

850 EMPLOYEES
3 TECHNOLOGIES
65 YEARS OF COMPETENCE IN AUTOMOTIVE AND HOME APPLIANCE COMPONENTS



65
ETIMEX
LEADING THE WAY IN BLOW AND INJECTION MOLDED PARTS FOR 65 YEARS

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**SOPHISTICATED BENEFITS:
ETIMEX TECHNICAL COMPONENTS**

We make vehicles lighter, ensure the precise transport of air and water in home appliances, meet the highest of requirements through injection molded products from the clean room: For over 60 years, ETIMEX has been a leading partner for customer-specific, technically sophisticated plastic parts, rubber molded items, elastomer parts, assemblies and systems.

Core ETIMEX competences include 3D blow molding, the combination of blow molding and injection molding, as well as multi-component injection molding. We supply leading manufacturers in the automotive, home appliance and medical equipment sectors and support them in their search for solutions. ETIMEX transforms trendsetting ideas through development and design, prototyping and testing into mass production of parts with premium quality.

**PRODUCTION METHODS FROM
A SINGLE SOURCE**

3D BLOW MOLDING (ALL STANDARD METHODS)

BLOW MOLDING COMBINED WITH INJECTION MOLDING

INJECTION MOLDING

MULTI-COMPONENT INJECTION MOLDING

INJECTION MOLDING OF HOLLOW PARTS BY UTILIZING OVERMOLDING TECHNOLOGY

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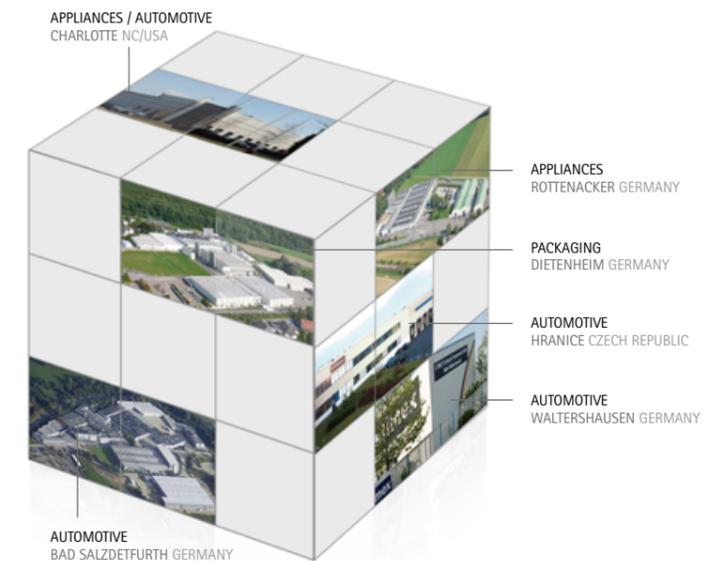
ETIMEX HOLDING

For over 65 years, ETIMEX PRIMARY PACKAGING GmbH has developed and produced films and containers from various plastics for applications in packaging solutions for the food and pharmaceutical industry as well as films for technical applications.

ETIMEX TECHNICAL COMPONENTS GmbH develops and produces customer-specific blow and injection molded parts and assemblies. For over 50 years, the company has supplied leading automotive and home appliances manufacturers with technically sophisticated, 3D seamlessly blow molded parts, plastic assemblies and rubber parts.

FACTS & FIGURES

- > Founded in 1950
- > 6 factories
- > 850 employees
- > Sales of €165 million/year
- > 5 technologies in the ETIMEX GROUP
- > Global distribution network





LIGHTER – PRECISE AND EFFICIENT

With our co-development capabilities and our precision products we help leading manufacturers every day to enhance their position in the market. Here are just three examples:

- > the steering column sealing with plastic bearing – compensates body tolerances and reduces road noise in the cabin: millions produced by ETIMEX
- > specifically shaped cooling ducts – essential in the complex cooling circuit of Li-Ion batteries and performance electronics in electric vehicles: a contribution to the future from ETIMEX
- > the high-strength, ultra-light roof frame made from carbon fiber – a model-dependent precision part up to three meters in length: developed and manufactured in the blow molding process by ETIMEX

ETIMEX is your contact for the intelligent development of plastic parts in the automotive industry.

We think ahead and allow our automotive customers to develop new products by combining different processes such as blow molding, elastomer and injection molding. In doing so we cover various applications and live up to the highest expectations including the complete development phase from a concept to the final product. Our production equipment is capable of producing various kinds of parts with special sizes.

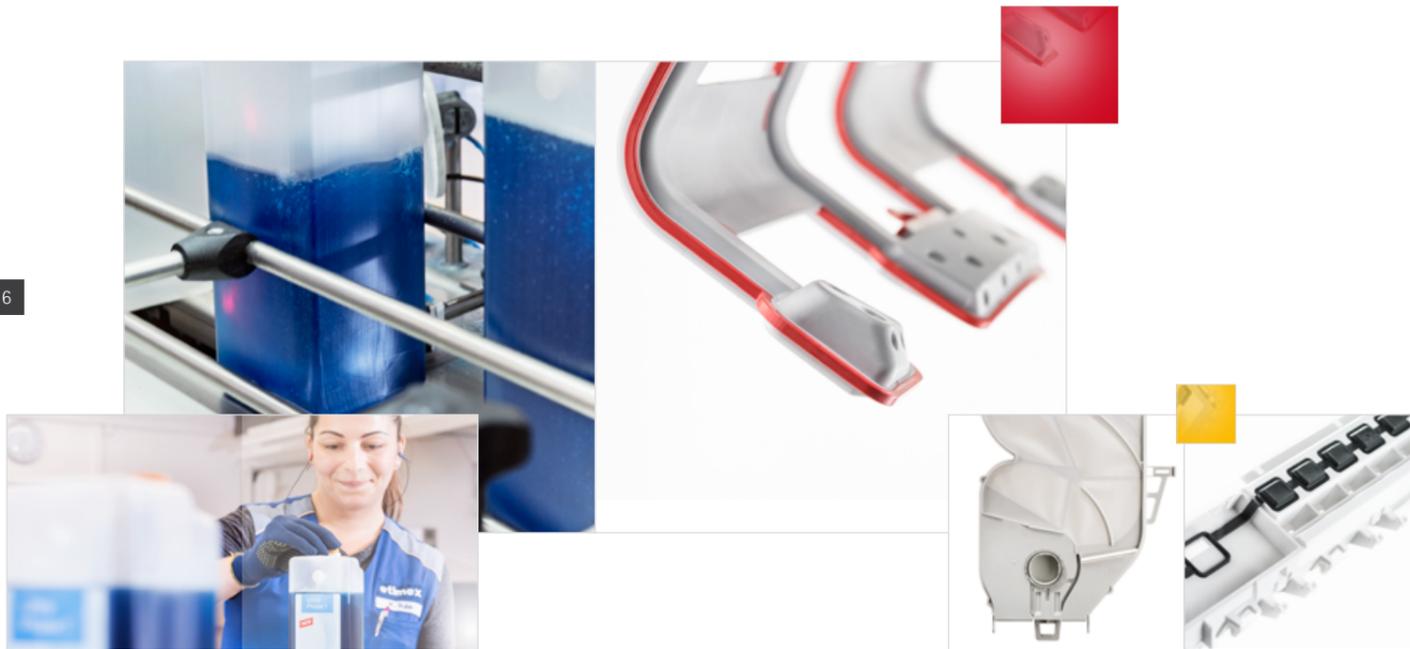
What are your requirements?

We would be pleased to develop products with you that are tailored precisely to your individual needs.

BY ETIMEX:

- > Raw air intake ducts
- > Clean air hoses
- > Charge air pipes
- > Blow molded cores for CFRP components
- > Battery cooling channels
- > Filler necks
- > Containers
- > Steering column sealings

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PROVEN ABILITY

Our products assist with the flow of air and water in home appliances through customized assemblies, channels, ducts and systems. These are part of ETIMEX's core competencies. We develop solutions together with our customers and produce high performance parts in production using mainly our blow molding and injection molding technology. Our ideas can lead to more efficient products that help to a consumers decision to purchase the end product. E.g. our easy-to-use containers, filled with detergent and packed at ETIMEX in a single operation, dedicated for premium washing machines.

ETIMEX develops your products to the end-users requirements and sparks ideas to be successful in tight markets.

BY ETIMEX:

- > Water management and drying systems for dishwashers
- > Water tanks
- > Water inlets
- > Heat exchangers and condensers made of plastic
- > Water management systems for washing machines
- > Air ducts for washer-dryers
- > Condensate tanks for laundry dryers
- > Detergent-filled tanks for washing machines
- > Gasoline and oil tanks for garden appliances
- > Air, water lines and empty pipes for sanitary areas

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SPECIAL SYSTEMS

We have special equipment available for special requirements. In our ISO Class 9 clean room, we protect sensitive products against possible contamination. Physically separated from other areas, the 70 square meter room enables the efficient manufacturing and packaging of high-precision, 2-component injection molded parts using a 350 ton 2K injection molding machine and a 6-axis robot outside the clean room cell. The plastic parts, which are initially sterile due to the high processing temperature, are transferred to the clean room completely automatically by robot, where they are packed under controlled conditions. ETIMEX paves the way to the future with you, investing in know-how and procedures.

BY ETIMEX:

- > Container for wound treatment
- > Connecting pipe



ACTIVE IN CO-DEVELOPMENT

ETIMEX cooperates with customers to develop technical plastic parts and assemblies for the automotive, home appliance, medical equipment and sanitary sectors. Our engineers and technicians work with:

- > 3D-CAD systems
- > Flow simulation
- > FEM programs and the
- > ETIMEX laboratory

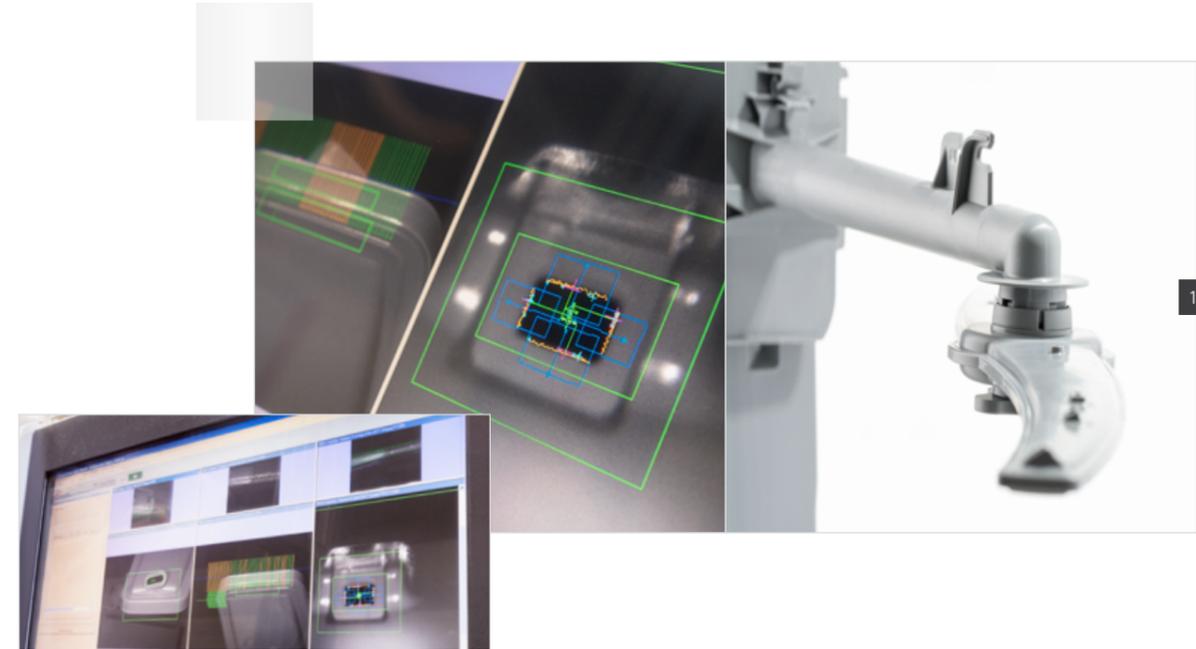
The manufacturing of prototypes and thorough testing procedures give us reliable results for functionality and long term usage. Projects are systematically realized through APQP (Advanced Product Quality Planning) pursuant to ISO/TS16949.

PROACTIVE IN-HOUSE DEVELOPMENT

ETIMEX invests in the optimization of existing assemblies and the development of new systems. Through the project phase we pursue clear development targets such as reduction of the necessary space, energy saving, integration of functions and elimination of parts. This is to reduce costs without compromising fit and function. A good example of this is the expandable, modular valve assembly: Various basic bodies equipped with high-performance valves offer a large number of hydraulic switching and control functions. A specially developed flow meter completes the assembly, turning it into an individual, flexible system.

DEVELOPMENT PROJECTS

- > Flow meter
- > Modular valve assembly
- > Heat exchanger made of plastic
- > Fabric-reinforced molded pressure hose
- > Water softener



PROCESS COMPETENCE AND CLEVER INNOVATIONS

With customer requirements, design, quantities and efficiency perfectly in mind:

We select the most effective and functionally optimal production process – blow molding, injection molding or a combination of the two. And are constantly developing them further.

ETIMEX PATENT – EXAMPLE 1:

Combining blow molding and injection molding for the fluid-impermeable connection of two pipes. Effect: Avoids the much more expensive manufacture of the overall component by injection molding alone (tool/system size) or by blow molding alone (lot of waste).

ETIMEX PATENT – EXAMPLE 2:

Suction blow method on a double station, which enables switching between two or more stations, each with a blow mold or blow tool. Effect: Saving of energy, cycle time and costs.

ETIMEX PATENT – EXAMPLE 3:

Modular block valve: a modular valve assembly for controlling the water inlet. It ensures flexible utilization in various installation spaces. The water diverter can be complemented with the ETIMEX flow meter, a flow regulator, valve and filter.

ETIMEX PATENT – EXAMPLE 4:

A special snap geometry has been developed specifically for spray arms. The goal here is the low-cost manufacturing of an aesthetic component with high requirements for stiffness and impermeability. Can also be used in similar components.

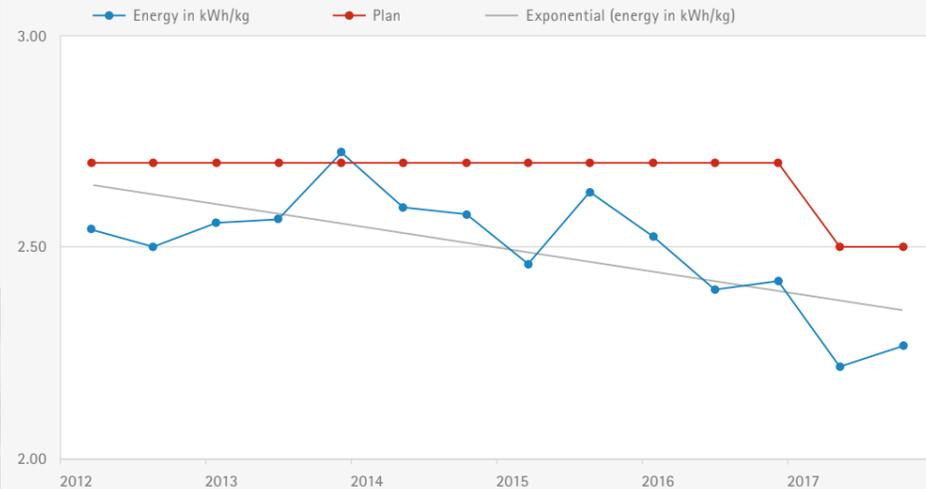
RESPONSIBILITY ACROSS ALL PROCESSES

Quality management and quality assurance go hand in hand: The ETIMEX quality management system is monitored and audited by independent certification authorities. Current certification status as of 2017: ISO/TS 16949:2009 (Automotive Quality) – ISO 9001:2008 (Quality) – ISO 14001:2004 (Environment) – BS OHSAS 18001:2007 (Safety) – DIN EN ISO 50001:2011 (Energy Management).

Comprehensive quality checks – from worker self-checks to the continuous inline checking of processes – ensure our high standards day in day out. Numerous inspections by means of dimensional checks, analytical procedures and component tests guarantee adherence to product quality. We perform analytical checks – such as the material's melt flow index – during the incoming goods inspection. Independently certified firms regularly check and certify the measuring equipment. Numerous customer audits confirm our high standard.



SPECIFIC ENERGY CONSUMPTION in kWh/kg



THE ENVIRONMENT AND ENERGY POLICY HAVE TOP PRIORITY AT ETIMEX.

We strive to achieve a constant improvement in energy performance with the least impact on the environment. This is part of our responsibility toward our workforce and customers, society and the environment.

ETIMEX is certified according to ISO 14001 and operates an energy management system certified to DIN EN ISO 50001. We identify and evaluate ongoing savings potentials and take steps to optimize energy performance. We have already achieved a continuous improvement in energy efficiency and the systematic improvement of energy flows. This remains our goal for the future.

EXAMPLES

- > Energy saving and energy recovery
- > Cooling of systems using ground water
- > Use of waste heat for heating the administration building



EFFICIENCY AND SUSTAINABILITY ARE INTER-DEPENDENT.

CIP affects all processes at ETIMEX – including in the areas of environmental protection, occupational health and safety, and energy management. Our lively in-house suggestion scheme focuses not only on the classical topics of process improvement but also on potentials in the areas of environmental protection, hygiene, and occupational health and safety. Our employees are regularly updated about current measures and the achievement of set targets.

EXAMPLES

- > Use of recyclable loaned packaging
- > Weight reduction
- > Use of production-related plastic residuals
- > Use of recycled plastics (where technically feasible and safe)





INTERNAL AND EXTERNAL RESPONSIBILITY

We see our employees as the heart of ETIMEX. Their satisfaction and identification with the company form the basis for our success.

We therefore continually take care of

- > occupational health and safety, certified to OHSAS 18001,
- > continuous further training,
- > next-gen promotion (e.g. through participation in the Girls' Day and company-based training),
- > in-house healthcare – well beyond statutory requirements: with an in-house company doctor and bonus system for preventive check-ups.

ETIMEX is certified to the Business Social Compliance Initiative (BSCI). The aim is to build an ethical supply chain to protect labor rights and the environment. Etimex Management is committed to create an atmosphere that recognizes and promotes both teamwork and proactiveness to achieve and secure safety and quality leadership. To this end, we publish information and data on working conditions, occupational health and safety and hygiene, corporate integrity and environmental management.

TRAINING AND DEVELOPMENT

We offer training places in interesting professions – for outward-looking, motivated, creative young people who want to help drive the future of ETIMEX. If you have successfully completed your training, then shape your career with exciting challenges and personally tailored training and development programs.

SKILLED OCCUPATIONS AT ETIMEX IN THE INDUSTRIAL AREA

- > Industrial mechanic for instrument and precision engineering, length of training: 3.5 years
- > Electronics engineer in industrial engineering, length of training: 3.5 years
- > Tool mechanic for molding technology, length of training: 3.5 years
- > Process mechanic for plastic and rubber technology used in molded parts, length of training: 3 years

IN THE COMMERCIAL AREA

- > Industrial clerk, length of training: 3 years
- > IT specialist in system integration, length of training: 3.5 years

A shortening of the training period and indefinite appointment is possible or provided in all areas with good grades.

You can find current vacancies at www.etimex-tc.com

ETIMEX PRIMARY PACKAGING & ETIMEX TECHNICAL COMPONENTS are companies of the independent ETIMEX HOLDING.

You can find more information at
www.etimex.de

YOUR IDEAS. OUR SOLUTION.



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