YOUR PROCESS
IN GOOD HANDS
Our aim
We do more than dispensing

Leading, comprehensible, all-embracing
These are the values of and for the people that make bdtronic: Workers, engineers, specialists, managers, sales staff – doers and thinkers.

At bdtronic, complex machinery is «handmade» by people with deft fingers. We symbolize this by a hand. It will consistently give hints on the following pages, gestures and clear hand signals to show you what we stand for:
Clever people creating, both with their manual and cognitive capabilities, solutions for the complex processes of our customers.

To simplify matters, we count our key competencies with the fingers of a hand: dispensing, impregnation, plasma, hot riveting and automation. The fact that these competencies currently sum up to 5 is pure coincidence. It is however no coincidence that lots of our competencies and services go hand in hand and complete each other.

This way of thinking is expressed in our logo.

An additional result of this equation is our new name: bdtronic, both a piece of our past as part of BARTEC Dispensing Technology and our future, which is: more than dispensing.
LEADING

WE WANT TO BE THE BEST. IN ORDER TO ACHIEVE THIS, WE CANNOT BE SPINNING OUR WHEELS, IT REQUIRES FOCUS. THAT’S WHAT WE DO: WE SHOW OUR WINNER’S MENTALITY IN NICHEs: DISPENSING, IMPREGNATION, PLASMA, HOT RIVETING AND AUTOMATION. WITH OUR IN-DEPTH KNOWLEDGE IN THESE FIELDS, WE ALWAYS PROVIDE A BENEFIT TO OUR CUSTOMERS.
Our company has grown. The roots of both our dispensing and automation technology can be found in the 70’s. Since 1983, the former business unit dispensing technology of BARTEC GmbH has developed itself further until the new independent BARTEC Dispensing Technology GmbH was formed in 2002.

The company is characterized by its wide scope of competence. Machine building in dispensing, impregnation, plasma and hot riveting technology belongs to the portfolio as well as entire systems solutions in assembly and manufacturing of electronic components.

In 2004 BARTEC Dispensing Technology became a 100% owned subsidiary of M.A.X. Automation AG which is listed on the stock-exchange. With the change of name to bdtronic in 2012 we have conquered quite some milestones. Now, we are heading towards open markets of the future with our competencies and know-how. A sustainable growth for the benefit of our customers.

MILESTONES

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>1975</td>
<td>Formation of BARTEC GmbH in Bad Mergentheim</td>
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<tr>
<td>1983</td>
<td>Creation of business unit dispensing technology in Bad Mergentheim</td>
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<td>2002</td>
<td>Formation of independent BARTEC Dispensing Technology GmbH</td>
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<td>2003</td>
<td>Commissioning of the 1,500th dispensing machine</td>
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<td>2004</td>
<td>Integration into the listed M.A.X. Automation AG</td>
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<td>2005</td>
<td>Construction of a new building at the headquarters Weikersheim</td>
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<tr>
<td>2006</td>
<td>Construction of a sales and service office in China</td>
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<tr>
<td>2007</td>
<td>Formation of a sales and service office in China</td>
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<tr>
<td>2008</td>
<td>Expansion of product portfolio by impregnation technology</td>
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<tr>
<td>2009</td>
<td>Turnover milestone: 20,000,000 exceeded</td>
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<tr>
<td>2010</td>
<td>Expansion of product portfolio by plasma and hot riveting</td>
</tr>
<tr>
<td>2011</td>
<td>Turnover milestone: 25,000,000 exceeded</td>
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<tr>
<td>2012</td>
<td>Turnover milestone: 30,000,000 exceeded</td>
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<tr>
<td>2013</td>
<td>Name change to bdtronic</td>
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<tr>
<td>2014</td>
<td>Turnover of 40,000,000 exceeded</td>
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<tr>
<td>2015</td>
<td>Turnover milestone: 40,000,000 exceeded</td>
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<tr>
<td>2016</td>
<td>Construction of a new building at the headquarters Weikersheim</td>
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<tr>
<td>2017</td>
<td>Turnover milestone: 50,000,000 exceeded</td>
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COMPANY
In everyday life, you can find products manufactured with our process solutions in the automotive industry, renewable energy, electrical and electronics industry and medical technology as well as in a variety of other sophisticated applications.

**MARKETS END PRODUCTS**

**YOU CAN FIND US EVERYWHERE**

**AUTOMOTIVE**
- Power plugs
- LED strips
- LED displays
- Transformers
- Street lights
- Capacitors
- Elevator motors
- Solenoid valves
- Water pump controller
- Relays
- Thermostats
- Sensors

**ELECTRIC AND ELECTRONICS INDUSTRY**
- Engine/gearbox control
- Instrument panel
- Airbag sensors

**RENEWABLE ENERGY**
- Inverters
- Solar/PV panels
- Back-rail bonding
- Junction boxes
- Wind power generators

**MEDICAL TECHNOLOGY**
- Dialysis filters
- Prostheses
- Monitors
ALL-EMBRACING

WE UNDERSTAND THAT EVERYTHING IS INTERCONNECTED. WE PROVIDE FROM SINGLE PRODUCTS UP TO COMPLETE SOLUTIONS, UPON OUR CUSTOMERS REQUIREMENTS. AN ALL-EMBRACING NET BUILT FROM OUR APPLICATIONS AND SERVICES, OUR EXPERTISE AND KNOW-HOW THAT DOES NOT LEAVE ANY QUESTIONS UNANSWERED. WE’LL GO WITH YOU FROM A TO Z, FROM YOUR FIRST INQUIRY TO THE COMPLETE SOLUTION AND BEYOND.
DISPENSING IN THE SUPERLATIVE

SMALLEST AMOUNTS, SAFEST PROCESS, HIGHEST ACCURACY, BEST ACHIEVEMENTS.

Our dispensing systems are masterpieces. Where others merely accomplish the approximate, our systems steal the show with exactness. The precision refers to all relevant dispensing parameters. We measure, monitor and check exactly where it happens: flow, pressure, viscosity, amount, time.

The most reliable material preparation, the most exact metering system, the most suitable mixing process, the highest possible control lead to one thing: the best for you.

APPLICATION

DYNAMIC
Consistent dynamic mixing

TECHNOLOGY

STATIC
Compact static mixing

MICRO DISPENSING
Precise dispensing of small and smallest quantities

PROCESSES

With our competence in this technology we can realize the following processes

- Potting
- Vacuum potting
- Paste application
- Sealing
- Bonding
- Spraying
- Foaming

APPLICATION

Pail Preparation System (PPS)

2K static dispensing system

Material Preparation System (MPS)

2K dynamic dispensing system

Our standard dispensing machine incl. material preparation
IMPREGNATION
A FULL SET OF RELIABILITY

What works in little we can also make work in large. In addition to different small electric and wound components, our machines also impregnate complete motors. The process always requires precision and professional experience. This is what we guarantee our customers, along with a maximum of reliability and a full set of technologies: trickling, roll dipping, hot dipping, vertical dipping, stator potting or combined impregnation processes. For all of these technologies, we use our own material preparation and dispensing systems and offer you efficient and stable processes from A to Z.

APPLICATION

With our competence in this technology we can realize the following processes
- Trickling
- Roll dipping
- Hot dipping
- Vertical dipping
- Stator potting
- Combined impregnation processes

Example of an impregnation machine with unilateral part flow

TECHNOLOGY

IMPREGNATION OF ELECTRIC MOTORS IN A STABLE PROCESS.

PROCESS

Trickling
Load and pre-heat
Trickle
Heat cure

Roll dipping
Load and pre-heat
Dip
Heat cure

Vertical dipping
Load and pre-heat
Dip
Drip-off and heat cure
Plasma is the future. We have it now. Plasma prepares the substrate for best adhesion on any kind of material. It makes solvent-based and mechanical cleaning steps redundant, protects the environment and your operators, saves cost and time. Plasma can modify surfaces in such a way that various glues can bond and join different materials. The most important benefit is in our hands: our plasma technology makes your process, 100% stable and repeatable. The adhesion properties of your components improve significantly and permanently. Day and night – continuously.
HOT RIVETING
 ALWAYS SPOT ON

TECHNOLOGY

APPLICATION

PROCESSES

With our competence in this technology we can realize the following processes

- Riveting
- Flanging
- Embedding
- Riveting of countersunk heads
- Anchoring
- Joining

TECHNOLOGY

TEMPERATURE EXACTLY CONTROLLED, EASE OF OPERATION, LOW OPERATING COSTS

Our temperature management during the hot riveting process is at the top level. This means most of all that we keep that level at all the time: our active dynamic temperature control ensures this continuously and reliably. A single head heats up a thermoplastic dome, forms a rivet and instantly cools down to achieve a maximum strong joint. Both applied technologies «Hot Stamp» and «Hot Jet», are cost-efficient and environmentally friendly. Consumables such as screws are no longer required.

HOT STAMP
exactly controlled temperature

HOT JET
high tensile strength by means of homogeneous heating

Hot Stamp

Hot Jet
AUTOMATION
PERFECTLY HAND-IN-HAND

PROCESS INTERLINKING DE LUXE. EVERYTHING FITS TOGETHER.
We see automation as the regulating power and royal discipline in mechanical engineering. As a leading manufacturer of dispensing systems we know how complex small steps can be. The linking together of different process steps to a larger entity is therefore an even bigger challenge. We gladly accept it. Varied «function modules» and diverse handling and transport systems make our process chain perfect.

SCOPE OF APPLICATION
We link our technologies and processes to complete manufacturing lines.
Alternatively we integrate our newest technology in existing systems
› Dispensing
› Plasma
› Hot riveting

PROCESS COMBINATION
› PCB mounting  › Hot riveting  › PCB potting  › Plasma  › Dispense of lid, cover  › Mounting lid  › Testing
YOU WANT THE HIGHEST STANDARD. WE ARE YOUR COMPETENT PARTNER AND WE GLADLY TAKE YOU BY THE HAND TO TRANSLATE SOMETHING COMPLEX INTO SOMETHING COMPREHENSIBLE. SUPPLEMENTARY TO SALES OF EQUIPMENT AND MACHINERY WE OFFER A WIDE SPECTRUM OF SUPPORTING SERVICES. THIS ALLOWS US TO PROVIDE CLEAR AND TRANSPARENT ANSWERS AND SOLUTIONS TO ALL DEMANDS AND QUESTIONS.
We are convinced that, especially when it comes to your requirements, order and transparency are very important aspects of successful project management. Therefore we assign to you, from the beginning of the project, a personal point of contact who will guide you through all the stages of the project. In the initial design phase you receive a project fact sheet in which all project relevant data, planning, arrangements etc. are covered.

Obviously, we also resort to the general standards of project management such as e.g. FMEA and cycle time analysis. Your requirement specifications are too important to be left to chance.

Please visit our in-house development workshop. In our application technology center our engineers, technicians and lab personnel are at your service to convert ideas into action. In our large and well-equipped technology rooms we test, optimize and develop your process requirements in the field of our key competencies.

Our portfolio includes manual and machine trials to optimize your process, testing of reactive resins and prototype and small series production.

Use our modern machinery and bypass small production bottlenecks with our help. We offer you solutions for potting, bonding or sealing of parts for among others the medical, electrical or filter industry.

The benefit of contract manufacturing of the above-mentioned cases is obvious: high quality and short lead times.

We offer you technical support and different maintenance contracts beyond the commissioning. You can choose from different, individual maintenance packages, or call for help for remote diagnosis, machine modifications, or relocation, at any time.

Our technicians carry out necessary repairs either in our own workshop or “on-site” in your facilities. An optimal spare parts supply is guaranteed.

We have set up a multilingual service hotline to provide technical support:

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