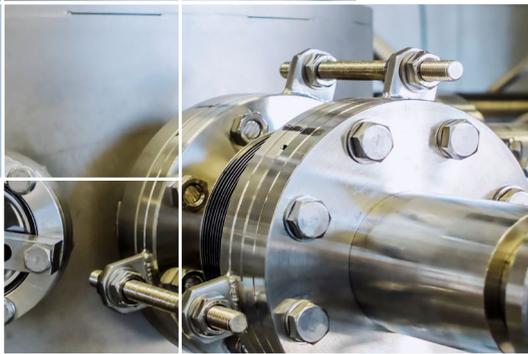


UPGRADE PRODUCTION & RESEARCH MACHINE

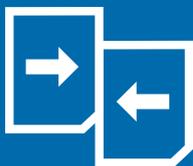


Retrofit



Machine operators face a variety of challenges when operating their systems. Whether it's lack of service and support, difficulty in finding spare parts, missing connectivity, exhausted expansion options, or even poor stability and functionality. As a machine gets older, there's also the question to purchase a new one or not. Exchanging or expanding specific components as part of a retrofit is in many cases a sensible, cost-effective and sustainable alternative to purchasing a new machine. As a result, your machine receives a second life.

With more than 30 years of experience, Kontron AIS is your reliable retrofit partner, for exchanging control systems, replacing components or expanding your machine.



EXCHANGE

Replacement of obsolete components



MAINTENANCE

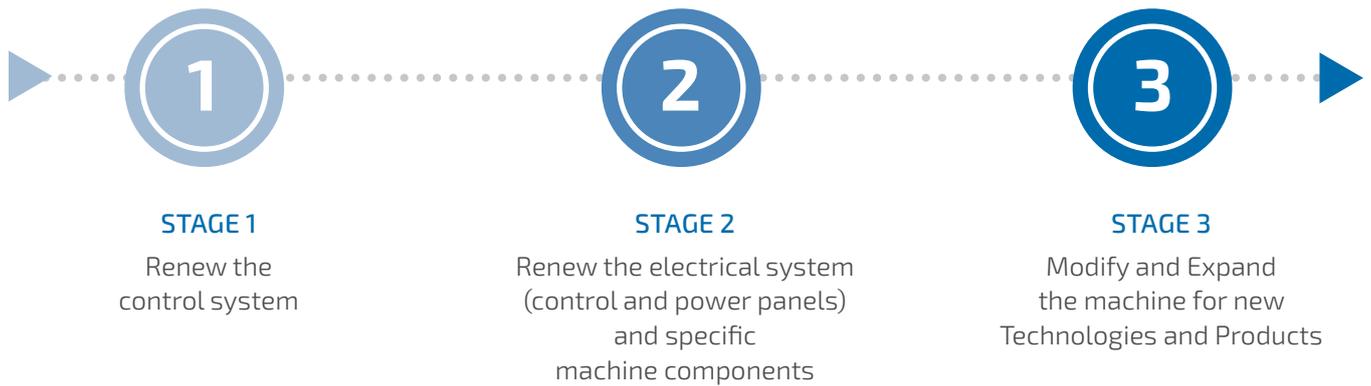
Reduced maintenance and costs



PERFORMANCE

Long-term increase in machine performance

FLEXIBLE STAGE CONCEPT FOR MACHINE RETROFITS



CONTROL SYSTEMS & RETROFITS ALREADY IMPLEMENTED

There are more than 7,500 installations worldwide that are equipped with Kontron AIS control systems. These include CVD and PVD systems such as classic vapor deposition systems, electron beam coating systems, sputtering systems, systems for plasma-enhanced technologies (PECVD), ion beam etching and ion beam processing systems, epitaxy systems (MOCVD) as well as wet chemical and special systems.

Our extensive experience is the reason why we can deliver optimal retrofit solutions.

We have already successfully renewed the following coating systems (excerpt):

BAK 640; BAK 642; BAK 760; BAK 1200; A 700; A 1100; A 1400; Z 550; Z 590; Z 600; Z 650; Z 660; Z 700; ZH 620 Vanguard/Emerald; Z 1200; ZV 6000; HZS 02; Perkin Elmer 4400; MRC 903

In addition, Kontron AIS implements retrofit solutions for other system types and technologies.

YOUR ADVANTAGES

- ▶ Save costs compared to new purchase
- ▶ Stable machine operation instead of recurring malfunctions and repairs
- ▶ Reduce production costs by improving performance parameters
- ▶ Reduce maintenance costs
- ▶ Long-term spare parts availability due to standardized components
- ▶ Complete independence from machine supplier due to open control system platform
- ▶ Guaranteed investment protection due to software and hardware expandability
- ▶ Quality assurance with extensive reporting and intelligent system monitoring



OUR SERVICE FOR YOU

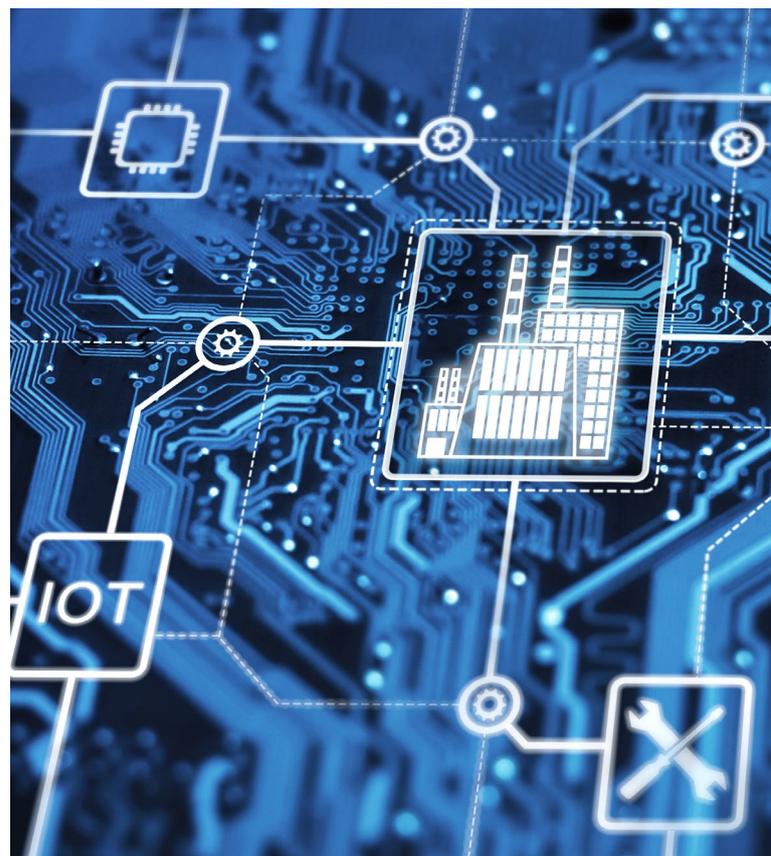
- ▶ Choosing the appropriate control system for reliable machine operation and optimal process control
- ▶ Customer-specific software optimizations and expansions
- ▶ Partial or complete renewal of electrical systems, CE-compliant and compliant to the current standards
- ▶ Renewal of selected system components such as HF and DC power supplies, MFC, measurement technology, etc.
- ▶ Modifications and extensions on the machine for new process technologies or modified production methods
- ▶ Comprehensive service and support: 24/7 hotline, remote diagnostics, on-site service, spare parts delivery

LIVING DIGITIZATION

In addition to focusing on the individual machine, there are further aspects for machine operators in production and research with a view on integrating of machines into IT systems, the acquisition and evaluation of machine data and also the possibility of controlling several machines from several locations.

By implementing the latest Kontron AIS software products, we implement integration solutions to connect machines into a new IT landscape and create the basis for Industry 4.0 (IoT) and the digitalization of your production.

With the FabEagle® series, we also offer solutions for monitoring and controlling multiple factories.





CONSULTING &
REQUIREMENT ENGINEERING



PROJECT MANAGEMENT
& TRAINING



SOFTWARE DEVELOPMENT



FLEXIBLE GLOBAL SERVICE &
SUPPORT



SUPPLY OF HARDWARE FOR
CONTROL & IT SYSTEMS



ON-SITE INSTALLATION &
COMMISSIONING

► KONTRON AIS GMBH

We set the benchmark in industrial software. For more than 30 years and with 190 employees, we have been providing solutions to support equipment manufacturers as well as production line operators to break new ground in automation and substantially reduce costs. Together with our customers, we develop concepts for smart manufacturing and Industry 4.0, helping to implement intelligent digitization strategies successfully.

As part of the Kontron Division in the S&T Group, we offer integrated concepts for control & IoT hardware as well as project management, service and support through a global network of regional centers.

Using flexible retrofit concepts, we ensure long-term system availability in the future by modernizing the control as well as the electrical and systems technology of your equipment.