boschman technologies bv

Boschman Technologies offers distinct process and equipment solutions for the semiconductor industry and related markets.

Boschman focuses on specific market segments offering unique and superior solutions tailored to customer requirements and wishes. We dedicate our resources to deliver molding and sintering equipment for the following market segments:

Mems and Sensor packages	Powers/Discretes
Smartcards	Leadless packages
Pre-molded packages	LED

Mold and Sintering tools

All our molds and sintering tools are developed, engineered, manufactured and tested at our mold tooling center in the Netherlands - all under one roof. Our design specialists and experienced craftsmen form a formidable team with one goal in mind - meeting your requirements. Thanks to our long history of innovative design and precision manufacturing in the Netherlands, our molds comply with the highest standards. We only use powder metallurgy tool steels of the highest quality and deploy certified heat treatments and coating processes. Our molds and sintering tools offer unprecedented wear resistance, dimensional stability and field replaceable spare parts during their entire service life. Our sintering tools are designed and manufactured based on our long term experience on molding tools.

Mold and Sintering systems

Our molding and sintering systems are developed at our systems R&D facility in the Netherlands. Mechanical, electrical, software, process and mold-design experts work in multidisciplinary teams to realize the best possible total system solution. Our semiautomatic and automatic systems are produced at Boschman Technologies Asia in Singapore. Aside from an experienced production staff, we have local mechanical, electrical, software and process engineers available to ensure and maintain the highest possible production quality.

Packaging services

Our Advanced Packaging Center B.V. (APC) provides packaging services ranging from package technology research, package development, qualification, prototyping and small to medium volume manufacturing services. APC also assists customers to transfer from proto-typing to massproduction for mems, Sensors and advanced IC packages.

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UNISTAR

Innovate-2-NF-L

The most universal semiautomatic molding system designed for conventional packages. Suitable for small to medium sized production volumes. Noted for very short conversion times when moving from one package to another and low cost tooling.

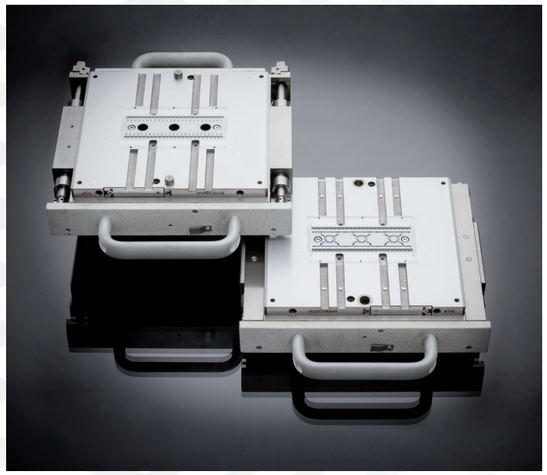
This system can handle test molds, 1-strip molds and 2-strip molds. It is ideal for package technology research, package development, process optimization and qualification runs. The transfer process technology used in this system is identical to the technology used in automated systems. Leadframes, substrates ceramic carriers, as well as individual modules can be processed. The ergonomic design makes the system easy to operate. CE-compliant.

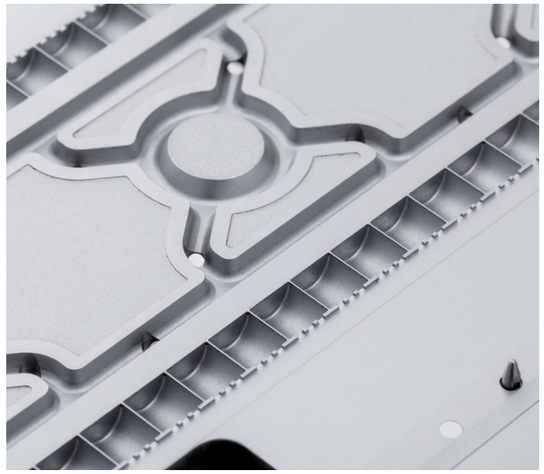
Fast conversion between different package types

Mold exchange is easy and fast and is supported by a conversion menu on our color touchscreen in your own language and removable exchange jigs. Top to bottom mold alignment is ensured after conversion.

Low Cost Tooling

For same family related packages, Boschman has developed low cost, exchangeable cavity blocks. These cavity blocks are self-centering and easy to exchange in the top and bottom mold.





Low to Medium Sized Volume Production

This system is semi-automatic meaning that carriers and compound must be loaded and unloaded manually using easy to handle jigs. Mold movements, the transfer process and film handling are fully automated and 100 % identical to our fully automatic 2-strip systems. User interface and control systems are also the same as in our fully automated systems. This system can process 1-strip production molds and/or 2-strip production molds. These molds can handle low to medium size production volumes without needing to invest in a fully automatic system. When volumes grow and a fully automatic system is needed, the production mold can be transferred to the automatic system.

Package Technology Research, Package Development and Process Optimization

This system can be equipped with a universal test mold base. Small low cost mold inserts are available for this mold making it easy and inexpensive to run process trials, develop new packages and provide first customer samples.

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Features

High Precision Press with Self Correcting Clamping System

Real time clamp force control from 20 to 100 tons by easy to use, color touchscreen parameter settings. Mold movement and closing are controlled by servo motors.

Advanced Transfer and Cure Process Closed Loop Control

Easily programmable and monitors unlimited steps. Can be equipped with additional pressure sensors in the runners for more accurate process control.

Simple and Fast Mold Exchange

Quick mold exchange is supported by a touchscreen guide menu.

Hard Disk Drive and USB Port

Enables storage of all relevant process parameters and allows for the easy extraction of data. All key process parameters can be monitored real time with upper and lower limits. With every shot, the process can be displayed on a graphical touchscreen. SECS/GEM optional.

I/O Menu Available

Allows for easy monitoring of all sensors.

Energy Efficient System Design

Low power consumption. During clamping no power consumption.

Vacuum Mold Option Available

Unique Automatic Substrate Thickness Compensation Clamping System Optional

Allows for the compensation of substrate thickness variation up to 0.5 mm without any hardware changes. Real time clamp force is controlled by easy to use parameter settings on a color touchscreen monitor.

Automatic Pellet Feed System Optional

Small Footprint and Easy Acces

CE-Certified