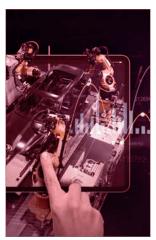




Analysis & Planning

Digital methods for process validation and data acquisition.

Laboratory tests with your own workpieces.







Operation

Services for plant operation to extend service life and minimize downtime.







Recurring Tests

Prescribed tests according to the Machinery Directive.







Trainings

Qualification of personnel.







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CONNECTING TECHNOLOGY AND PEOPLE

We believe in perfect cooperation between man and machine and in sustainable value ceated in harmony with economy and ecology. This is what we stand for with our claim "Connecting Technology and People".

ASIS solves challenging tasks in automated plant engineering worldwide. The result for our customers are perfect coatings with highest economic efficiency. As an internationally positioned company, we export from four locations in Germany and a subsidiary in the USA to over 30 countries worldwide.

We overlook technical progress across industries and manufacturers and apply it targeted and with high added value in our solutions. Our competence in control technology and the use of digital intelligence gives us the decisive lead over our competitors. Our employees with their corporate values - the ASIS DNA - are the foundation of our actions.

Portfolio

| Coating Systems | | |
|--|----------------------|--------------------------|
| L Wet Painting Systems | L Enamelling Systems | L Powder Coating Systems |
| Application Technology | | |
| L Flaming | L Paint Supply | L Paint Application |
| L Atomizer Cleaning | | |
| Quality Control Systems | | |
| L End of Line | L Measuring Tables | |
| | | |
| Surface Treatment | | |
| ^L Automatic Sanding Systems | L Automatic Finish | |
| Automation | | |
| L Factory Automation | L Robotics | L Control Technology |
| Analysis & Planning | | |
| L Virtual Factory | L Software | L Plant Concepts |
| L 3D Scanning | | |
| Service | | |
| ^L Operation | L Recurring Tests | L Trainings |







Genuine Parts

ASIS products are built for the toughest 24/7 use. With all industrially used products, the extreme continuous stress in production leads to wear. We therefore recommend always replacing defective or worn parts with genuine ASIS parts. They are optimally matched to your application, deliver the highest quality and maximum safety.

Not sure which parts you need?

Contact us, our service team will be happy to advise you (page 41).







Sustainability is Safety

Progress is an integral part of our lives. For the perfect surface we push the technical development, it is a constant companion of our daily work.

We are absolutely sure that a solution will only be a success if it is intelligent. This means that it is perfectly suited to its goals, works extremely economically for the customer and is also designed to be future-proof for the coming challenges of digitalization. It delivers first-class quality in operation and meets our sustainability benchmarks:

For each ASIS product the design made sure that wear parts can be replaced in a maintenance-friendly way. We are also structurally organized with our spare parts sales that all ASIS customers can be supplied with the required genuine parts in the shortest time possible.

This keeps production lines running and our products can do what they are best at: **creating long term value.**

We see sustainability not as an empty phrase for a green image, but as a benchmark of our engineering skills that offers our customers safety.

Alexander Schmunk, CEO

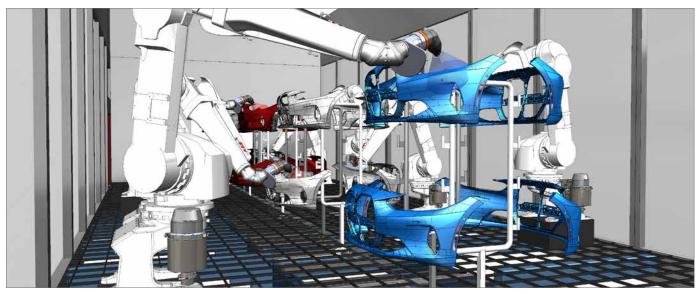
Analysis & Planning Exploiting the potential of digital pre-planning





Robot Simulation

Virtual safeguarding of robots



The robot simulation

For optimal plant design, robot simulation can already be used to determine all the necessary information and parameters for different types of plant.

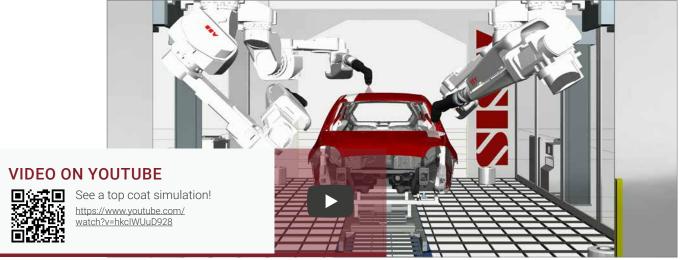
Scope of services

- Reachability and cycle time studies
- Offline programming
- (Pre-)commissioning and optimizations

Customer benefits

Robot simulation provides our customers with a central planning basis for the design, planning and realization for complex plant types.

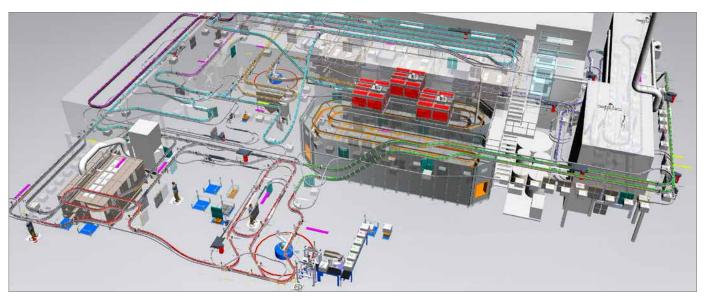
Robot simulation helps to identify and eliminate potential sources of error to ensure the quality and safety of the end product.



Simulation of top coating

Material Flow Simulation

Simulate interlinked processes



Material flow simulation of a powder coating line

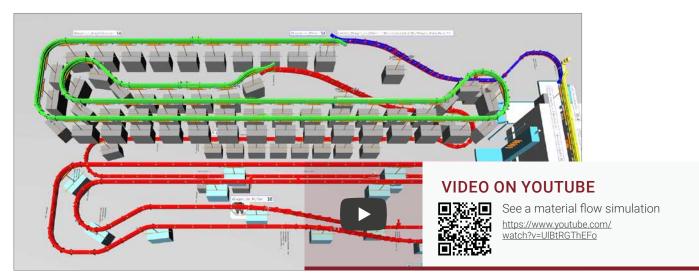
The overall plant planning is significantly influenced in advance by a material flow simulation and can efficiently be handled.

Scope of services

- Design of conveyor technology and buffer sections
- Optimization of output / overall layout
- Planning of the number of employees / route optimization
- Utilization / Degree of utilization

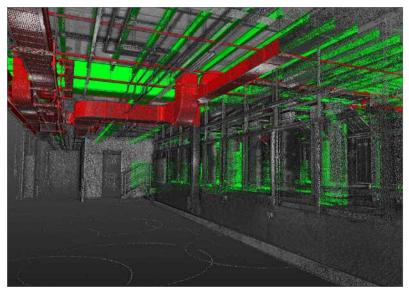
Customer benefits

For the customer, all conveying paths, process times and buffer sections for the entire plant are already known at the beginning of the plant planning and can always be taken into account to minimize negative surprises in the further course of the project.



3D Scanning

All dimensions with the highest precision in just one appointment







Recording of the data at only one appointment

With the latest 3D scanning technology, we can fully scan the object of any plant, hall or area with the 3D scan, model it and make it available to the customer as a 3D model.

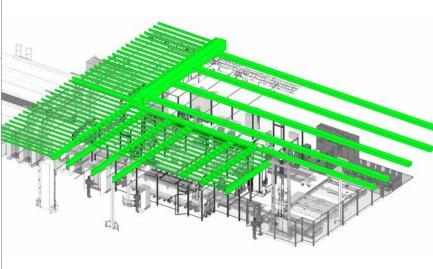
Customer benefits

The 3D scan provides our customers with a fully comprehensive 3D model of halls or plants with all interfering contours and information.

The 3D plant scan helps to identify and eliminate potential sources of faults to ensure the realization of conversions.

Scope of services

- Exact recording of existing plants / interfering contours
- 3D modeling
- Integration of the 3D data into the plant design



Finished 3D data

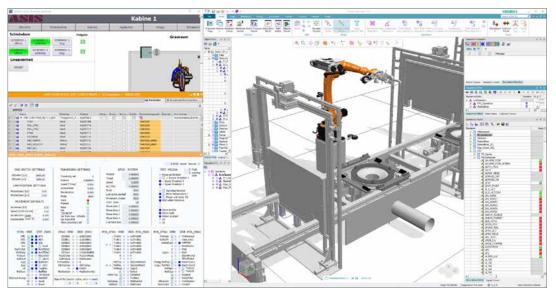


Also for difficult areas



Virtual Commissioning

The virtual twin and virtual commissioning



Virtual commissioning reduces on-site time to a minimum.



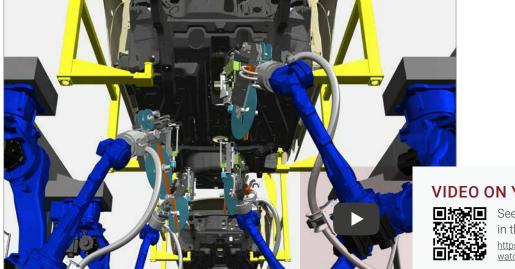
For maximum efficient commissioning of a plant, it can be commissioned almost entirely in advance.

Scope of services

- Complete testing of all processes without pre-assembly
- Complete design of functionality in advance
- Defining all relevant parameters

Customer benefits

With virtual commissioning, we reduce the total duration of on-site commissioning, lower the cost of a plant pre-assembly, and realize complete pre-commissioning without components, which often have long delivery times.



VIDEO ON YOUTUBE

See patch sealing in the simulation! https://www.youtube.com/ watch?v=4Eet6s2fKn4

Laboratory Tests

Test your own workpieces







Test of own workpieces

For the evaluation of sanding and polishing processes, an evaluative basis can be created by different tests and trials.

Scope of services

- Investigation of cycle and down times
- Insights into the effects of different abrasives and sanding mediums
- Determination of process parameters

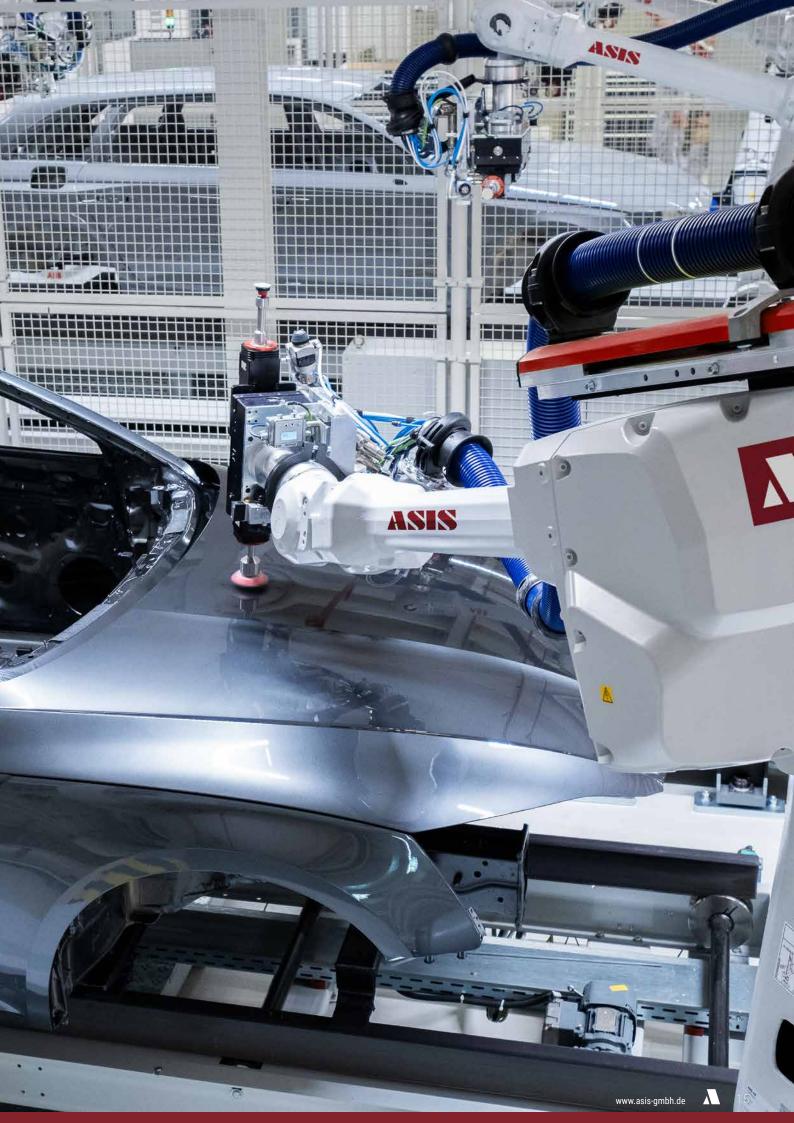
Customer benefits

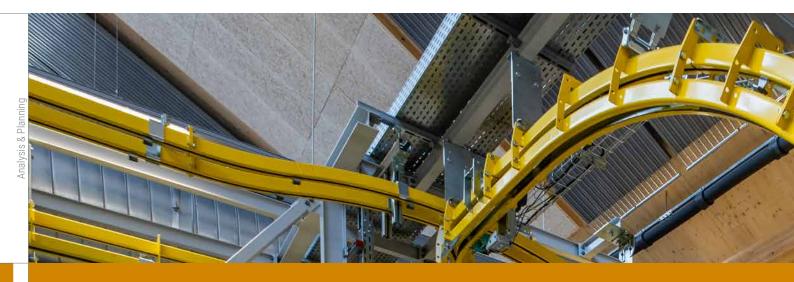
Process validation provides our customers with a basis for decision-making or the certainty that the process meets the given specifications as well as the desired results.

Process validation helps to identify and eliminate potential sources of error to ensure the quality and safety of the end product.



The abrasive change can also be tested





Operation Full service during plant operation





Maintenance

Reduce equipment wear



Maintenance by trained personnel

Actions for early detection of wear and tear in components and plant parts.

Scope of services

- Visual and functional check
- Replacement of spare and wear parts
- Restoring the plant to its functional condition
- Documentation of the scope of maintenance

Scope of services

We check the function of your plant and evaluate the condition. The wear and tear of the plant is reduced.

You will then receive a detailed condition report including instructions for preventive actions. You increase the availability of your plant.



Repair

Repair of plant components and products



As an "Authorized Service Center", repairs are implemented quickly.



Video tutorials

Reliable repair management of components to restore functionality.

Scope of services

- Repair components sanding technology
- Repair components painting technology
- Repair of specific plant components
- Providing video tutorials for ASIS components

Customer benefits

If necessary, we support you in repairing the components and restoring their functionality. We reduce the downtime of the plant to a minimum.

We guarantee our customers fast and reliable execution.

Authorized Service Center for 3M™ products

ASIS is officially an "Authorized Service Center" for the $3M^{TM}$ Finesse-ItTM Robotics Paint Repair product range in the EMEA region.

- For all sanding and polishing tools as well as for active force compliances of the 3M™ brand.
- First point of contact, whether for warranty, maintenance or repair.
- Service workshop with specially trained personnel
- Fast repair with original spare parts
- Purchase of original spare parts via ASIS
- Purchase of entire replacement products in case of emergency

The advantages for customers are accelerated repairs with competent contact persons.



Maintenance Contracts

Perfectly tailored maintenance concept



Contractually secure maintenance concept

Contractual regulation of regular maintenance work as well as inspections.

Scope of services

- Planned maintenance for defined technologies or plant areas
- Development of maintenance concepts
- Inspections
- Specification of required spare and wear parts

Customer benefits

We create a maintenance and servicing concept tailored to your plant. At regular intervals, we check the function of your plant and evaluate its condition. Plant wear and tear will be reduced.

You will then receive a detailed condition report including instructions for preventive actions.

You increase the service life of your plant and reduce unplanned plant downtimes.



Process-safe plant with maintenance contract

Service Contracts

Perfectly tailored service concept

| Services | Standard | Premium |
|--|--|--|
| Telephone and e-mail support response time | Received by 12 noon: same working day | Recieved by 12 noon: 4 hours after contact |
| | Received after 12 noon: next working day | • Recieved after 12 noon: Reaction by 9 a.m. of the next business day at the latest |
| Service on site (Service personnel travel start after clarification of all details). | Within 2 working days | Within 1 working day |
| Remote support (processing start by remote) | Received by 12 noon: the following working day at the latest | Received by 12 noon: 4 hours the same day at the latest |
| | | Received after 12 noon: 4 hours after the beginning of the next working day at the latest |
| Billing rate for service technicians/ engineers/remote support | - 125,00 € | • 125,00 € |
| Billing rate for project managers | - 140,00 € | - 140,00 € |
| Hours per year (travel expenses not included) | - 10 hours | • 25 hours |
| On-site inspection | Not included | Once a year - 8 hours on site |
| Base price | - from €3,900.00 per year | - from €9,800 per year |

All times according to Central European Time (CET)

Contractual agreement on availability for on-site service calls and remote support according to flexible service levels.

Scope of services

- Telephone support after a defined response time depending on the service level
- Remote support according to defined response time depending on service level
- On-site service according to defined response time depending on service level
- Fixed processing times for spare parts supply
- Depending on service level including inspection and start-up support

Customer benefits

We guarantee our customers the availability of on-site service technicians and remote support. Our customers decide on the required service level with maximum flexibility.

Definitions

- Response time: Time window until an active feedback is given by ASIS to the customer and first internal steps are initiated.
- **Service on site:** Support by ASIS personnel on site. Start time is when the trip begins.
- **Remote support:** Support by ASIS personnel via remote (access must be guaranteed by customer in advance). Start time is the beginning of processing.
- Inspection: A free inspection of the affected system by an ASIS service technician is offered, depending on the contract model.

On-site Troubleshooting and Fault Elimination

Fast help also on site



Fast and competent troubleshooting on site

We provide on-site support with our specialist personnel as quickly as possible in the case of complex plant malfunctions.

Scope of services

- Systematic troubleshooting
- Initiation of troubleshooting actions
- Evaluation of error memory / creation of service report
- Identification of causes
- Fast response times

Customer benefits

We support you in analyzing the fault if necessary. We inspect the situation on site and immediately initiate the necessary steps.

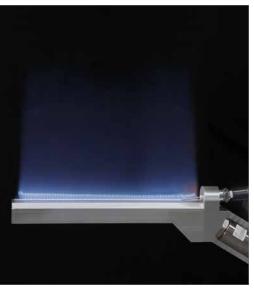
We minimize the downtime of the plant and initiate preventive measures to enhance the process stability.

Spare and Wear Parts Supply

Perfectly tailored maintenance and servicing concept



Spare parts packages for application technology



Service for flame treatment plants

A reliable supply of spare and wear parts is essential for optimum plant availability.

Scope of services

- Spare and wear part concepts
- Consulting for alternatives or optimization of components
- Consulting for ASIS products
- Supply of all common spare and wear parts
- First equipment for new plants



Wearing part supply for electric random orbit sander Rob-E-Unit

Customer benefits

Together with our customers, we develop a suitable concept for stocking spare parts. We determine the optimum of necessary plant availability and capital commitment.

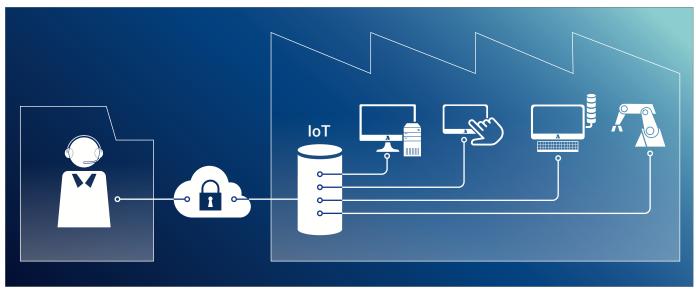


PushCorp service



Remote Support

Fast help, no matter where they are



ASIS Connect: remote access to the system in the shortest possible time



Fastest possible fault analysis and troubleshooting of control-related malfunctions.

Scope of services

- Error analysis
- Troubleshooting support
- Software updates
- Optimizations

Customer benefits

We don't have to be on site to support our customers. With online tools, we can access to your plant, analyze errors and take corrective actions.

This allows us to troubleshoot and make changes efficiently and effectively. We reduce the downtime of the plant to a minimum





Recurring Tests Important tests at regular intervals



Recurring Tests



Parameter Check

Predictive maintenance for key components



Forecasts about the lifetime of the components can be made by reading out parameters



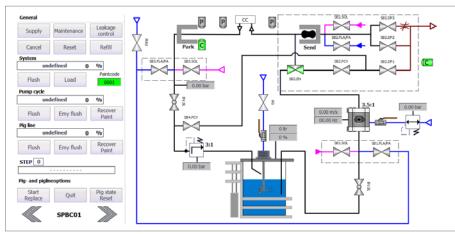
Parameters such as pump factor, switching cycles, in terms of preventive maintenance are checked.

Scope of services

- Analysis / protocol
- Evaluation of calibration data
- Checking software backups
- Readout of error loggins for frequency inverters / fault archives
- Check memory capacity and cycle time CPU

Customer benefits

If necessary, we check the plant parameters to ensure that the process meets the given specifications and that the desired results are achieved.



Analysis of plant parameters

Safety Check

Mandatory inspection according to the Machinery Directive



Stay on the legally safe side with regular safety checks

According to the Machinery Directive, it is mandatory to check the function of the safety devices annually.

Scope of services

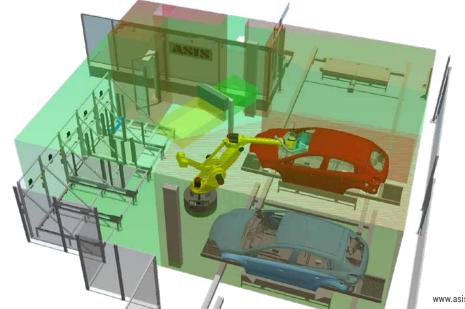
- Testing of the entire safety sensor system
- Overtravel measurement of light barriers
- Documentation

Customer benefits

We check the proper function of the safety equipment of your plant outside of production:



Machinery Directive 2006/42/EG



Life Cycle Check

Know the service life of your components and react proactively



We check your components for service life and advise you on technical solutions if required

Review of life cycle and end of life of Siemens modules according to Machinery Directive.

Scope of services

- Checking products for spare parts (availability)
- Life cycle scan of Siemens modules
- Documentation / Recommendation

Customer benefits

We check at regular intervals whether components are installed in our customers' plants for which spare parts may not be available in the future.

In this case, we inform you proactively and advise you on technical solutions.

The plant will remain functional in the future, and spare parts will remain available during the plant's service life.



Machinery Directive

ISO 13849-1:2023

The Machinery Directive assumes a service life of 20 years.

Bus Measurement

The proper function of the bus connections for trouble-free operation



Functioning connections for low-interference operation



Scope of services

- Checking bus subscribers
- Verification of line lengths
- Documentation

Customer benefits

We check the proper function of the bus connections of your plant outside of production.

In this way, we ensure trouble-free operation.

Firmware Updates

Keep your Siemens modules up to date



Firmware update on Siemens components

Firmware updates of Siemens modules to keep the plant up to date and prevent defects before they occur.

Scope of services

- Support for the exchange of older Siemens components (software adaptation)
- TIA Openess: automatic export of firmware versions as protocol
- Automated update search
- Documentation

Customer benefits

We perform firmware updates of Siemens components. This keeps your plant up to date and reduces unplanned plant downtime.

Inspection

Regular inspections reduce plant downtime



Inspection of paint pressure regulators

To achieve optimum plant availability, it must be regularly checked for faults, wear, function and parameters.

Scope of services

- Determination of the actual condition of the plant
- Checking the functions of the plant
- Inspection of the process parameters
- Evaluation and documentation of the inspection results

Customer benefits

We check the function of your plant and evaluate its condition. Wear is detected at an early stage, unplanned plant shutdowns are reduced.

You will then receive a detailed status report including instructions for preventive measures. You increase the availability of your plant.

Trainings Qualify your technical staff



Plant Operation Training

Qualify your personnel for the safe operation of the plant



The more extensive a plant, the more complex the operation

The operating personnel is professionally trained by our commissioning engineers on all functions, error messages and technologies used.

Scope of services

- Functions of visualization
- Setting parameters
- Evaluation of fault messages
- Getting to know program sequence / process sequence

Customer benefits

We train the operating personnel of our customers. Your employees will be able to operate the plant and safely eliminate faults. This increases the availability of the plant and ensures low-fault operation.

Robotics Training

Qualify your personnel for the safe operation of robotics



Operation and troubleshooting of robots

To provide basic knowledge of operating various types of robots for production personnel.

Scope of services

- Teaching basic knowledge
- Coordinate systems, TCPs, manual operation
- Adaptation of robot programs to specific systems
- Operation of robot panel
- Procedure in case of a crash

Customer benefits

We train our customers' specialist robot personnel. Their employees are able to operate the system, optimize it and safely eliminate faults.

This increases the availability of the plant and ensures low-fault operation.

Application Technology Training

Qualify your personnel for the safe operation of the application technology



Understand application technology, its setting and displays

The training covers the plant technology for coating plants in the wet paint sector as well as the individual components and plant parts.

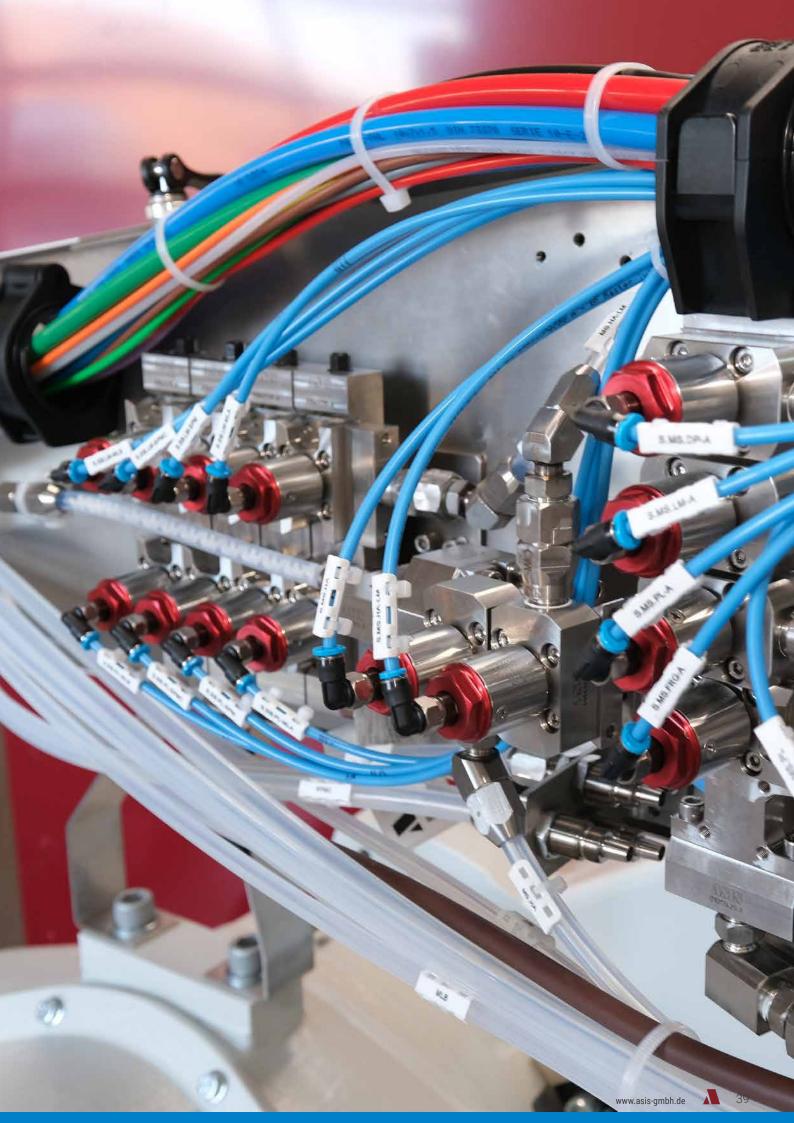
Scope of services

- Technology paint mixing room
- Technology robotic application
- Troubleshooting / maintenance
- Technology flaming
- Plant components of a painting plant

Customer benefits

We train our customers' application personnel. Their employees are able to monitor and influence application processes. This increases the availability of the plant and ensures low-fault operation.







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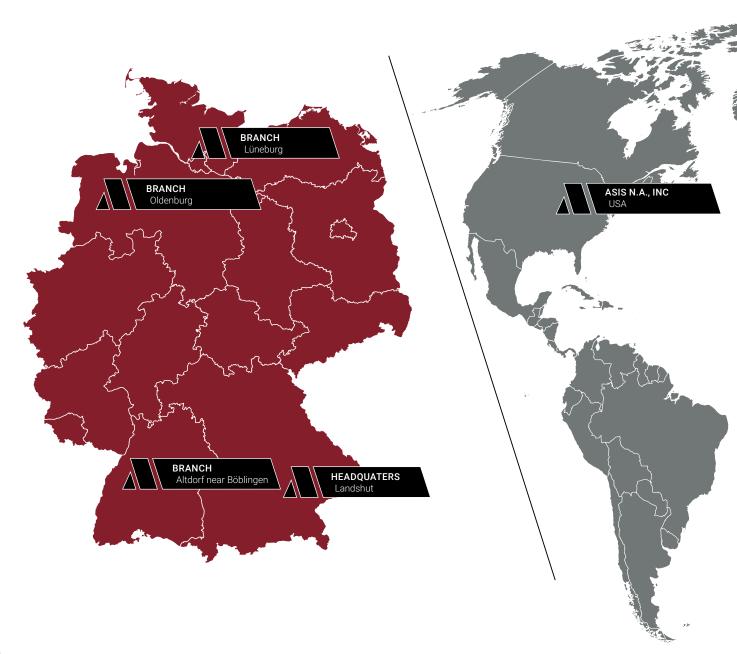


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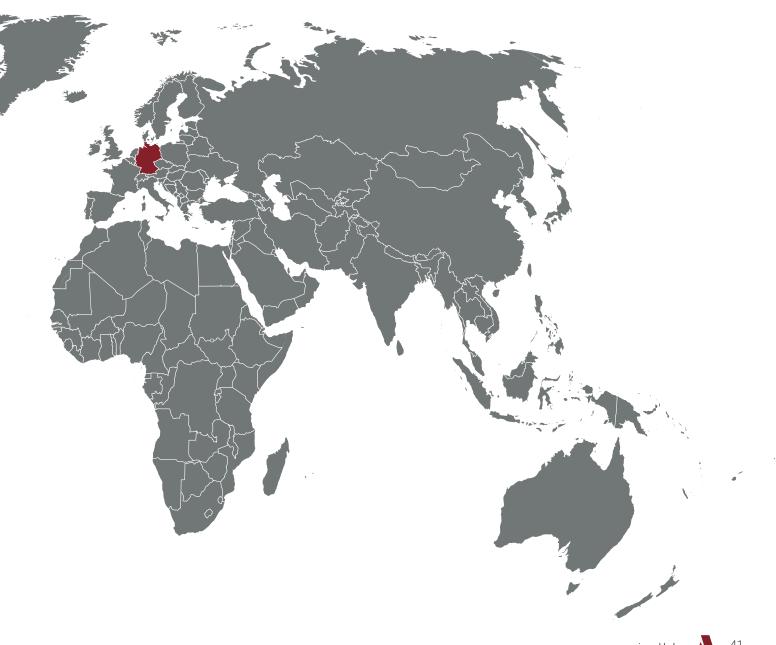
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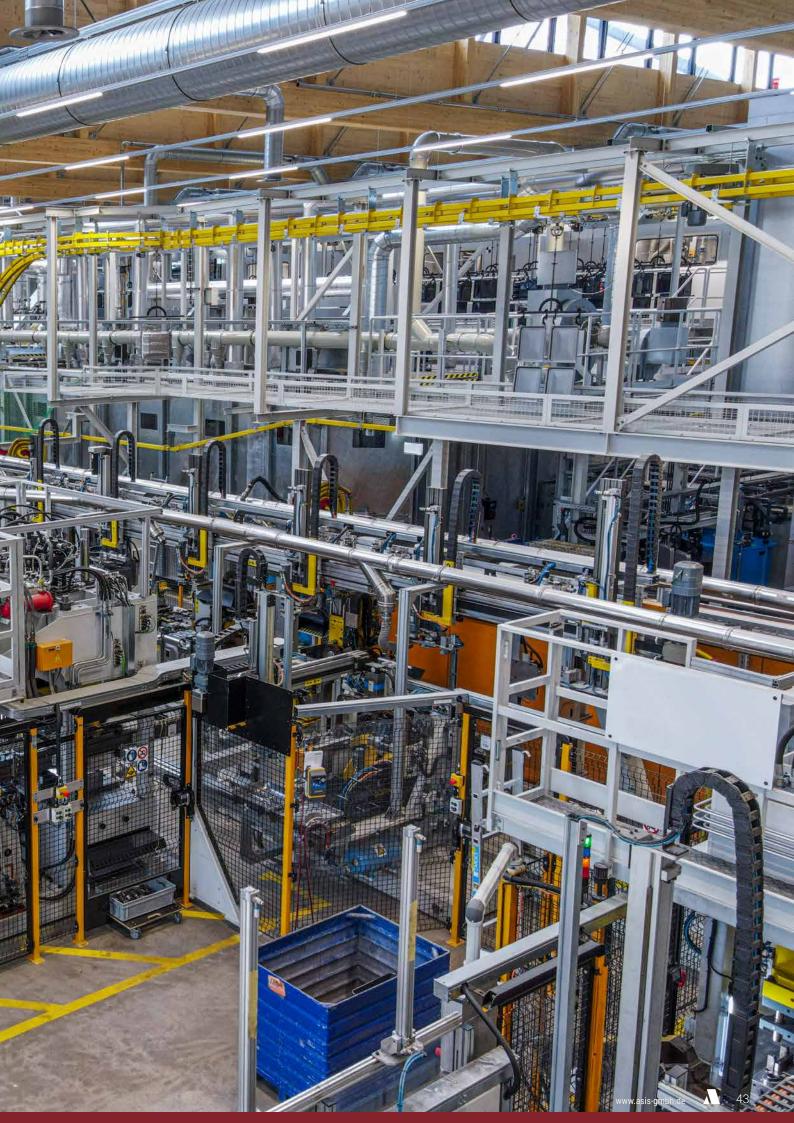
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