arburgXworld

Digital transformation for the factory of the future
EFFICIENCY DRIVER

Digitalisation of plastics processing.
Digitalisation means becoming more efficient – at every point along the entire value chain. Starting with machine purchasing and order planning, production and quality assurance through to maintenance and spare parts purchasing. This includes the responsible use of resources. This is where the world of our digital networking comes in. Our arburgXworld will support you in all aspects. Work with us to increase your production efficiency and strengthen your competitiveness sustainably.

WIR SIND DA.
Traceability, production on demand and mass customisation, but also resource management and circular economy – these are just a few examples of what can be achieved through the digital transformation of production. Our "arburgXworld" offers you everything you will need. As a technology and system partner, our expertise ranges from the machine, process, automation and control technology through to IT networking. With us, you can systematically implement your individual digitalisation requirements. For maximum production efficiency and greater value creation as well as for completely new business models!

AT A GLANCE

This is what our "arburgXworld" means for you

- Comprehensive expertise
- Interlinking of production and information technology
- Assistance tools for control systems
- Online data management
- Platform for digital services
Individual strategy required

Digitalisation offers enormous potential:
- Transparent production – employees are kept reliably informed
- Process-reliable manufacturing – processes and products are traceable
- Flexible production – small-volume and one-off parts can be produced economically
- Efficient production – processes are resource-saving and fast

There is no general solution for digitalisation! This is because no two injection moulding production tasks are alike and you need to develop your own production solutions. We will be delighted to help you achieve this.

ARBURG components for all areas

Are you looking to increase operating convenience and process control of your machines with smart assistance functions and connectivity modules? Do you need 100 percent traceability even of interlinked work steps in production cells? Would you like to plan your entire production more accurately on the basis of online data and dynamically control processes? Do you want to reduce your organisational effort by using digital services? Our aspiration is: We are your technology and system partner, especially when it comes to digitalisation! You will benefit from our extensive expertise and individually combinable digital components. Come and join our arburgXworld!
SMART MACHINE: ASSISTING AND CONTROLLING

Operators need to be able to adjust and control production processes intuitively, however complex they may be. This calls for a smart machine that offers extensive data integration options, monitors and adaptively controls your processes, and supports you in every operating situation. This is precisely the aim of many of our control system features. For higher productivity. For reliable processes. For improved part quality. For fault-free operation. In other words: For more value all-round!
Predictive maintenance
Reduced maintenance costs and higher availability: the real-time capable network system of our machine technology combined with smart data analyses form the basis for predictive maintenance. These solutions include load-dependent lubrication for electrical toggle-type clamping units and for servo axes on robotic systems. Lubrication intervals are calculated individually, depending on the forces, speeds, strokes, and times that have been set.

Comprehensive connectivity
Simple, standardised networking – the OPC UA communication protocol creates ideal conditions for this with its manufacturer and language-independent technology. And this is precisely what our flexible connectivity modules are based on. For limitless process control between the ALLROUNDER and its production environment. For the online provision of process information to higher-level software tools and platforms. In other words: for practice-oriented digitalisation!

Clever assistants
How do you make a control system provide even more support? With our GESTICA filling assistant, the filling level of the produced part can be animated in relation to the current position of the screw as a 3D graphic in real time. Expert installation technicians also benefit from this information as it saves them valuable time. Our plasticising assistant is another good example. It uses the data stored on a memory chip in the cylinder module to automatically determine parameters such as plasticising capacity and dwell times. As a result, material preparation can be quickly evaluated and optimised.

Further information:
SELOGICA and GESTICA brochure
OUR ASSISTANCE PACKAGES
MAKE IT EASY FOR YOU.

4.set-up
Guided set-up: you receive active support during set-up and parameter input, leaving you more time for productive tasks.

4.start-stop
Fast production start-up: start-up and shut-down of complex processes are made easier for you, reducing the number of start-up parts required.

4.optimisation
Assured quality and productivity: allows you to get even more out of your machine in each case – because every split second counts.

4.production
Greater programming freedom: special processes become standard for you and even complex moulds can be mastered quickly.

4.monitoring
Controlled system status: comprehensive monitoring functions enable you to detect deviations early and seamlessly document them.

4.service
Time-saving online support: have faults analysed quickly, efficiently and safely in a remote process – for even greater machine availability.
SMART PRODUCTION: CONTROLED DYNAMICALLY

Utilise your available resources much more effectively – whether it’s during order planning, quality assurance, mould management or maintenance. Direct exchange of information forms the basis for this. Process data is captured online, clearly prepared and available end to end. You will always be aware of what is going on in your production – wherever, whenever and however you want! Processes can be dynamically controlled and systematically optimised. As a technology and system partner, we also take care of the implementation of a digital data management system for the organisation of production. Turning big data into smart data!
Online data acquisition
Reliable documentation with no effort or incorrect entries. Directly available feedback and key indicators for the management level – even mobile! Detailed planning down to the minute to optimise capacity utilisation, quality and delivery reliability. Manufacturing Execution Systems (MES) play a key role when it comes to IT networking of production. Our ARBURG host computer system (ALS), specially designed for injection moulding companies, permits data exchange across production facilities and locations (horizontal integration) as well as with an ERP system (vertical integration).

Traceability
Collect relevant process and quality data for specific parts and forward them to an evaluating system: This requires a SCADA system such as the ARBURG Turnkey Control Module (ATCM). It also visualises the key functions of complete production cells, including log graphics, system statuses, alarms or the results of camera inspections. If required, you can also use the ATCM to start non-cyclical production processes such as ejection.

Consistently transparent: targeted data exchange as the basis for maximum availability.

Always ready to make decisions: precise information available worldwide at any time.

Further information:
Host computer system brochure
ERP: Enterprise Resource Planning
MES: Manufacturing Execution System – ARBURG host computer system (ALS)
SCADA: Supervisory Control and Data Acquisition – ARBURG Turnkey Control Module (ATCM)
SMART SERVICES: RETHINKING WORK

Direct and fast assistance, whenever you need it! At the workplace or on mobile devices. In purchasing, in production planning, production or maintenance. Our "arburgXworld" customer portal is a driving force behind the digitalisation of services and business processes. After all, our technology needs to not only convince through top-class functionality, but also through maximum availability. Enter a world that offers you completely new possibilities and perspectives.
Our “arburgXworld“ customer portal is a classic win-win situation: it offers you access to digital services that were previously not available in this form. And we can make processes even more efficient in contact with you. It is an extraordinary offer that we will successively expand. Joining our arburgXworld is free of charge. Central apps such as our Shop and our ServiceCenter provide a better overview right from the start, make communication easier, increase flexibility and speed up responses. And they can save you substantial amounts of time and costs. Anyone looking for even more functionality can expand their digital capabilities systematically at any time.
Companies wishing to use access to ARBURG’s digital service world can register at www.arburgXworld.com

**MachineCenter**
The “MachineCenter” provides you with a quick virtual overview of the machine fleet. Central access to production-relevant information and documents (for machines from 2017) reduces your organisational efforts.

**ServiceCenter**
The “ServiceCenter” enables time-saving communication in the event of malfunctions and downtimes:
- Start tickets 24/7 – including from mobile devices directly on site.
- Reduce queries, e.g. by attaching marked photos.
- Get information about the current status at any time
- Access the automatically documented service history.

**Calendar**
The “Calendar” app centrally manages the planned deployment of service technicians for you. A download function also allows you to import it into your own calendar.

**Shop**
The “Shop” offers you everything you need for your purchases:
- Place orders 24/7
- Direct access to prices, availability and order history
- Spare parts catalogues with exploded drawings and 3D previews
- ERP integration (OCI)
**SelfService**

Our “SelfService” offers suggestions for solutions to machine control messages. This allows you to immediately deal with malfunctions and downtimes yourself – around the clock. A fee-based expansion stage adds ABB’s comprehensive solution know-how. Because you will be guided in analysing the problem, contact with ABB Service also becomes much more efficient. In short, you’ll be back up and running fast.

**VirtualControl**

The app enables you to simulate the machine control system – in accordance with the respective software version of the ALLROUNDER. This allows you to create data sets, optimise processes and train employees.
An attractive offer: online configuration and ordering of the ALLROUNDER 270 S compact.

**Configuration**

The “Configuration” app allows you to configure certain standardised machines online – such as the ALLROUNDER 270 S compact – and order them directly at fixed conditions. For you this means: attractive delivery times and prices!

**MachineFinder**

You can also profit from our expertise when it comes to machine configuration. Our “MachineFinder” app helps you to decide which ALLROUNDER best suits your application.

**DataDecoder**

The “DataDecoder” enables you to display important parameters of a machine data set and save them as a csv or xlsx file.
WE SHOW YOU WHAT DIGITALISATION CAN ACHIEVE.

**ProcessDashboard**

The “ProcessDashboard” provides you with targeted assistance when it comes to the reliable documentation of your production processes. The required data is collected on the basis of the production protocol via an IIoT gateway in the machine and continuously prepared for you. An ideal basis for audits and certifications.

**MachineDashboard**

Status information and important key figures of your ALLROUNDERs at a glance: Our live “MachineDashboard” keeps you up to date at all times. More transparency, wherever and whenever you need it.

**ALS Dashboard**

Are you already using the ARBURG host computer system (ALS)? Then ALS Dashboard gives you easy access to the production feedback and key production data prepared by the ALS – across all your locations.

**INDIVIDUAL ACCESS**

Nominate a master user in your company who can create as many users as required
Keeping up to date: reliable information on the current status of production.
This digitalisation of the factory makes it possible to integrate processes that respond extremely flexibly to changes and can largely control themselves. This leads to a higher value creation from products. Furthermore, completely new business models can be developed, e.g. through the direct integration of customer wishes. As a technology leader and trendsetter in the plastics industry, we are constantly opening up new horizons in what is technically possible. And we impressively demonstrate this with specific solutions. This means that the associated potential is directly available for you.

**BEST PRACTICES:**
**DIGITAL POTENTIALS**

Mass customisation in 3D: individualisation of high-volume injection-moulded parts in original material.

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**Online examples**
What is possible with digitalisation? Be inspired by some more examples.
Individualisation “on demand”
Automated additive manufacturing
with integrated data management.

Unique identification: Data matrix
code provides product-related data.

High-volume, multi-variant production:
IT networking is a key prerequisite for
process optimisation.

Smart products: Integrated
memory chip provides data for
decentralised production.

Traceability: SCADA system links
process data of a manufacturing
cell for each component.