

# BL300

Small Footprint Eutectic Die Bonder



***ficonteC***  
micro assembly machines

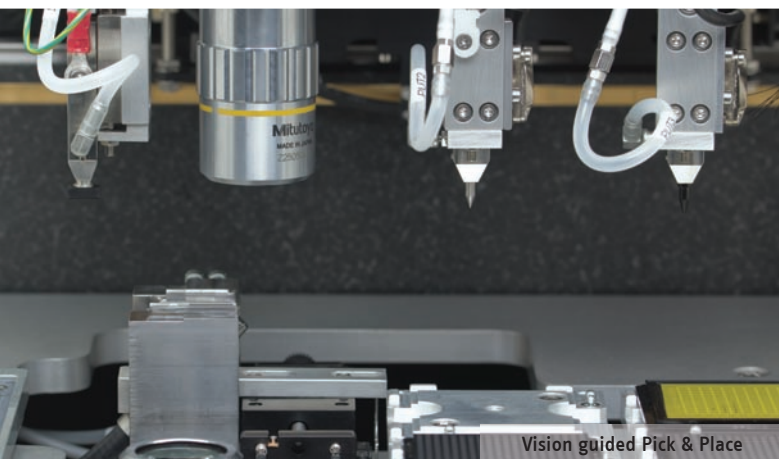
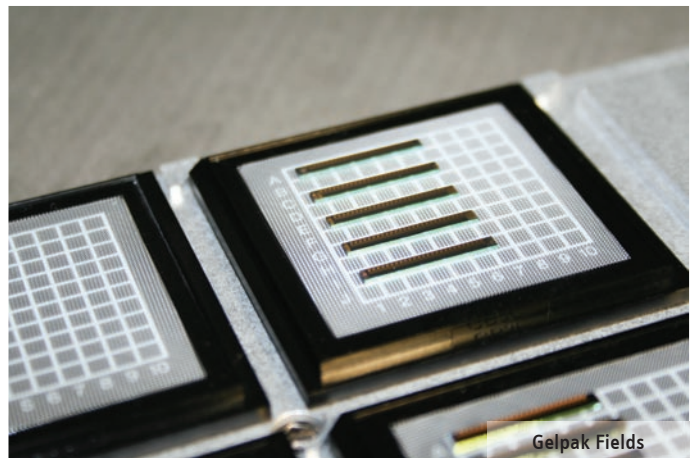
# BL300 Small Footprint Eutectic Die Bonder

The machines of ficonTEC's 300 series are small footprint yet high precision die bonders. They are designed to break down complex assembly processes into standardized recurring sub-processes for low cost of ownership.

The BL300 is an automotive eutectic die bonder. It can be equipped with a conventional heating plate or an state of the art laser soldering module.

## Typical Tasks

- Eutectic die soldering
- Chip to chip bonding
- Chip to substrate soldering
- Pick and place
- Die sorting



## ProcessControlMaster Powerful Machine and Process Software

- Freely programmable machine processes
- User friendly user interface
- Line based process programming
- Recipe based management of process parameters
- Algorithms for active assembly
- SQL data base based storage of process parameters and flexible data import and export
- Component tracking
- Remote service and control via internet

## Built for Industrial Usage

- Rugged steel base production cell
- Hardware interlock circuit for safe operation
- Ergonomic HUI
- Integrated air and vac control
- Operation console for comfort access of basic machine function
- Cabinets for electrics and pneumatics
- Laser class 1

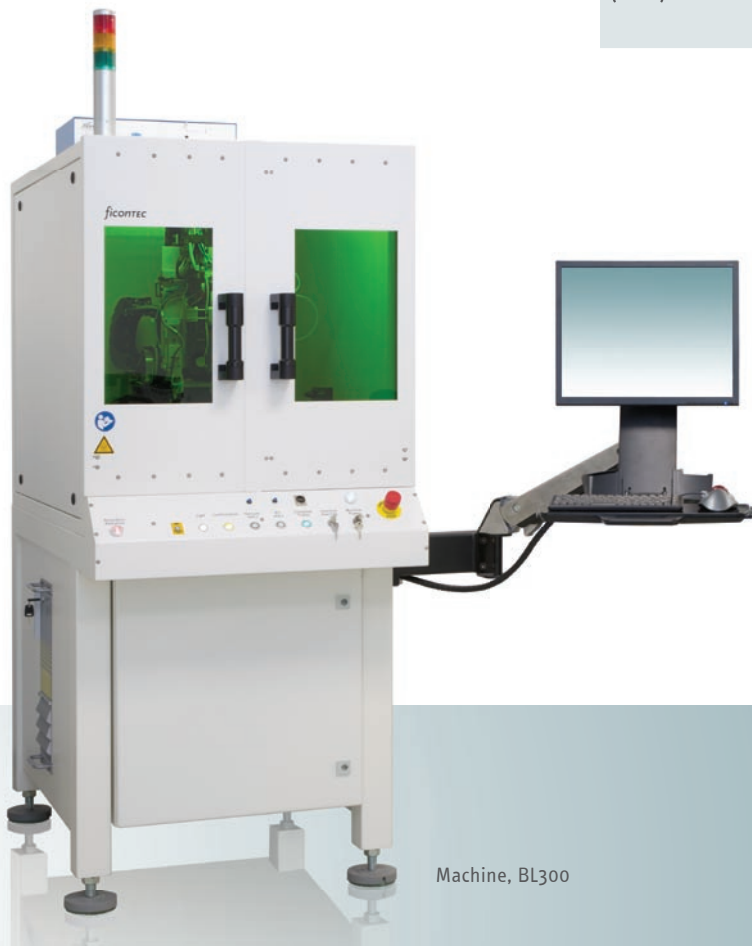
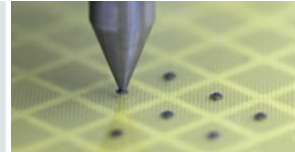
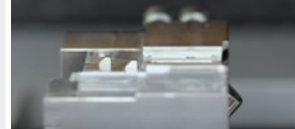
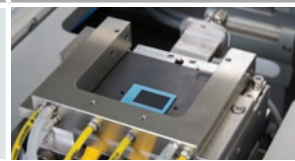
## Key Features

- Machine vision guided fully automated alignment and attach
- Fully automatic process
- Compact footprint
- Reduced complexity
- Single task operation
- Automatic calibration routine
- ProcessControlMaster: Extremely powerful and versatile machine software



Vacuum Pick-up Tool

Module	Features
Heating Plate	<ul style="list-style-type: none"> <li>• Ceramic heating plate</li> <li>• 10 mm x 10 mm net area</li> <li>• Programmable temperature profile</li> </ul>
Laser Soldering Chuck	<ul style="list-style-type: none"> <li>• Fast soldering processes</li> <li>• Internal compact laser</li> <li>• Individual chuck design</li> </ul>
Pick-up Tool (PUT)	<ul style="list-style-type: none"> <li>• Different PUTs available</li> <li>• Glass, steel, rubber, plastic chosen for best application</li> <li>• Operated with vacuum</li> </ul>



Machine, BL300

## Machine Configuration

- Maintenance free linear motor driven motion system
- Easy tool exchange for varying component sizes
- Granite machine bed
- Soldering chuck (conventional or laser heating)
- Vacuum release Gelpak field
- Component flipping capability (optional)
- Auto calibration routine

## BL300 Specifications

Features	X, Y, Z Axis	Phi-Z Axis
Travel	350, 200, 100 mm	> 90°
Resolution	50 nm	< 2"
Speed	0.5, 0.5, 0.2 m/s	20°/s
Component Feeding	<ul style="list-style-type: none"> <li>• 4 x 2" Gelpaks or Waffle Trays</li> <li>• Customized trays</li> </ul>	
Component Alignment	<ul style="list-style-type: none"> <li>• Machine vision based referencing (+/- 2 µm capability)</li> <li>• Optical distance sensor alignment (+/- 0.5 µm capability)</li> </ul>	
Housing and Control	<ul style="list-style-type: none"> <li>• Steel base</li> <li>• Cover with sliding doors</li> <li>• Control System with PC</li> <li>• Displays, Keyboard &amp; Trackball</li> <li>• Motion Control System for linear and rotary motion system</li> </ul>	

### What we do

ficonTEC designs and produces automated production equipment for the assembling or testing of components.

We are the market leader in the field of equipment for the assembly or test of micro-optics or opto-electronics such as laser diode manufacture, medical technology, security and defense engineering as well as telecommunications.



### Contact us

#### EUROPE

ficonTEC Service GmbH, Rehland 8, 28832 Achim, Germany  
 Phone: +49 4202 51160-0, Fax: +49 4202 51160-090  
 Mail: [info@ficontec.com](mailto:info@ficontec.com)

#### USA

ficonTEC (USA) Corporation, 25 Calle Canela, San Clemente, CA 92673, USA  
 Phone: +1 949 388-5800, Fax: +1 949 388-1489  
 Mail: [usa@ficontec.com](mailto:usa@ficontec.com)

#### ASIA

ficonTEC Trading (Shanghai) Limited Company  
 Rm. 303, Floor 3, No. 150 Liulin Road, Huangpu District 200021, Shanghai, PRC  
 Phone: +86-21-5273 0985, Fax: +86-21-5273 0985  
 Mail: [china@ficontec.com](mailto:china@ficontec.com)

[www.ficontec.com](http://www.ficontec.com)



### ISO 9001 Certification

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