

# PLANTLINE<sup>TM</sup> SERVICE AGREEMENT

Peace of mind for your plant



## PEACE OF MIND FOR YOUR PLANT

As digitalisation advances, we've all come to depend on plant automation more than ever. But how do you make sure that the equipment and software your process relies on can support you 24/7?

Service is fundamental to achieving your production targets. For more than 50 years, we have delivered reliable and valued services to plants across the world. Many now benefit from a PlantLine™ Service Agreements, which offer secure, proven, trouble-free support, wrapped in expertise. It's the peace of mind you need to focus on other productive tasks.

And it's not just productivity at stake.

Safety, environmental compliance, energy consumption, run-time and product quality are all under pressure – and all can benefit from a PlantLine Service Agreement. That's why customers continue their contracts year after year – like Ash Grove Cement Company, a CRH company,

PROACTIVE

Maintenance services to reduce downtime

PLANTLINE™
ESSENTIAL
CORE MODULE

CYBERSECURITY
Managed whitelisting system hardening

which has been a PlantLine customer for more than 20 years and has grown its coverage to include all automation products across every one of its 12 North American plants.

#### What is PlantLine Service Agreement?

Plantline Service Agreement covers FLSmidth's automation equipment and software. The name refers to the support line that connects the plant with FLSmidth. Through a range of flexible service offerings, it ensures your automation equipment and software remain protected and performing well. We ensure that your asset delivers today, tomorrow, and throughout its lifetime, giving you the time to focus on other important matters.

#### **Building a PlantLine Service Agreement**

All PlantLine Service Agreements start with the mandatory Essential package of services. This lays the foundation for more advanced offerings via four optional service packages: Proactive, Lifecycle, Cyber Service, and Remote Technologies. Each of these packages offers multiple pick 'n' mix services, so you can decide just how much support you need and choose which combination of services to include. You can also adjust the level of support from year to year as your needs evolve.

- Essential delivers a fixed package of services and is mandatory for all PlantLine Service Agreements.
- Proactive focuses on maintenance and optimisation services.
- Lifecycle offers a choice of lifecycle-focused services, such as software and hardware maintenance agreements.
- Cybersecurity ensures the plant is protected from cyberattack.
- Remote Technologies includes tools and technologies to empower customers via mobile apps and secure connections.

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## WHY CHOOSE A PLANTLINE™ SERVICE AGREEMENT?

PlantLine Service Agreements give you access to highly skilled support and high-priority response to any issues that arise. This not only saves you precious time, but also:

Reduces downtime-related costs	Delivers higher run factor
Give first priority status	Extends system lifetime
Fixes maintenance costs	Lowers risk
Improves system performance	Improves productivity and quality



## ESSENTIAL: THE CORE PLANTLINE™ MODULE

## A fast and secure remote support from our team of experts

A mandatory part of all PlantLine Service Agreements, PlantLine Essential is all about responding to urgent situations as quickly and effectively as possible. It is designed to get you back up and running with minimal loss of productivity.

Whether you contact us via email, phone, over the internet, or using HelmetCam technology or smart glasses, we'll provide a fast, secure response that swiftly and efficiently returns you to productivity. This core service includes user support, advanced troubleshooting, hot fixes, reestablishment, and managed antivirus updates.

PlantLine Essential is delivered by our large global team of experienced automation specialists, who provide 24/7 global support, 365 days a year, to keep downtime to a minimum and reduce the need for internal on-call support. You're covered by an unlimited number of support tickets; however, if we discover a lack of knowledge in a specific area, we'll offer specialised training as an additional service.

#### **User Support**

The PlantLine User Support service provides assistance to users of our automation products, helping them to understand and best utilise system features to achieve their desired aims. It also offers limited 'How to' training for users around specific problems.

#### **Advanced Troubleshooting**

Advanced Troubleshooting service covers:

- problem analysis.
- solution proposal.
- minor corrective reconfiguration.

These provide the foundation for some of the more advanced offerings in the PlantLine Proactive and PlantLine Lifecycle packages, such as remote maintenance sessions and software maintenance.

#### **Hotfixes**

During the problem-analysis phase of our Advanced Troubleshooting service, we may find that a solution already exists within a previously-released hotfix. Our Hotfix service helps you to quickly install this solution.

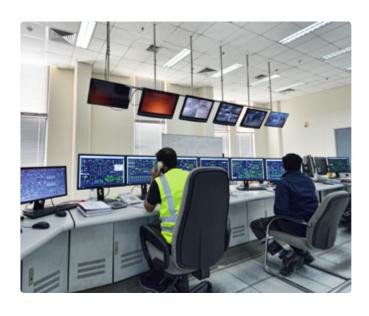
#### Reestablishment

During the problem-analysis phase of our Advanced Troubleshooting service, we may find that issue can only be solved by restoring the system to the last backup state. Our Reestablishment service supports you to do this, while making sure you maintain any accumulated fixes to the current version of the system.

#### **Managed Antivirus**

As part of PlantLine Essential, antivirus software from an accredited supplier is supplied and installed locally on your PCs. The PCs are also monitored by a central service at FLSmidth and a compatibility test is always done before updating the system.

The Managed Antivirus service is available only for PCs with a Microsoft OS in Microsoft Active/Extended Support Phase.





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## GOING BEYOND PLANTLINETM ESSENTIAL

#### Service that's tailored to you

What comes after PlantLine Essential? Well, that's up to you. Your PlantLine Service Agreement is designed for you, by you, using our four optional PlantLine service packages: Proactive, Lifecycle, Cyber Service, and Remote Technologies.

Do you want to handle all the maintenance and service yourself, with us as a back-up only in case of an emergency?

Do you want to undertake all routine maintenance yourself, with us taking care of the more delicate and demanding service activities and advising to ensure stable operation?

Or do you want the highest return on investment, with comprehensive services designed to create high long-term up-time and performance through a balanced combination of emergency back-up, maintenance, renewal and optimisation?

The choice is yours.







## PROACTIVE SERVICE PACKAGE

### Proactive maintenance services to reduce downtime

Experience has taught us that prevention is better than cure. That's why PlantLine Proactive includes a range of services designed to help you stay on top of the maintenance workload. You can pick and choose from a range of services that help address weaknesses before they become problems.

Individual services within the PlantLine Proactive package include:

- Preventative maintenance visits:
  - · Onsite.
  - · Remote sessions.
- Performance monitoring and remote optimisation.

#### **Preventative maintenance**

Our preventive maintenance visits aim to optimise operation of your FLSmidth automation systems. We can deliver visits onsite or remotely for a faster and more cost-effective response. The exact quantity of visits and other particulars are established with each contract, and administration is simplified through one annual billing.

Each visit or remote session will involve some or all of the below:

- Preparation (based on information from PlantLine Manager).
- Pre-visit investigation.
- · Discussion of issues with site personnel.
- Verification and adjustment of system operation and state according to checklists.
- Installation of available and applicable software updates.
- Minor reconfiguration, system back-up and configuration documentation update.
- · Functionality testing.
- Recommendations on operation, upgrade offers, parts, etc.
- Reporting on the service visit and informing the client and PlantLine Manager.



- Training sessions
- Audits
- Parts disassembly, cleaning and reassembly, as needed, and inspecting/exchange of wear parts (during visits).

Preventive maintenance visits or remote sessions are carried out by experienced specialists and are planned well in advance by you and your PlantLine Manager. Your PlantLine Manager will follow up on any outstanding activities after the visit to ensure nothing is missed. Visits can also be extended to include more comprehensive software upgrade tasks or engineering tasks.

## Performance monitoring and remote optimisation

Our performance monitoring and remote optimisation service aims to empower your plant personnel to get the most from our ECS/ProcessExpert® (ECS) advanced process control system and /or QCX/BlendExpert™ (QCX) advanced quality control system. Benefits include regular performance monitoring, close cooperation between your plant specialists and our experts, professional tuning of your expert systems, and advice on relevant upgrades and migration.

Using systems that reflect your actual situation, we help you:

- Maintain a high level of system availability.
- Enhance process/quality control efficiency.
- Reduce production cost.
- Increase overall plant availability and performance.
- Increase plant OEE (overall equipment efficiency).

This service is highly recommended when bundled with PlantLine Essential and preventive maintenance visits.

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## LIFECYCLE SERVICES

#### Access to the latest FLSmidth software products for maximum efficiency, reliability, and security

Software advances at speed. Waiting years to update your software could therefore not only risk your security; it could also mean you're missing out on opportunities to improve process efficiency that could save you millions of dollars. Our PlantLine Lifecycle services make sure that doesn't happen with both software and hardware maintenance service options.



#### Software maintenance service

Installation of the most recent software release ensures:

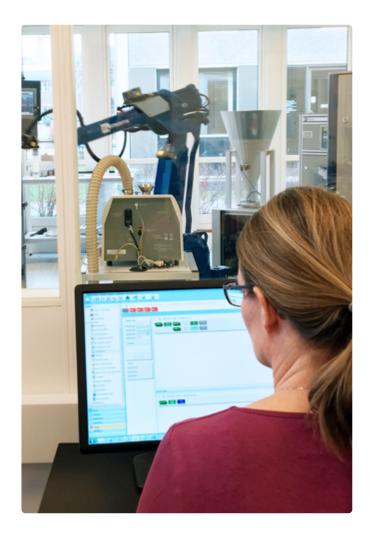
- You have access to the latest and best software features.
- Your system is optimised for stability and availability.
- Your software is compatible with any new hardware or operating system updates.

So, it's important to keep up to date with the latest release. And with our software maintenance services, you will do just that. Every time we release a new version of an ECS or QCX product, we let you know about it and give you access as it's released, so you can benefit from the latest features for enhanced precision and productivity.

#### Hardware maintenance service.

Similar to software, your hardware also needs maintenance. By planning timely repairs and having expert assistance on hand, you can increase your equipment's life expectancy and enjoy predicable maintenance costs. Whether it's spare parts or wear parts, we can recommend the needed items.

Our hardware maintenance service covers laboratory equipment like QCX/RoboLab® systems and QCX® AutoSampling systems, gas analysis equipment like KilnLoq, and PCs. We can also expand this service to cover inventory management, so you keep only the parts you really need in stock and rely on FLSmidth stock management for the rest.





## **CYBERSECURITY**

#### Cyberattacks are one of the biggest threats facing manufacturers.

With the potential to take you offline for hours or even days, the risk of virus attacks is significant and should not be ignored. The PlantLine Cybersecurity package of services includes our managed whitelisting service and system hardening service.

#### **PROACTIVE**

to reduce downtime

REMOTE TECHNOLOGIES Plantline mobile app

#### LIFFCYCLE

Access to the latest software features

#### **CYBERSECURITY**

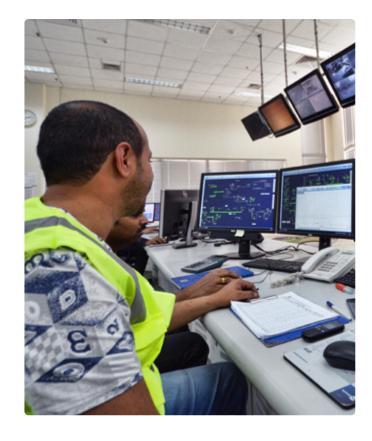
Managed whitelisting system hardening

#### Managed whitelisting service

Antivirus software can protect your systems against known malware, but not against unknown [called zero-day] threats. To add more safety than the traditional antivirus can deliver, we therefore offer managed whitelisting software on a subscription basis, including licenses, update tests, monitoring, support, and reporting. This service allows only existing software to run on your PCs and is therefore an excellent option to improve cybersecurity in the relatively static world of industrial automation software.

#### System hardening

System hardening aims to eliminate means of attack by turning off non-essential services. Our system hardening service covers FLSmidth-supplied PCs, PLCs, firewalls, and network equipment. It involves configuration checks, back-ups, Windows OS/firmware patching, and hardening of equipment, and can be offered as a remote or onsite service, or as a combination of the two, to meet the requirements of the individual customer or site(s). Checks are performed using a standard checklist, prepared based on industry best practices and recommendations for FLSmidth products.



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## REMOTE TECHNOLOGIES

### PlantLine Service Agreement – What else can you do?

The services on offer within a PlantLine Service Agreement open up a world of possibility. Now it's up to you to discover what you can do with them. From a mobile app to enabling remote access to your control network across your organisation, we can use PlantLine as the foundation for a host of additional solutions, enabling you to increase productivity and gain peace of mind with a flexible approach that's tailored to your plant.

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#### REMOTE TECHNOLOGIES

Plantline mobile app Go2FLS

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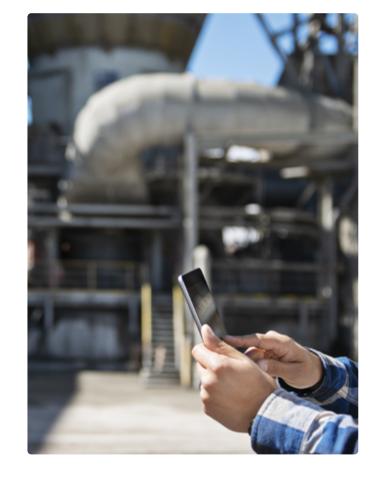
#### PlantLine mobile app

The mobile app keeps you updated on equipment, process, and performance around the clock, even when you're far away from the plant. Receive plant information directly on your iPad, iPhone, Android phone, and enjoy the following benefits:

- Quickly and easily check user-defined spot values.
- Compare historical day and month trends for the same tags.
- Touch anywhere in the trend to track historical values.
- Share trends with others via e-mail.

#### Go2FLS

The world is changing, and we're ready for it. Our remote services are well-established, but if you want to empower your team to access control room data remotely, we can help. Our Go2FLS technology enables remote access to the plant's control network for internal plant support and maintenance. Your team can tap in to real-time process mimics, trends, diagnostic faceplates, and all alarms/events on the plant's control system, enabling them to be part of troubleshooting efforts, engineering, software maintenance and process optimisation wherever they are.



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## PROTECTIVE COVERAGE WRAPPED IN EXPERTISE

A PlantLine™ Service Agreement gives you the personalised support you need to optimise your plant's productivity. Whether you're struggling with technical issues, concerned about your vulnerability to cyberattacks, or just missing out on opportunities to improve efficiency due to out-of-date software, we're here to help with a flexible package of services built to deliver productivity with peace of mind.

When you sign up to a PlantLine Service Agreement, you're getting the support of:

- A highly skilled and experienced global service team of automation specialists
- Your own PlantLine Service Agreement project manager, who essentially becomes part of your team and gets to know your plant and your challenges

We wrap this expertise around our services to provide protective coverage for your automation systems. And it is this that truly adds the next level of value to PlantLine Service Agreements. Because we know our products best. We developed, manufactured and commissioned them. This means we can recognise weaknesses before they become a problem.

The bottom line? You can rest assued that a PlantLine Service Agreement will provide faster recovery, longer mean time between failures, improved system performance, extended system lifetime, optimised re-investment, and lower risk.

