



arburgGREENworld

Protecting resources
Creating cycles
Increasing efficiency

ARBURG

NATURAL TALENT

**We enable sustainable production
solutions – out of conviction!**

The plastics industry and mechanical engineering are facing major challenges worldwide. For us, plastic is a material that improves our lives in many ways. But it is also a recyclable material that must be used sensibly, reused several times, and efficiently exploited. This is only possible if everyone along the value chain works together to create an efficient circular economy. That is why we offer a wide range of solutions to ensure sustainable production for our customers. This is our way of providing answers to important questions in the field of plastics processing.

WIR SIND DA.

STUBBORNNESS: OUR RECIPE FOR SUSTAINABILITY

// Stubbornness is in the DNA of family company ARBURG. We have always taken a holistic view of all processes and continuously optimise our operational sequences, also in terms of resource conservation and efficiency. The fact that we have not yet reached our goal is for us an incentive to keep questioning the existing situation as a whole. Our customers, employees, our region all benefit from our “stubborn” behaviour – and last but not least, we ourselves as a sustainable business. //

Action Plan: Energy
We have a plan for resource-efficient production.



Think globally, act locally: We have been manufacturing in Lossburg in the Black Forest since 1923.

A matter of attitude

When it comes to sustainability, we claim an outstanding position for ourselves. For example, the ARBURG Code of Conduct states that environmental protection and the conservation of resources and energy are an integral part of ARBURG's corporate culture. For us, this is not an end in itself, it is also a matter of economic logic. Working sustainably is the foundation for organic growth and innovative ideas, which in turn increase our customers' efficiency from our products and solutions.

Set achievable goals

In order to reduce the impact our company has on the climate, realistic targets and a sound action plan are indispensable. Our environmental and energy management takes into account the current corporate goals, the energy mix, the delivered product mass and the legal regulations. We want to achieve the 1.5 C target, so we are pledging to reduce Scope 1 and 2 emissions by 42 per cent by 2030 compared to 2021, and to reduce Scope 3 emissions by 25 per cent.

Implementing measures

The targets for climate-friendly production are implemented in all areas of the company, i.e. they are actively "lived". The use of rainwater and geothermal energy in our production are tangible examples of this. These measures are collected in the annual sustainability report and made available to the public (in accordance with GRI standards). Participation in the Carbon Disclosure Project CDP with the best rating in our industry was also confirmation of our efforts.



CDP SCORE

B

is official confirmation for ARBURG that the company performs better than average in the areas of climate protection, ecology and CO2 emissions compared to other mechanical engineering companies

Supplier structure* as proof of being "Made in Germany":

SUPPLY SHARE

83 %

GERMANY

of which **70 %**
BADEN-WÜRTTEMBERG



Explainer video: Save energy

Quickly and easily reduce energy requirements in production – and save costs in the process.

We are Facilitators

// Our arburg GREENworld program is both a statement and a milestone. It includes practical solutions for recyclate processing and recycling management that customers can use directly in their own facilities. High-quality machine technology and comprehensive process knowledge make for energy-efficient operation. The aim is to continuously increase resource efficiency and resilience – for sustainable industrial manufacturing. //





OUR PROGRAMME: FOUR SUPPORTING PILLARS.



GREENmachine

Efficient and resource-friendly machine technology

GREENproduction

Innovative processes and networked workflows

GREENservices

Services covering all aspects of plastics processing

GREENenvironment

Manufacturing and business processes at ARBURG

Sustainable reduction of emissions

Sustainable circular economy for plastics is now anchored in legislation worldwide. The carbon footprint generated by production is an important aspect. ARBURG has taken a look at all the relevant factors. We take the necessary steps jointly with our customers.

Anchoring production efficiency in strategic terms


Production efficiency is a definable objective for reducing the carbon footprint in a cost-effective way. If this can be made part of the corporate strategy right from the start, (additional) investments in resource-friendly operations will pay for themselves within a short time.

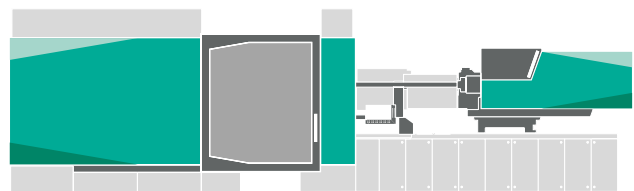
Economical operating phase

The production at our central headquarters in Germany is the foundation for long-term, low-wear operation of our machines and systems. Our efficient technology, which can be perfectly adapted to the most diverse requirements, reduces the amount of energy needed in daily operation and also makes heat recovery possible.

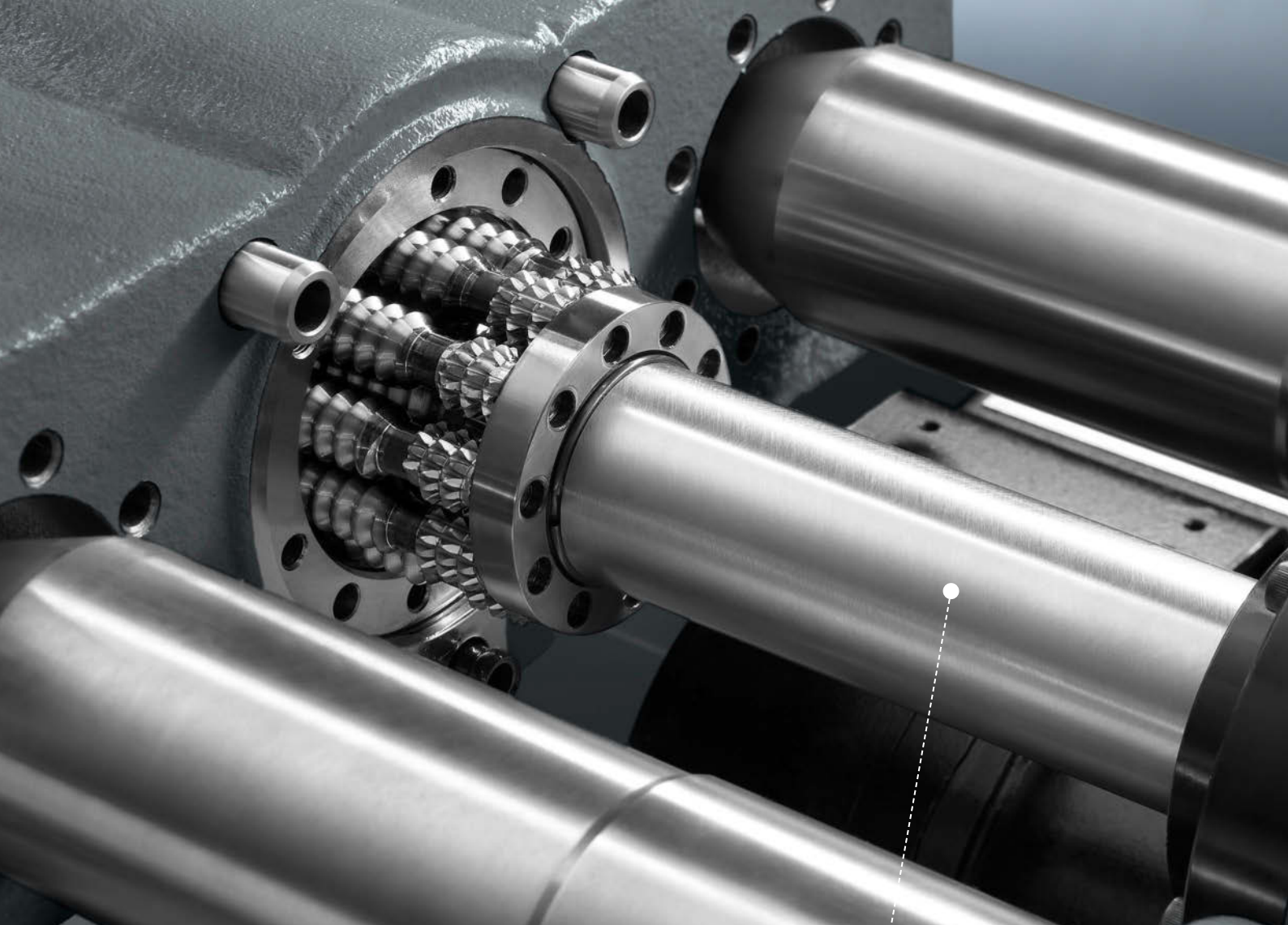
Efficient with digitalisation

Digitalisation makes processes more efficient – across the entire value chain. Starting with order planning, production and quality assurance through to maintenance. This is where the world of our digital networking comes in.

 **75%**
ENERGY EFFICIENT
The volume of energy-saving machines at ARBURG is already very high.



Further information:
Brochure Production Efficiency



High-performance powertrain:
Basis for efficient
material processing.

GREENmachine

// Resource-efficient production starts with the energy-saving operation of injection moulding machines and reliable processing of recyclates and alternative materials. In addition to machine technology, a sound knowledge of manufacturing processes is essential in this regard. Our high-quality technologies save primary energy and therefore reduce energy costs. Powerful machine technology, smart control systems and clever assistance systems from ARBURG – always a good investment in your "green" future. //

Smart automation: dynamic movement speed reduces energy consumption and wear.



Smart control system: assistants like the PressurePilot make the processing of recyclates more stable.

High-end technology

High availability with a long service life is crucial for resource-saving production. We achieve this, for instance, with low-wear planetary roller screw drives and liquid-cooled motors. Performance-based lubrication, for example, saves both working time and minimises costs. This is the basis for efficient plastics processing – even those with more stringent requirements, such as post-consumer recyclates (PCRs).

Adapted dimensions

In our modular and adaptable injection moulding machines and their customised expansion stages, you will find a perfect production solution that is suitable for long-term use and frees up resources for future investments. Cube tools, for example, halve the number of injection moulding machines required, depending on the application – saving space and reducing your production energy requirements. We can help you with individual advice and data-supported configuration.

Smart processes

Our machine control system offers a lot of potential for actively saving resources. With smart controller technology, such as the aXw Control MeltAssist, the production performance of the cylinder module can be quickly evaluated, saving spare parts and reducing machine standstill. The unique aXw Control ScrewPilot stabilises the injection moulding process. Your advantages: Material fluctuations are offset during injection moulding, so your production requires less energy.

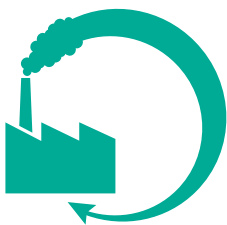
i / Further information:
Brochure Products and Services

GREENproduction

// Processing valuable materials efficiently: resource efficiency becomes production efficiency. The key innovations required for this can only be implemented economically through thrifty machine technology and a flexible digital network for the entire value chain. Our "arburgXworld" provides you with targeted solutions – including support in coping with future requirements. This makes digitalisation the catalyst for a sustainable circular economy and, beyond that, for greater competitiveness. Because your "smart factory" reduces supply-related risks and makes entirely new business models possible. //

Energy-saving production

To be able to meet the strict legal requirements and achieve climate-neutral production by 2050, companies will have to significantly increase energy and resource efficiency in the future. Local supply chains, a high degree of in-house production depth, and the use of renewable energies can positively influence the carbon footprint of production. With our in-depth expertise, machine upgrades and digital services, we provide injection moulding plants with targeted support and make them resilient in terms of energy efficiency.



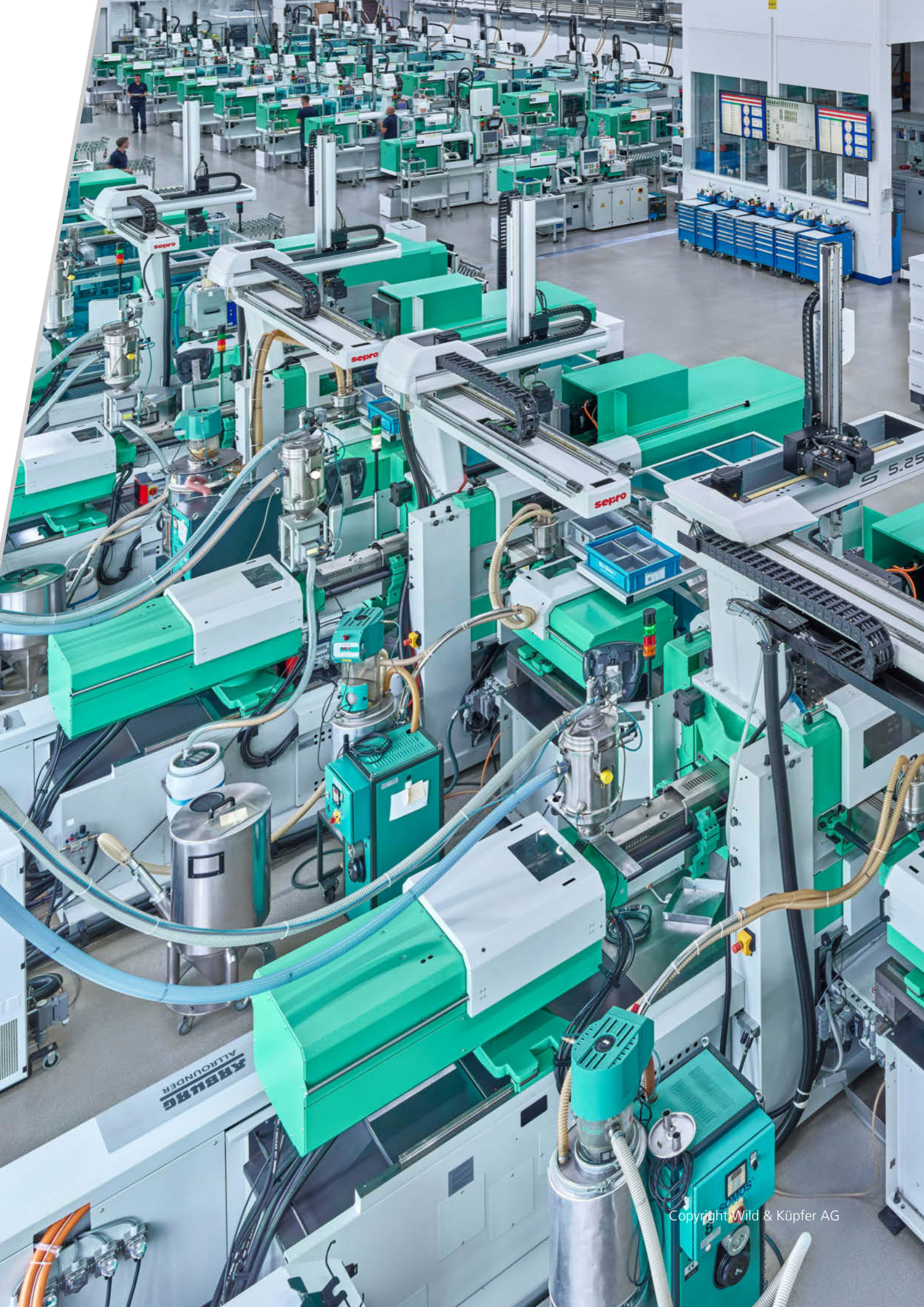
According to the EU Commission,
companies can save

€ 600 million

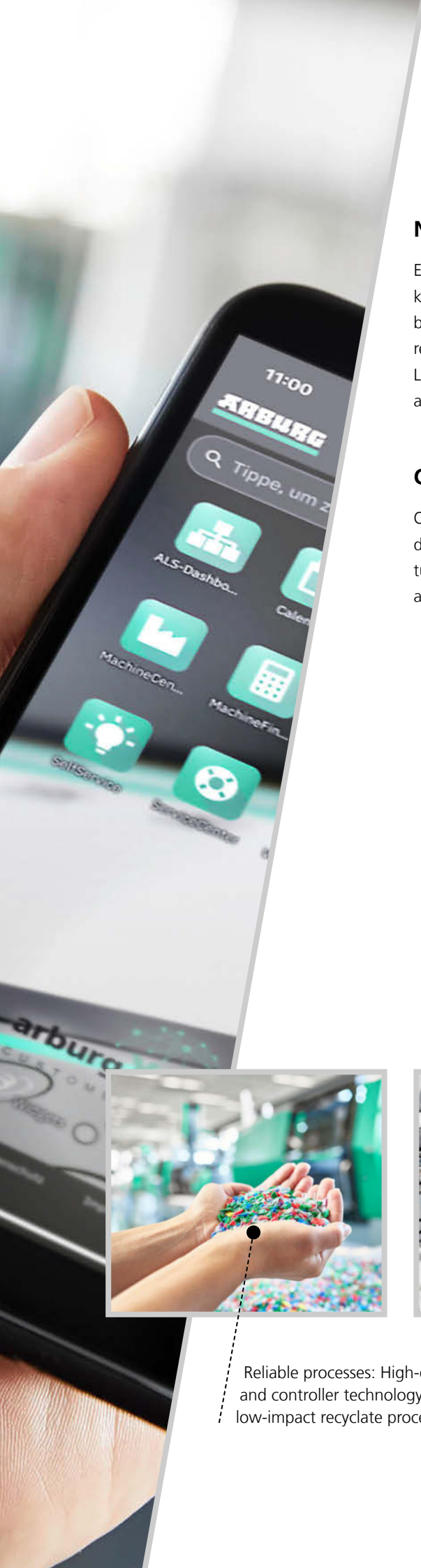
**EACH YEAR IN A
CIRCULAR ECONOMY**

i Further information:
Brochure arburgXworld





FRIBURG
ALTLÖSUNG



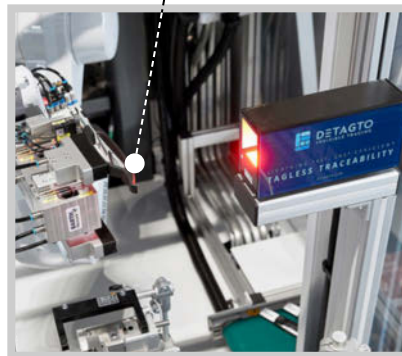
Networked production of

Essential for resource-efficient production: all relevant company departments know at all times about capacity utilisation, idle times, etc. etc. This is only possible by digitally networking your production – so that the right information always reaches the right place. We live by this philosophy: our central production site in Lossburg (Germany) has been digitalised throughout, with flexible process linking and efficient manufacturing technologies.

Consistently transparent with digitalisation

Only an efficient circular economy saves money and creates added value – provided, for example, the clear traceability of products is guaranteed. Our customised turnkey solutions and the ARBURG Turnkey Control Module (ATCM) link process and material data with a component ID – for transparent production.

Universal information: Relevant data is individually assigned to the product and universally readable.



Reliable processes: High-quality machine and controller technology enable low-impact recycle processing.

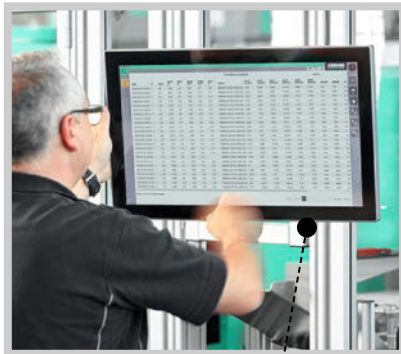
Setting trends with cross-sectoral cooperation

A circular economy for plastics is possible if all stakeholders along the entire value chain work together in a creative and constructive way. As a machine manufacturer, we are a partner in several pioneering projects, such as the R-Cycle Initiative. We set the pace with our dynamic measures – and we do so worldwide for the long term!

New thinking for closed cycles

As early as the injection moulding stage, data relating to aspects such as raw materials and colouring agents are recorded. Every product is thus given a digital product passport. After the use phase, precise sorting can be carried out and high-quality recyclate recovered to close the recyclable materials cycle.

Design for recycling:
PCR-material from household
waste become durable products.



Complete information: ATCM
links processing and
material data with the product.





GREENservices

// In a networked, fast-moving production environment, we address issues such as reusability (design for recycling) or durability (design for longevity) with customers and in renowned research networks. We aim to develop sustainable innovations that avoid waste, extend the service life of plastic products, and encourage the use of recyclates. This is only possible by taking the entire value chain into account and providing customised consultation. And last but not least: a detailed range of services, for example through the worldwide interlinking of all our locations. //

Our services:

- Continuous research and transfer of expertise
- Partnership-based cooperation with our customers
- All-encompassing view of production processes
- Comprehensive after-sales services

Working together holistically

We offer support for issues surrounding things like product design and the processing of innovative materials. We consider the entire injection moulding process in terms of productivity and energy requirements – using our comprehensive expertise.

Innovative manufacturing

Processing plastics using injection moulding technology offers huge potential for optimisation: barrier technology, for example, makes it possible to save on complex outer packaging while simultaneously increasing the shelf life of food.

Finding solutions

If a malfunction does occur, our customer portal "arburgXworld" offers you unique services. Our SelfService, for example, helps you find adequate solutions quickly. This minimises effort and saves resources.

Streamlining processes

Thanks to the interlinking of our global branches, our original spare parts will reach you quickly. The deployments of our service technicians are also digitally coordinated. This protects the environment and minimises production downtimes.



Premium service around the world:
our own organisations in 26 countries
and a total of

35
LOCATIONS



Further information:
Global service brochure

GREENenvironment

// Since the company was founded in 1923, we have manufactured our products exclusively in Lossburg in the Black Forest, a region with the highest density of habitats and nature reserves in Germany. This has shaped us. We are continuously improving our manufacturing processes, thereby reducing our carbon footprint. With strategic and operational objectives, we keep both the economic and the social aspects in mind and take the necessary, sensible steps towards more production and resource efficiency. //

Since 1996: the Energy Saving Round defines strategic as well as operational goals and monitors their implementation.



The use of renewable energies is part of the programme: wind power, photovoltaics and geothermal energy are all being used.

Optimising processes

We optimise our processes where it counts. Collected rainwater is used in cooling systems. Compressed air pipes are checked regularly, reducing the leakage rate to almost two per cent. This saves energy and consequently money.

Building efficiently

Our production and office buildings in Lossburg as well as our subsidiaries and ARBURG Technology Center (ATC) are built and operated according to environmental considerations. Natural resources and waste heat from production and machines are being utilised.

Maintaining values

As a company with strong regional roots, we are consistently reducing our energy and raw material requirements by way of an Energy Saving Round. We use 100 per cent CO₂-neutral electricity and have increased the deployment of our own photovoltaic and wind energy plants by at least six per cent every year since 2006.

Shaping the future

We are certain that we can address the global challenges only by working together for the generations to come. We support educational and development programmes relating to technical and scientific subjects.

Multiple award-winning architecture:
Use of plastic spheres in the concrete casting saves resources and CO₂.



Sparking enthusiasm for science and technology: projects with kindergartens and schools.



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