

MLP-10

Laser Perforation for Single Bobbin of Cigarette Tipping Paper



*Picture shows the turnkey MLP-10 system
including the Micro Perforator, the Rewinder, the CO₂- Laser Source.*

The MLP-10 System is a turnkey Laser Perforator Systems which offers highly attractive state-of-the-art technology for offline perforation of single bobbin of cigarette tipping paper.

The MLP-10 System perforates a maximum of 8 rows (max. 4 rows per perforation zone) and up to 40.000 holes/second at a maximum web speed of 600 m/min. The maximum web width is 100 mm.

The MLP-10 System perforates an extremely consistent hole-to-hole quality which results into a minimum standard deviation giving the MLP-10 System the highest reliability.

Technical details of the MLP-10 System:

Rewinder:

- Max. bobbin diameter: 450 mm
- Paper length unwind: max. 3500 m
- Max. bobbin / paper width: max. 100 mm
- Ramp up time: 0 – 600 m/min below 3 sec.
- Max. winding speed: 600 m/min
- Printed and un-printed paper: 35 to 45 gr./sqm.
- Web guide: 1 optical edge sensor
- Slitter: no slitting operations for single bobbin
- Base plate: solid steel base plate for perfect long term stability

Micro Perforator:

- Based on patented Vario-Polygon System
- Rotating speed: up to 12.000 RPM / others on request
- Max. optical pulse frequenz: up to 40.000 holes/sec, 10.000 Hz per row
- Hole density: range from 5 – 30 holes/cm
- Typ. Porosity: 50 to over 100 Coresta Units/row
- Hole diameter: adjustable from 50 – 150 µm

Focusing Heads:

- Max. 8 perforation heads
- All heads can be moved across the whole web
- Each focusing lens is adjustable with 0,01 mm resolution
- Each head with individual shutter

CO₂ – Laser source with 10,6 µm wavelength:

- Laser power 200 Watt or 400 Watt, others on request
- Optimised power stabilisation

Chiller:

- “Water-to-Air” or “Water-to-Water” cooling
- +/- 0,5°C temperature regulation

Exhaust dust Filter system:

- Removes and filters debris of the perforation process