Esec 2009 fS^{E}

Fastest Soft Solder Die Bonder with a Wide Application Range

The ever more demanding market requirements led to the evolution of the Esec 2009 fS^{E} Die Bonder, the fastest soft solder die bonder in the industry with a broad application range. First to mention is the point-to-line Pick & Place with stationary indexer, which enables increased throughput and productivity. Furthermore, the Esec 2009 fS^{E} Die Bonder handles both single row and matrix leadframes, as well as a wide variety of packages like SOT-23, SOT-223, SOT-89, TO-92, TO-126, TO-220 and DPAK devices. The optional leadframe conversion kits offer an effective solution for future changes in the product mix.

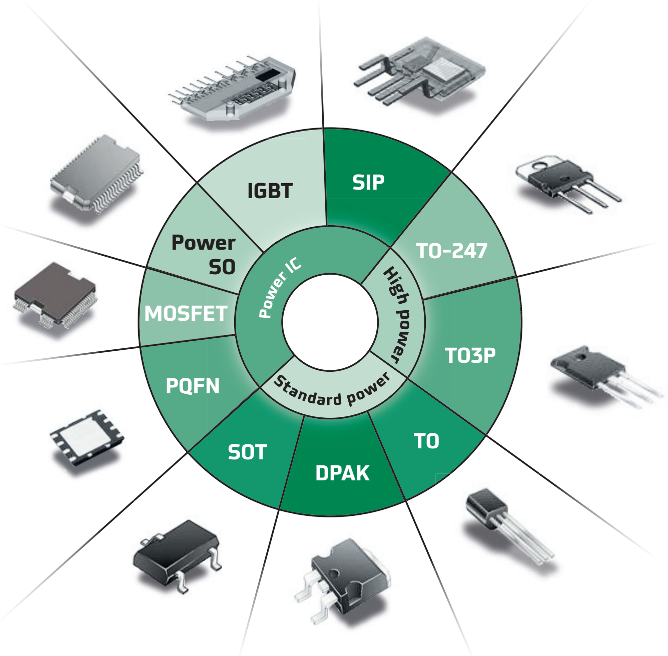
The development of the Esec 2009 fS^{E} is based on more than 30 years of experience. One important contributor to lowest cost of ownership is the significant reduction of gas consumption of up to 50% compared to competing systems, which means massive savings in operating costs every day.

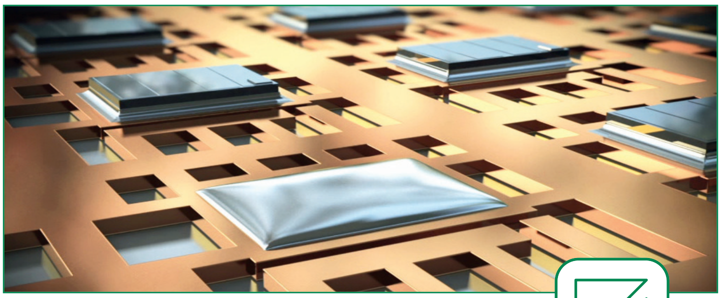
Increased Throughput & Productivity

Enhancements

- New dispense system
- Best process control
- Significantly higher throughput for matrix leadframes

Future Proof Equipment



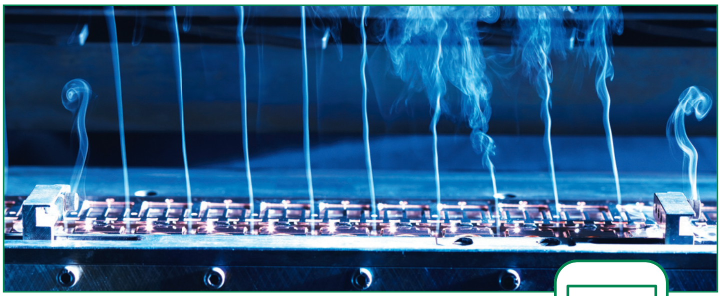


Pattern Dispensing

- New dispense process
- Programmable pattern size and BLT (tool-less)
- Full pad coverage, no geometrical limitations
- Superior wetting
- Upgradable on all 2009 fS^{E}

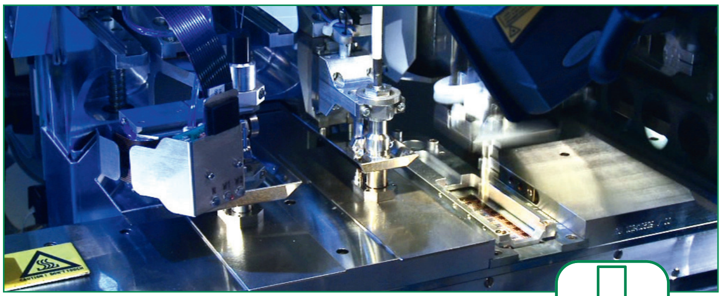
Quick Exchange

- Extended application range
- Quick exchange indexers
- Leadframe conversion kits
- Multi die and multi pass bonding



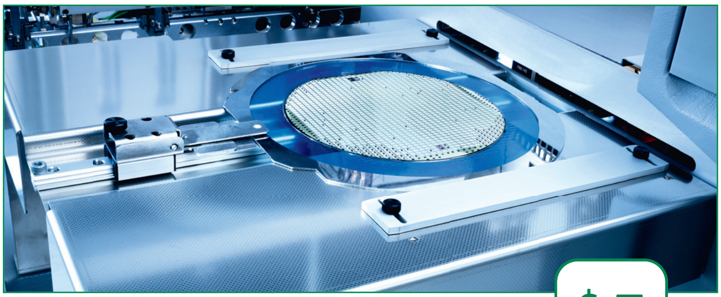
Oven and Atmosphere

- Uniform gas flow
- Accurate and flexible temperature profile settings



Point to Line Pick & Place

- Highest throughput with matrix leadframes
- Individually programmable pick and bond force



Low Operating Costs

- Lowest gas consumption
- Single wafer loader
- Manual QC inspection

Productivity / Process

- Net productivity: 2,500 to 8,000 UPH typical (depending on overall equipment and material configuration)
- Temperature control: 8 zones, up to 450°, ±5°C
- Bonding time: 0 to 32 sec (programmable)
- Bonding force: 0.5 N to 20 N (programmable)

Wafer

- Wafer size: up to 8”
- Frame size: 6”, 8”
- Die size: 0.4 x 0.4 mm - 11 x 11 mm / 16 x 16 mils - 430 x 430 mils

Substrates and Carriers

- Max length: 285 mm
- Max width: 60 mm

Die Placement Accuracy

- ± 80 μm / 0.6° (3σ)

Product dependent

Machine Dimensions

- Footprint: W x D x H: 1970 mm x 1305 mm x 1760 mm
- Weight: approx. 830 kg / 1,830 lb