

Fico MMS-LM Top Foil



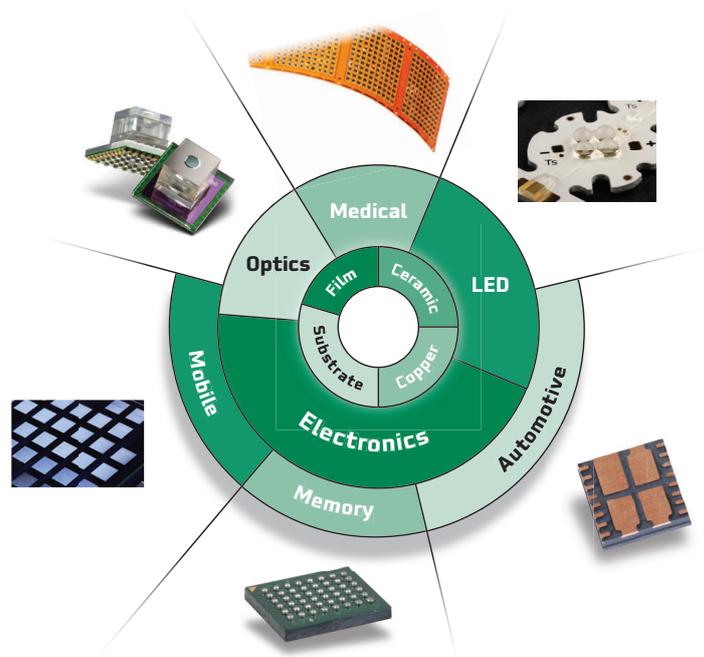
Manual - Large Substrate - Top Foil Molding

Molding is a process where micro chips are encapsulated in plastic.

The MMS-LM Top Foil can handle all current single sided packages on up to 102 x 280 mm large substrates, which allow high board utilisation. Together with the sophisticated top foil molding feature, the MMS-LM allows bleed free production of bare die molded underfill products.

The MMS-LM Top Foil is the perfect solution for molding process parameter optimization. Using the original molds, new products can be developed and optimized prior to large scale production. It can also be used for small production batches or offline cleaning of AMS-LM molds.

Future Proof Equipment



The Fico Approach

Conventional

- Moving blocks
- Complex handling
- Large and heavy mold

Fico MMS-LM

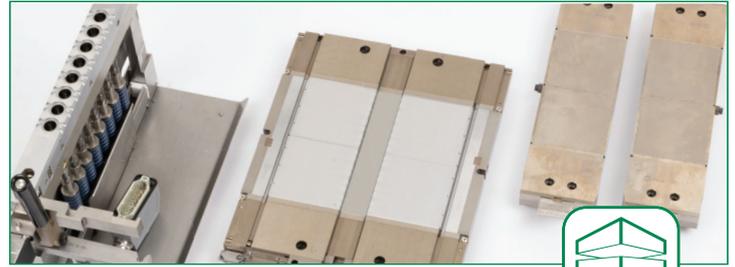
- 102 x 280 mm substrates
- Individually moving bottom molds
- Modular mold design





Vacuum

- Board vacuum
- Cavity vacuum
- Void free end product
- V-pin vacuum control
- Suited for complex molded underfill packages



Mold

- Solid mold design
- Laminated mold design
- Vacuum mold
- V-pin vacuum control
- High precision Fico quality



Foil Unit

- Bare die molding
- Bleed free molding
- No mold cleaning necessary



Molding Press

- Topedge molding (low viscosity compounds)
- Adjustable high clamping force
- Dynamic Clamping Control (Flip Chip Bare Die)
- 17 process patents
- Board and cavity vacuum
- Individual, equal board clamping



Compatible

- Fully compatible automatic and manual machine
- Mold exchange to different systems
- Process parameter exchange
- Universal parts

Machine Dimensions

- WxDxH: 1210 x 1175 x 2012 mm
- Weight: approx. 850 kg

Leadframe Size

- Width: 74 - 102 mm
- Length: 100 - 280 mm

- Thickness: 0.1 - 1.5 mm
- Max. height: 2 mm

Supply Requirements

- Voltage: 208 - 480 VAC
- Frequency: 50 / 60 Hz
- Power rating: 7.5 kVA

- Compressed air: 5 - 10 bar
- Average air cons.: 1.5 m³ at 6 bar
- Factory exhaust: 300 m³ at 50 Hz

Press & Mold

- Max. clamp force: 600 kN
- Max. mold opening: 90 mm

- Max. transfer pressure: 180 bar
- Pellet diameter: 11, 14, 14.3 mm
- Max. number of plungers: 10
- Max. cavity temp. diff.: 2°C
- Built in cleaning exhaust
- Easy installation