falma machines

producing high quality compact fluorescent lamps S, D and T types

montena
falma machines

philosophy

montena
machinery components technology

Turning darkness into light

Montena machinery develops, builds and commissions machines and production lines for the manufacture of all kinds of light sources: incandescent or economical, traditional or the latest generation.

Working in close co-operation with montena lighting, montena machinery has acquired complete mastery over all the phases of lamp production. This synergy effect brings high benefits: for example, it enables montena machinery to make an objective and well-formed assessment of production tool quality.

Montena's foremost aim is to give you comprehensive service, dedicated to your satisfaction and success. Our customer advice focuses on research, development and engineering; we also provide on-site after-sales service, maintenance and monitoring of installations.

Montena summarises its objectives in a single declaration of intent: we can do it!

We will be happy to give you further information. Just contact us!

options

**Options to fully or semi automatic
Production lines Ax or Mx
Producing high quality compact
Fluorescent lamps S, D and T types**

- Component preparation

- Quality control equipment

- Final assembly

- Laboratory equipment

1 optional machines

HAS: tube cutting machine

MPF: mercury pill machine

GPF: mercury pill mounting and rim forming machine

AFA: automatic final assembly system

LMT: photometer and colour measuring system

Pre-warming or test bench for CFL with 100 lamp holders.

Other equipment.

HAS

Tube cutting machine

Horizontal tube cutting machine for tubes used for the CFL production with continuous motion thermoshock cutting system. The tubes are fire polished at both ends.

Capacity: 4000 tubes per hour.

MPF

Mercury pill machine

Machine to produce mercury pills, used in fluorescent lamps (low pressure mercury vapour lamps). The mercury is held in an iron container which is closed at both ends. It is designed to be held in the exhaust tube between two restrictions and acts as an antenna for the heating through high frequency magnetic field. Mercury pollution is reduced to an absolute minimum.

Production capacity: min. 8'000 pieces per hour.

GPF

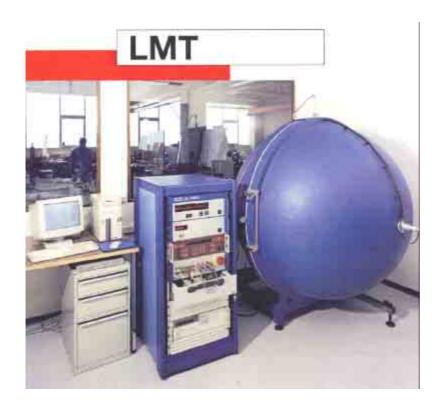### Mercury pill mounting and rim forming machine

This machine is to assemble the mercury pill and the exhaust tube used for the CFL lamp production. Fully automatic, including rim forming. Hg- pill mounting and presence check of the pill before unloading into a container.

Production capacity: 2'800 pieces per hour.
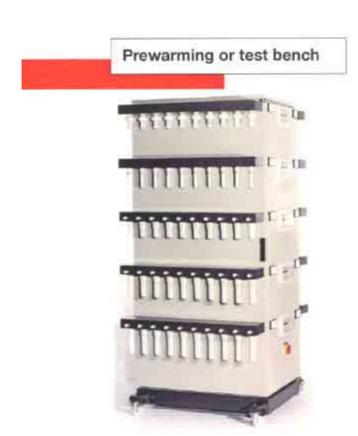
AFA

Automatic final assembly system

Pick and place to the pallets Cutting and straightening of the lead-in wires. Feeding of the different cap types. Feeding of the electronic circuit board. Soldering the contact wires. Inserting the lead-in wires to the contact pins and placing the cap. Hot stamping (SE and DE types only). Crimping the electrical contacts (or soldering the electronic versions). Grinding off the protruding lead-in wires. Function test of the lamp. Unloading to a conveyor.

LMT

Photometer colour measuring system

Especially designed to measure the light output, current and voltage of compact fluorescent lamps. It also provides colour analysis of the lamps, according to the recommendations of the IEC.

The system includes a measuring sphere, stabilised power supply, electronic controls, computer, printer and software.

Prewarming or test bench

This life test bench is for CFL with 100 lamp holders.

2 other equipment

Other equipment available for the CFL production

- Gas filling pressure measuring unit.

- Coating thickness comparison light box.

- Polariscope.

- High frequency tester.

- Electronic thermometer.

- Cap adhesion tester.

- Electronic analytic balance PM300, 0-300 g, tolerance 0,01 g.

- Electronic multifunction balance PM3000, 0-3100 g, tolerance 0,1 g.

- Stainless steel mixing containers for the coating suspension.

- Storage containers for coating suspension.

- Viscosity measuring device.

- 60 kg balance for the preparation of the coating suspension.

- Ultrasonic cleaner.