- 2,500 filter rods a minute with low rejection
- Clean, accurate cuts from the 2K single-knife system
- Uniform rod density from a synchronized tow unit
- Safe, dependable running with electronic monitoring

DELIVERY & SUPPORT

Installation & commissioning

On-site set-up and start-up by MOI engineers.

Operator training

Hands-on training for operators and maintenance teams.

Spares & service

Genuine spare parts and ongoing maintenance support.

APPLICATIONS

Tobacco & filter rod production · Plug manufacturing for cigarette assembly · High-speed continuous rod making — feeding tippers and plug assemblers on a filter-cigarette line.