



Complete control over your production environment and industrial automation

Greater data consistency, security, safety, and reliability, thanks to backups and version control

HOW CAN INDUSTRIAL COMPANIES COMBAT DOWNTIMES?

Anyone facing long downtimes in production today has already lost the race for new business opportunities. Any company that does not have a complete overview of the program versions of its devices in **automated industrial production** risks not only business continuity but also blocks capacities for innovation and optimization.

SO WHAT DO INDUSTRIAL COMPANIES NEED?

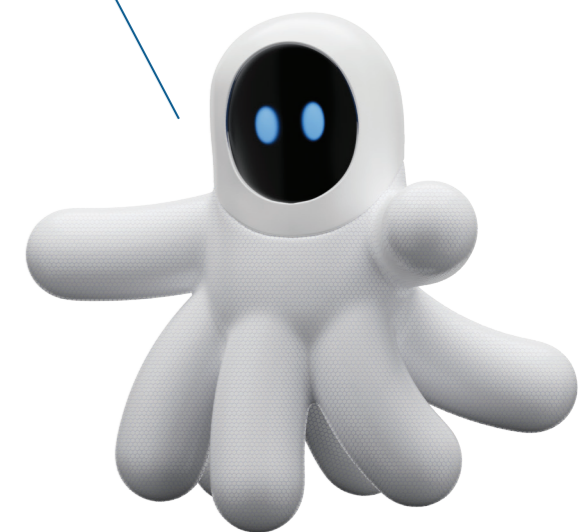
A strong partner who ensures the smooth operation of automated production with versioning and backup solutions. AUVESY-MDT is that partner, true to their motto "We secure the world's automation."

HOW DOES IT WORK?

The software solution octoplant achieves vendor-independent integration of various automation technologies, from PLC and HMI to CNC, SCADA systems, and robots. It **enables traceability of changes**, compliance adherence, and transparency of security vulnerabilities.

In this way, industrial companies gain a comprehensive overview of all automation backups and the current status of the system. Management teams have a better decision-making basis to increase the **reliability of production facilities**, avoid or at least minimize production downtime, and significantly enhance manufacturing efficiency and cybersecurity.

Hi! It's me
YOUR
PRODUCTION
PRO



OVERCOME THE CHALLENGES OF DATA MANAGEMENT

Skillfully manage complex industrial production environments

Regardless of the sector, company size, or task, you'd be hard pressed to find an industrial production environment that doesn't rely on a complex IT setup — or one that doesn't deal with an ever-increasing **amount of production data**. While scheduling routine backups and managing data storage are standard practice in IT, these practices are relatively new in industrial production and operational technology (OT).

The increasing complexity of industrial environments is just one of a growing number of challenges. Operations managers and maintenance staff encounter a steadily increasing number of SCADA systems, PLCs, sensors, and field devices — plus a variety of machines, robots, drives, and industrial PCs to control the parameters and preliminary settings of a production environment.

If that wasn't enough, production environments are often only partially digitalized or networked and **regular retrofits** are also common practice.

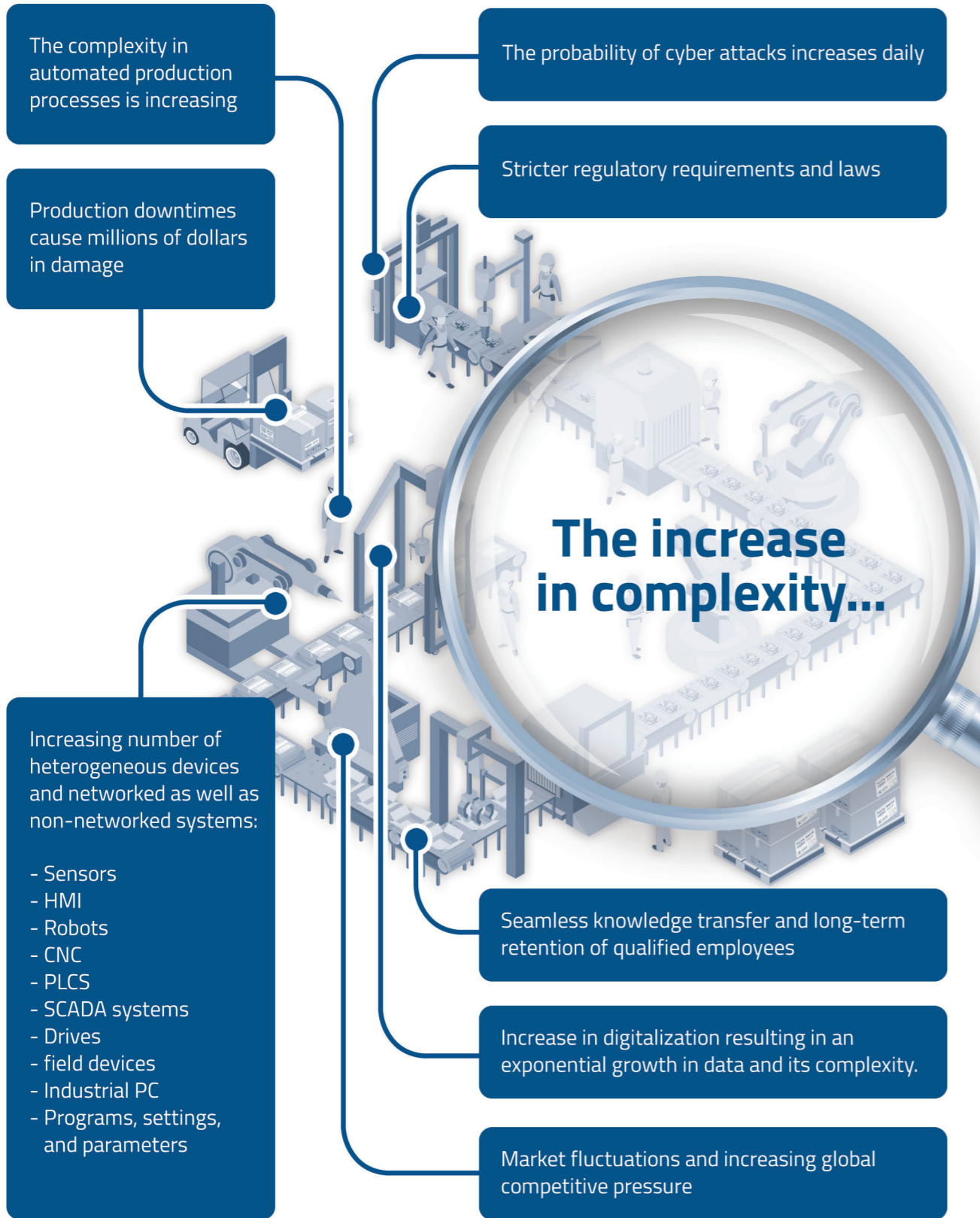
The advancement of **automation and digitalization** contributes to an exponentially increasing amount of data sources and measurable data, especially where the Industrial Internet of Things (IIoT) is concerned. These data streams need to be processed, managed, and utilized. This presents a number of challenges to operations managers and engineers.

These day-to-day challenges take on a whole new degree of difficulty when partial or total **plant shutdown** occurs. When even part of a production environment shuts down, the costs can quickly run into the millions.

IT security and safety are also of growing concern. In the past, malware attacks were primarily aimed at exploiting general security vulnerabilities. Today, targeted **cyber attacks** on specific companies are all too real a threat. Production downtime — brought about as a direct result of such attacks — has been responsible for record losses in recent years.

According to one cyber insurance provider, 48% of companies faced a cyber attack in 2021, and of those attacked, one in five had their solvency threatened.¹

If you add in disruptions caused by **technical errors, human error, or negligence**, the sheer scope of the problem becomes clear.



ASK YOURSELF THE FOLLOWING QUESTIONS:

DO YOU KNOW — at all times and for all assets — where configuration settings and program data are stored? Is every element up to date?

BASED ON AVAILABLE PRODUCTION DATA, are you able to make effective and informed decisions?

DO YOU HAVE a plan in place to bring production back online in the event of downtime or a partial or total plant failure?

IN THE EVENT OF FAILURE, are you able to quickly and easily restart production and restore the default settings of your automated machinery?

HOW WOULD YOU manage everything above when faced with disruptions or threats from both internal error or sabotage, as well as external hackers or cyber criminals?

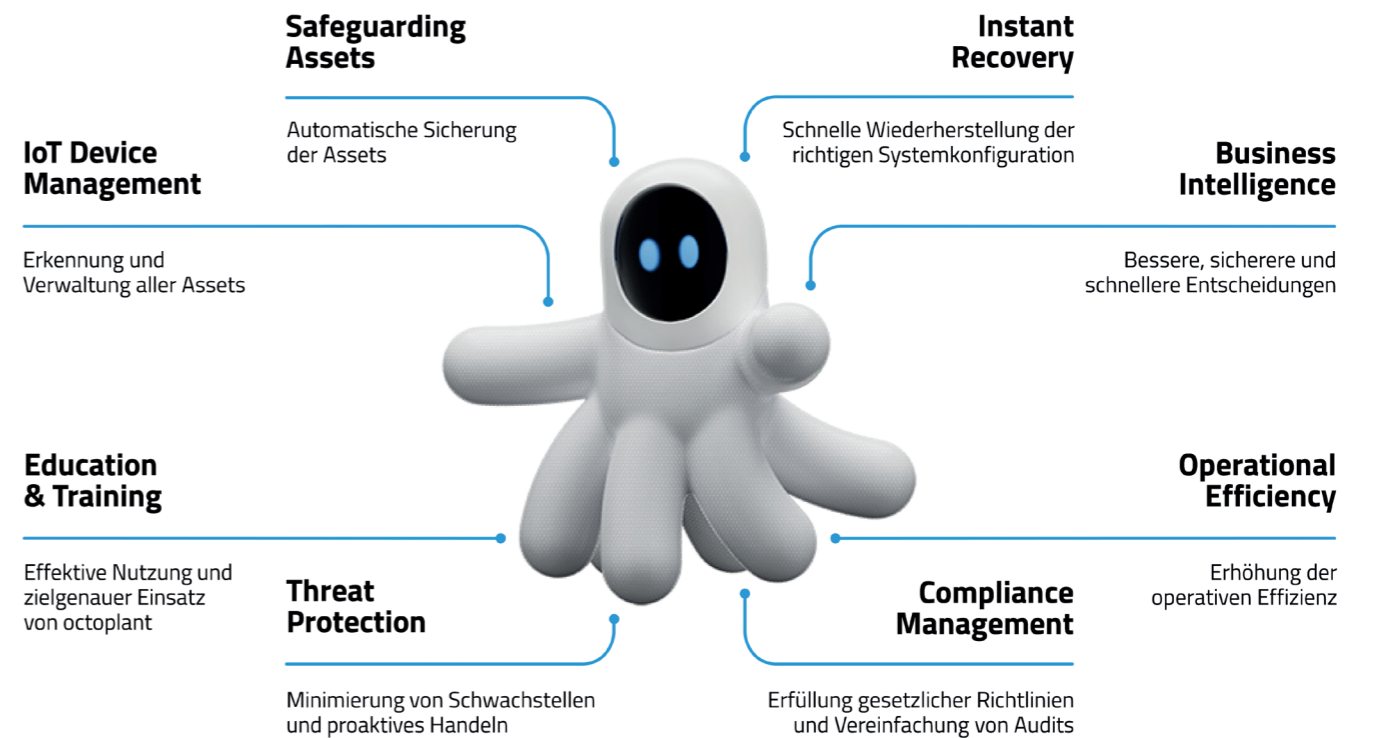
Our software platform | octoplant provides both device management and backups in one single solution

AUVESY-MDT offers a modular solution that helps customers meet their requirements and offers solutions to common plant management challenges.

The octoplant platform is comprised of **eight solution sets** that offer features tailored to specific industrial needs to help prevent downtime, errors, and security issues.

The octoplant platform provides a holistic summary of your plant and shows the information you need — when you need it — thanks to dashboards that can be customized for each user.

octoplant centralizes the management of your entire production environment in one system and includes the following features:



The octoplant platform — tailored to your specific industry needs.



Know and manage what is going on with your devices

1. IoT Device Management

octoplant is vendor-independent and can connect to all commonly found automated production and IoT devices. As a central data management platform, it handles programs and configuration settings data in a standardized manner. octoplant ensures transparent management of complex information in a way that is both manufacturer-agnostic and solution-neutral across all common industry standards. Its robust change history shows **who changed what, where, when, and why — at a glance.**



Ensure all devices are configured correctly

2. Safeguarding Assets

By backing up assets, octoplant helps safeguard automated production and ensures that the correct authorized version is always running. With complete version management, plant operators always have access to the latest version and can see whether changes are required. The process of creating backups is automated — saving time and labor, reducing errors, and ensuring a reliable **data snapshot of the entire production environment.**



Quickly bring back the right system configurations

3. Instant Recovery

octoplant's capacity for instant recovery ensures that all necessary programs, data, and settings are available and are running correctly. It also allows for production to be **restored at any time.** In the event of an emergency, octoplant enables production environments and devices to be restored quickly as it eliminates the need to search for the last previously functioning version.



Make more informed decisions

4. Business Intelligence

octoplant consolidates the data of complex, fragmented production environments in one easy-to-use data management platform. It helps ensure that data is easy to analyze and thus **guarantees better, safer, and faster decision making.** Additionally, data can be exported and imported from third-party systems at any time. This solution provides **valuable insights,** allowing the user to compare different production locations and devices, and helps ensure reliable predictive maintenance.



Drive efficient operations

5. Operational Efficiency

octoplant enables companies to increase overall equipment effectiveness (OEE) by digitally connecting information from field, control, supervisory, and enterprise levels. octoplant adapts to existing workflows and — by comparing servers — provides information on how efficiently components are being used and how frequently changes to specific components are being made. Guidelines and best practices for assets and configuration settings data can lead to an **increased level of standardization** and **efficiency.**



Fulfill regulatory requirements and streamline production audits

6. Compliance Management

Integrated documentation and regulatory workflows, such as those for the release process, help ensure reliable and **seamless compliance management.** This reduces risk, resulting in a rule-compliant, traceable, and auditable production process. octoplant supports compliance with **legal standards** such as the KRITIS IT security law, the FDA 21 CFR Part 11 regulation, and GxP rules to ensure process quality, production documentation, and proof of compliance.



Take proactive action to prevent security breaches

7. Threat Protection

Thanks to its proactive vulnerability, change, and risk detection features, octoplant's holistic security architecture can protect production environments from attack, **prevent damage, and avoid downtime.** It breaks down the automatically assigned, regularly updated asset risk score for each inventory asset. Therefore, AUVESY-MDT's solution can be used to prevent or reduce damage and shorten or avoid downtimes thanks to its vulnerability, change, and risk detection features.

8. Education & Training

Finally, due to **effective knowledge transfer,** companies can help preserve their own production-specific knowledge and pass it on to new employees. The comprehensive e-learning platform enables employees to continue learning about octoplant anytime and anywhere. Best practices in the form of videos and webcasts can help improve job skills for everyone involved and ensure **rapid onboarding** when it comes to new equipment or production lines.



Use octoplant effectively

Visible benefits for your plant | How companies can profit from digital plant management and production documentation

When it came to developing and launching AUVESY-MDT's asset management platform, the **market leader in version control and change management software** drew on its first-hand experience with 3,000 international customers. octoplant's features are used in 10 million devices.

octoplant helps production companies address pressing challenges related to asset management, backup, version control, and process documentation in a modern and straightforward way.



Centralized and transparent data management that gives you a 360-degree overview of your production environment

octoplant supports fully integrated IoT ecosystems and provides users with a clear summary of their entire production environment. It is transparent, vendor-independent, and solution-neutral across all common industry standards. The plant management solution is compatible with a wide range of automation devices and offers an unmatched number of supported devices, when compared to competitors.

Other solutions only capture individual machines or partial aspects of a production environment, such as PLCs, SCADA systems, HMIs, or robots. Only components from a specific manufacturer, bus system, or standard are analyzed. This is an obstacle when it comes to rapid troubleshooting. **AUVESY-MDT's products have the largest compatibility base of manufacturers and devices.**

VA robust software solution needs to summarize the entire automated production environment and analyze devices on the shop floor. octoplant can detect differences between operating systems and firmware versions, even for identical sensors. This makes it easier to isolate errors by processing data from sensors and field devices in a direct and unfiltered manner. octoplant allows you to directly communicate with almost all IoT devices in a production environment.

Find out which devices are supported:

auvesy-mdt.com/en/device-finder



The decision to bring in Auvesy-MDT was born out of a desire for a comprehensive and uniform overview for all projects and versions in production and maintenance. We also wanted to unify all automated data for all user groups, including our overseas-based technicians, into a single system.

These expectations were fully met with the introduction of Auvesy.-MDT"

Jan Petersen
Production Engineer at
Siemens Energy AS



"Thanks to B4M - and octoplant as its core - Bosch is a big step closer to becoming a digital factory."

Through the standardized provision of machine optimizations to all production sites worldwide, we are significantly increasing efficiency."

Oliver Müller
Responsible senior manager for the B4M service at the central IT department (Bosch Digital_) at Bosch

Reduction of manual maintenance through Group-wide IT/OT standards

The example of Backup4Manufacturing (B4M) clearly demonstrates how group-wide standards reduce the manual effort required in maintenance and at the same time reconcile it with the high security requirements of IT. At Bosch, production managers are freed from traditional IT issues such as installation and license management. This enables them to fully concentrate on optimizing manufacturing processes.

Bosch needed a central solution that would support all production sites worldwide in terms of data backup. IT was to provide comprehensive support for the solution, ranging from infrastructure and installation to onboarding and license management. The company had already worked with octoplant locally in individual areas. However, it had not yet established a global solution for process and data management.

All plants were responsible for introducing, optimally using, installing, and maintaining the product themselves.

Bosch pooled their experience and information from years of using octoplant at the various locations and decided that there should be a product that could be supported by the central IT department and the whole of Bosch globally, for all production sites worldwide, and could be used by all business units. This gave rise to the B4M product/service.

B4M was developed to support the manufacturing team (the main user group) to enable them to focus exclusively on optimizing manufacturing processes. Due to the high compatibility of octoplant with any production equipment, B4M can be used in all Bosch plants.

The aim is to optimize data and recovery processes through standardization. The standardization level begins at plant level, where initial experience is gathered. Standardization then takes place at business unit level and finally at the level of central departments such as the central IT department BD (Bosch Digital).

A clear comparison | see immediately whether and which changes have been made in production

octoplant compares job results (active project status and previous versions) graphically and reveals at a glance who has made which changes.

octoplant takes over the cyclic check as to whether the active project status on the device (e.g. Siemens S7 controller) corresponds to the last valid project version. By doing this, it can be ensured that a valid backup is available at all times.

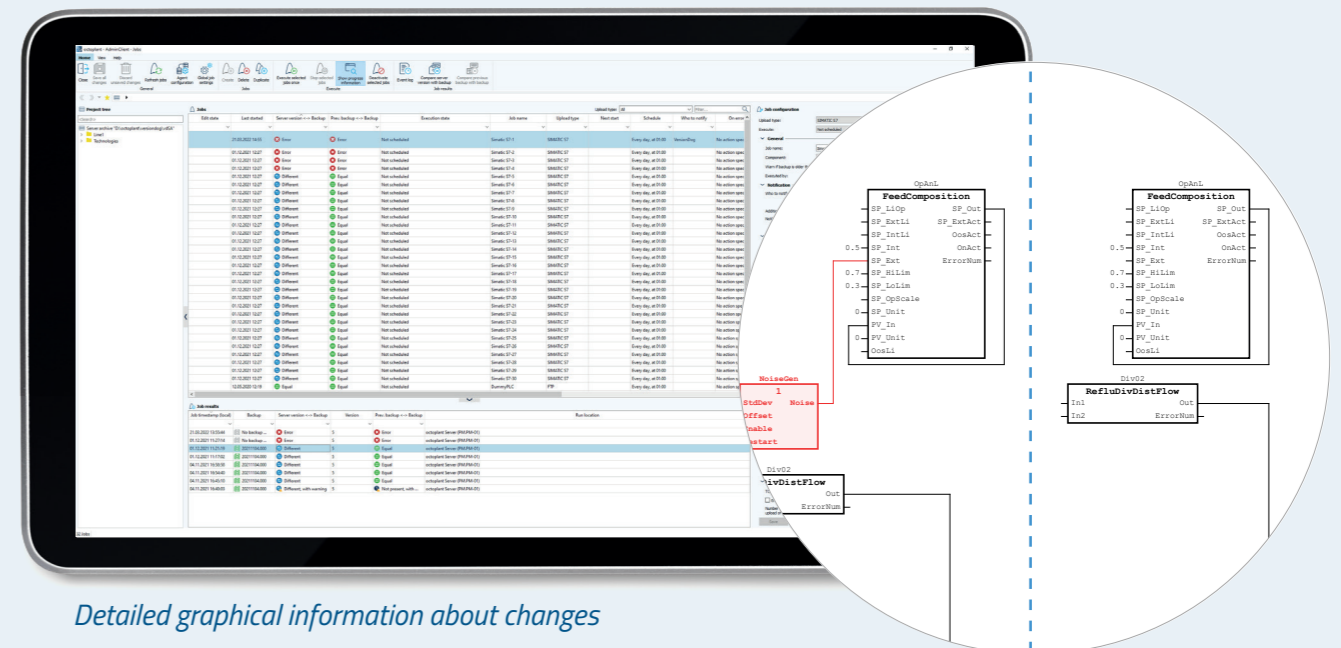
Automatically generated notifications about differences between the active and previous project status of the controller enable users to detect incorrect or unauthorized changes at an early stage.

Thanks to octoplant **SmartCompare**, the detected differences can be displayed in detail and different versions can be compared graphically and in tabular form.

SmartCompare – Change detection at a glance

octoplant allows for an **easy comparison of different versions** and statuses with the help of a clear change detection and analysis:

- AS TABLE
- IN TEXT FORM
- IN GRAPHIC FORM



Detailed graphical information about changes

AFTER BEFORE



“With Auvesy-MDT, we always know the current status of our production plants. versiondog makes our work easier, saves us time and gives us end-to-end clarity on what changes have been made.

You can't get better quality than that!”

Hassan El Haddad
from MAS Automation works as Technical Automation Specialist at HTD, Tata Steel Europe

Automatic backups reduce downtime and enable swift disaster recovery

In the event of partial or total failure, a program backup ensures fast disaster recovery so plant operations can be resumed. AUVESY-MDT's octoplant software solution enables customers to restore production to the last viable backup at a push of a button, so that production is up and running within minutes. This is crucial because every minute of downtime costs the company money and puts supply chains at risk.

The transparency provided by a plant backup solution has a direct influence on whether a plant can be restored quickly and accurately in an emergency. Version control — the consistent logging of changes — is another important factor, especially when it comes to troubleshooting and documentation. With octoplant, this process is fully automated. The user simply needs to enter the reason for the change — octoplant does the rest!

On average, it takes maintenance staff 3-4 hours per week to track down correct changes when using a manual approach to manage program versions. octoplant automatically creates backups of program files and compares them to identify any differences. octoplant helps you see the current and correct status at all times, providing maximum clarity with tabular and graphical presentation of changes and allowing you to see what changes have been made and why.

Restoring the last authorized version — or even an earlier version — is crucial to reduce downtime and facilitate rapid disaster recovery, especially if this earlier version was the last time the system was operating smoothly before a malfunction occurred.

Backups created with octoplant help save time and maximize plant uptime. Restore a status with just a few clicks — for a single automation device or machine, or for an entire plant with thousands of devices, sensors, hardware, and software.



“The fact that backups can not only be saved, but also compared with each other, is an enormous help to us, especially during audits.

The software is set up: all new projects are stored in Auvesy-MDT as standard. I see no reasons to why we would ever do without this system again.”

Gilles Gaeng
Technical Manager of Maintenance & IT at thyssenkrupp Automotive

Audits and documentation — mandatory across many industries

The importance of straightforward and consistent documentation varies from industry to industry. In sectors related to processing engineering — such as chemical, pharmaceutical, and food and beverage — consistency is particularly important. Companies whose critical infrastructure is subject to FDA regulations in the U.S., the German government's CRITIS Directive, or the EU's new NIS 2 Directive, understand strict documentation obligations.

When settings and changes must be submitted to supervisory authorities or insurance companies as part of production audits or liability issues, data transparency is critical. Questions like, „Who changed what, where, when, and why?“ must be answered promptly and proven beyond doubt — especially when anomalies or accidents occur.

octoplant helps you achieve greater regulatory compliance through audit trail reports and traceable cause-and-effect relationships. Both are legal requirements, as seen in the current legislation pertaining to IT, and help to facilitate the presentation of evidence to third parties in the event of errors. Our software also helps reduce liability risks in the case of certification, which itself is subject to a different set of strict international rules. Let our industry experts show you how AUVESY-MDT and octoplant can optimally implement your specific requirements.

Customizable reporting across all assets and locations

The investment in a modern data management platform for industrial companies is not only a means to an end but should also generate an economic uplift and increase plant efficiency. After all, more important than the sheer volume of data is to be able to manage it and generate added value from it.

octoplant pro hub provides companies with the optimal evaluations for their relevant KPIs, thereby allowing regular monitoring of production-relevant figures and customizable reporting, depending on the requirements needed.

octoplant's BI application does not need to be installed as Software as a Service (SaaS) on the hardware side. At the same time, the SaaS solution

meets all security requirements, as neither program data nor project data, but only meta-data is stored in the cloud.

Thanks to octoplant pro hub, data from multiple octoplant servers can be linked and analyzed. By comparing patterns and deviations of different instances, users have a powerful solution for meeting reporting requirements even for multiple, independently operating production sites. In addition to this, third-party data can be imported and linked to the data from octoplant and visualized.

The benefit: managers make more informed decisions that both lead to quality improvements and identify previously untapped efficiency potential.



All relevant data for automation technology are united in octoplant and are presented in intelligent dashboards at a glance.

octoplant – tailored to your specific industry needs and individual requirements

AUVESY-MDT's octoplant software is your go-to solution for straightforward IoT device and asset management and management — thanks to reliable backups that can be restored quickly and securely in the case of an emergency. From helping customers achieve operational and organization efficiency to enhancing business intelligence — octoplant does it all.

octoplant is straightforward and easy to implement. Manufacturing companies can start small by deploying the software platform at individual sites. Over time, octoplant can be transferred and scaled to other plants worldwide.

Learn how automatic backups of your devices and plants can contribute to greater safety, security, and reliability. Find out why version con-

trol and change management are so important to maintain a complete plant view, especially in the event of an emergency.

AUVESY-MDT's octoplant solution is offered as a subscription, which helps reduce acquisition costs and maximize flexibility. Choose which elements to deploy today and adjust as needed to meet production demands in the future.

Companies can easily scale and, together with AUVESY-MDT, grow at their own individual pace. Contact us to determine which product package suits you best.

	Core	Plus	Premium
IoT Device Management			
Safeguarding Assets			
Instant Recovery			
Business Intelligence			
Operational Efficiency			
Compliance Management			
Threat Protection			
Education & Training			

Find out more | How octoplant can help your company guarantee reliability in your production

AUVESY-MDT's intelligent solutions reduce manual effort in plant management and ensure greater safety, optimized reliability for production, and consistent product quality. Over 2,500 companies and groups across numerous industries already entrust AUVESY-MDT's software with 10 million monitored components.

As part of a recent customer survey,* AUVESY-MDT looked at how customers use and evaluate its software solutions. According to the results, 96% of customers agreed with the statement that they save time thanks to AUVESY-MDT's solutions.

For 73% of customers, availability of data / documentation was the biggest benefit. Three quarters of all customers surveyed said that they cannot do without AUVESY-MDT's solutions. The survey also showed that the topic of security is becoming increasingly important. As many as 6 out of 10 customers stated that the increased security gained from implementing AUVESY-MDT's solutions was one of the strongest arguments for implementing the software.

Customer trust in our solution:

—
96%

... would recommend AUVESY-MDT.

—
84%

... agree with the statement that they save time thanks to AUVESY-MDT.

—
73%

... see the availability of data & documentation as the biggest advantage.

AUVESY-MDT

AUVESY-MDT is the global market and technology leader for versioning and backup solutions in industrial automation. With its octoplant software platform, the company secures the automation of production processes through strong end-point management, where it consistently records and monitors changes to configurations, programming and project statuses in production. This minimizes downtime, increases efficiency, quality and safety standards, and saves costs as well as resources. As a modular solution, octoplant can be linked to different automation technologies and devices, regardless of the manufacturer.

AUVESY-MDT was formed in 2022 from the merger of the two established market leaders AUVESY GmbH and MDT Software Inc. The company is headquartered in Landau, Pfalz, Germany, with additional locations in the USA and China. The company works with more than 100 partners on all continents and serves over 3000 customers worldwide.

More Information at: auvesy-mdt.com



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