



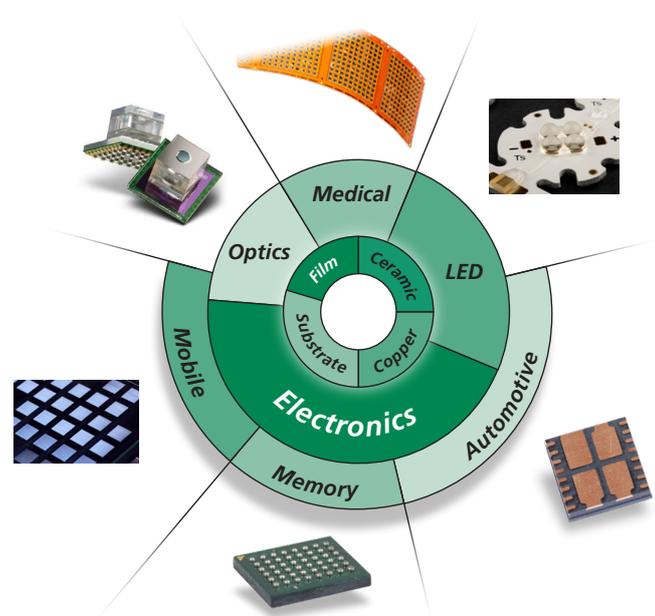
Besi

# Fico AMS-LM <sup>Mk3</sup>

## Large strip molding for SIP, flip chip exposed die, dual side and mems

Besi continuously improves and upgrades its product portfolio with the latest available technology. With its Mk3 version, the Fico AMS-LM is fit for the latest market trend in SIPs, exposed die and complex dual side molding packages. It is also prepared for new and advanced features like factory automation and AGV handling.

The Fico AMS-LM <sup>Mk3</sup> handles strips up to 102 x 280mm which allow a high board utilisation. In combination with deep vacuum and the unique clamp mechanism, the Fico AMS-LM <sup>Mk3</sup> delivers the best product quality at the highest possible yield.



### The Fico approach

#### Conventional

- Moving blocks
- Complex handling
- Large and heavy mold
- Long conversion time
- Expensive PR-set

#### Fico AMS-LM <sup>Mk3</sup>

- Individually compensating clamp cylinders
- Modular mold design
- 35% less moving parts
- Short conversion time
- Low cost PR-set
- Advanced process setup



CASSETTE HANDLER



LEADFRAME HANDLER



VISION



MOLDING PRESS



TOP FOIL (option)



PELLET SUPPLY





### Molding Press

- High clamp force: 600kN (750kN option)
- Recipe controlled deep vacuum level (1 torr)
- Recipe controlled venting closing mechanism
- Substrate thickness compensation
- Selective molding & Flip Chip Exposed Die
- Even mold cap planarity
- Topedge molding



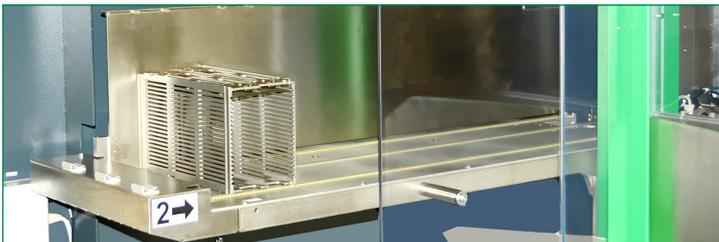
### Foil Units (option)

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



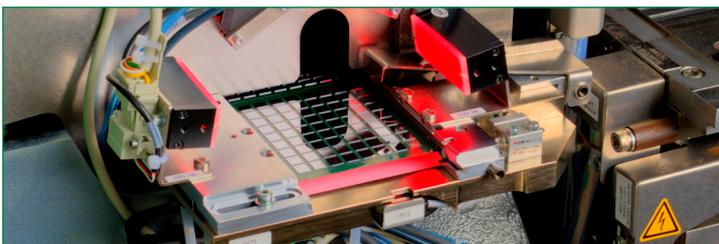
### Leadframe Handler

- Automatic orientation correction
- Leadframe pre-heating
- Anti warpage leadframe cooling
- Thin board air cushion transport



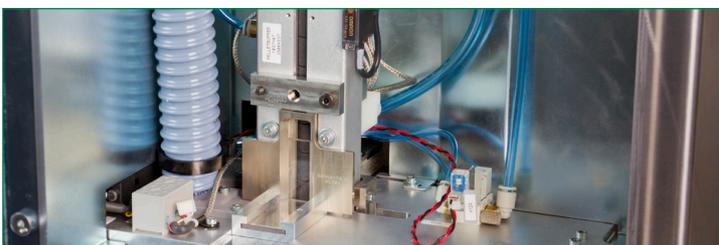
### Cassette Handler

- High capacity
- Freely accessible
- Slot to slot copy
- 2 or 4-deck version
- Bar code, 2D code and RFID reader (optional)



### Vision

- Leadframe orientation check
- Mark inspection, bar code and 2D code check
- Optical Character Verification (OCV)



### Pellet Supply

- Up to 40m remote pellet feed with pellet length check
- Pellet cooling
- Pellet age control

### Strip size

- Width: 74 - 102mm
- Length: 100 - 280mm
- Thickness: 0.1 - 1.5mm
- Max. height: 2mm

### Cassette Dimensions

- Width: 80 - 120mm
- Length: 180 - 300mm
- Height: 100 - 165mm
- Storage capacity: 800mm

### Performance

- Uptime: 98%
- MTBF:  $\geq$  200h for a MTTR of 1h
- MTBA:  $\geq$  3h
- MTTR:  $\geq$  1h
- MTTA:  $\leq$  3min

### Machine dimensions\*

- WxDxH: 3,145 x 1,652 x 2,191mm
- Weight standard syst.: 3,600kg
- Weight foil syst.: 3,750kg

### Supply Requirements

- Voltage: 208 - 480VAC
- Frequency: 50 / 60Hz
- Power rating: 9kVA
- Compressed air: 5 - 10bar
- Average air cons.: 6m<sup>3</sup> at 6bar
- Factory exhaust: 1000m<sup>3</sup> / 50Hz

### Press & Mold

- Max. clamp force: 750kN
- Max. mold opening: 90mm
- Max. transfer pressure: 15MPa
- Pellet dia.: 14, 14.3, 16, 18mm
- Max. number of plungers: 10
- Max. cavity temp. diff.: 2°C

\* Base dimensions of the system, without protrusions like exhaust, hand grips, MMI support and other provisions or options of the system.