



# SI<sup>®</sup>/PAM: Operation Management, Easy and Efficient

Flexible IT Solution, Applicable Across Industries



## Growing Requirements, Different Goals, One Solution

### Growing requirements

Success essentially depends on whether companies are able to meet the steadily growing, permanently changing requirements of the markets with effective strategies. In this context, success primarily means identifying the own company's potentials, utilizing them consistently and, in doing so, increasing the efficiency of operational procedures.

### Different goals

We from STEAG Energy Services know from experience that the resulting, sometimes highly diversified goals impose very high and specific requirements on companies. Requirements that, for the most part, can be mastered by means of an IT-based solution for operation and maintenance.

### One solution

You are looking for a flexible, user-friendly software that ... can be put to result-oriented and thus productive use very quickly?  
... adjusts to your requirements?  
... is applicable in all sectors of the company?  
... considers all steps for the optimization of operating processes – from the planning via the control right up to the documentation?  
... can easily be integrated into other data processing applications like e.g. ERP systems?

### Then you are holding the solution in your hands!

SI®/PAM is a powerful computerized maintenance management system (CMMS) that covers the entire range of technical operation management. Unlock previously undetected potentials with SI®/PAM!



# Modular, Flexible, Versatile, Scalable

Virtually every industry can profit from the benefits of SI®/PAM as the modular CMMS system is not only very flexible but also versatile. In addition, as a scalable platform the software will grow with your individual requirements at all times. As a field-tested, industry-independent software solution, SI®/PAM helps you to fulfill very complex tasks and meet future challenges with effective strategies by means of more efficient operational procedures.

## A few of the industries that can benefit from SI®/PAM:

- Renewable power generation
- Conventional power generation
- Municipal utilities
- Process industry
- Manufacturing industry
- Industrial service providers

Learn more about the benefits of SI®/PAM in the individual industries on [www.si-pam.com](http://www.si-pam.com).

## SI®/PAM lastingly supports you in a wide range of important areas of application.

### Maintenance management

- Planning, control, and execution of maintenance measures
- Implementation of corrective, preventive, and condition-based maintenance strategies
- Plant management and documentation
- Controlling of the maintenance processes

Whatever maintenance strategy you prefer, with SI®/PAM you implement your goals in an efficient and thus profitable way.

### Results you benefit from:

- Intelligent basis for economically efficient maintenance strategies
- Modular, flexible structure for considering individual tasks
- Fast, targeted implementation of more efficient organizational processes
- Leaner, more efficient processes for a better controlling and for eliminating potential cost drivers
- Complete plant documentation and transparent proof for compliance with legal requirements
- Economically efficient, future-oriented solution for the entire maintenance management

Learn more about the flexible capabilities of SI®/PAM in the fields of preventive, corrective, and condition-based maintenance on [www.si-pam.com](http://www.si-pam.com).



### Operation management

- Organization of operational sequences and processes
- Representation of the most various operating processes
- Administration of documents
- Planning, control, and implementation of measures for preserving the value of investment goods

In the light of a permanent cost pressure, the economically efficient operation of machinery and plants is becoming a greater and greater challenge in virtually all industries. SI®/PAM is based on decades of STEAG's experience in the operation management and control of power plants. Please use this experience to your benefit!

### Results you benefit from:

- Fast and consistent representation of the operational organization
- Successive build-up of a powerful system for the operation management
- Higher data consistency owing to uniform systematics and thus higher transparency as well as cost-efficiency
- Economically efficient mastering of new challenges by means of a modular system scalable at any time
- Uniform, flexible IT platform for many tasks that can be integrated into other data processing environments

### Document management

Change management in terms of a systematic planning, implementation, and documentation of operational changes should be an vital component of each corporate strategy. An organized filing of important papers like e.g. technical drawings or plans alone, however, do not imply consistent document management. Thus, crucial modifications on machines or other technical equipment mostly do not entail the adjustment of corresponding documents.

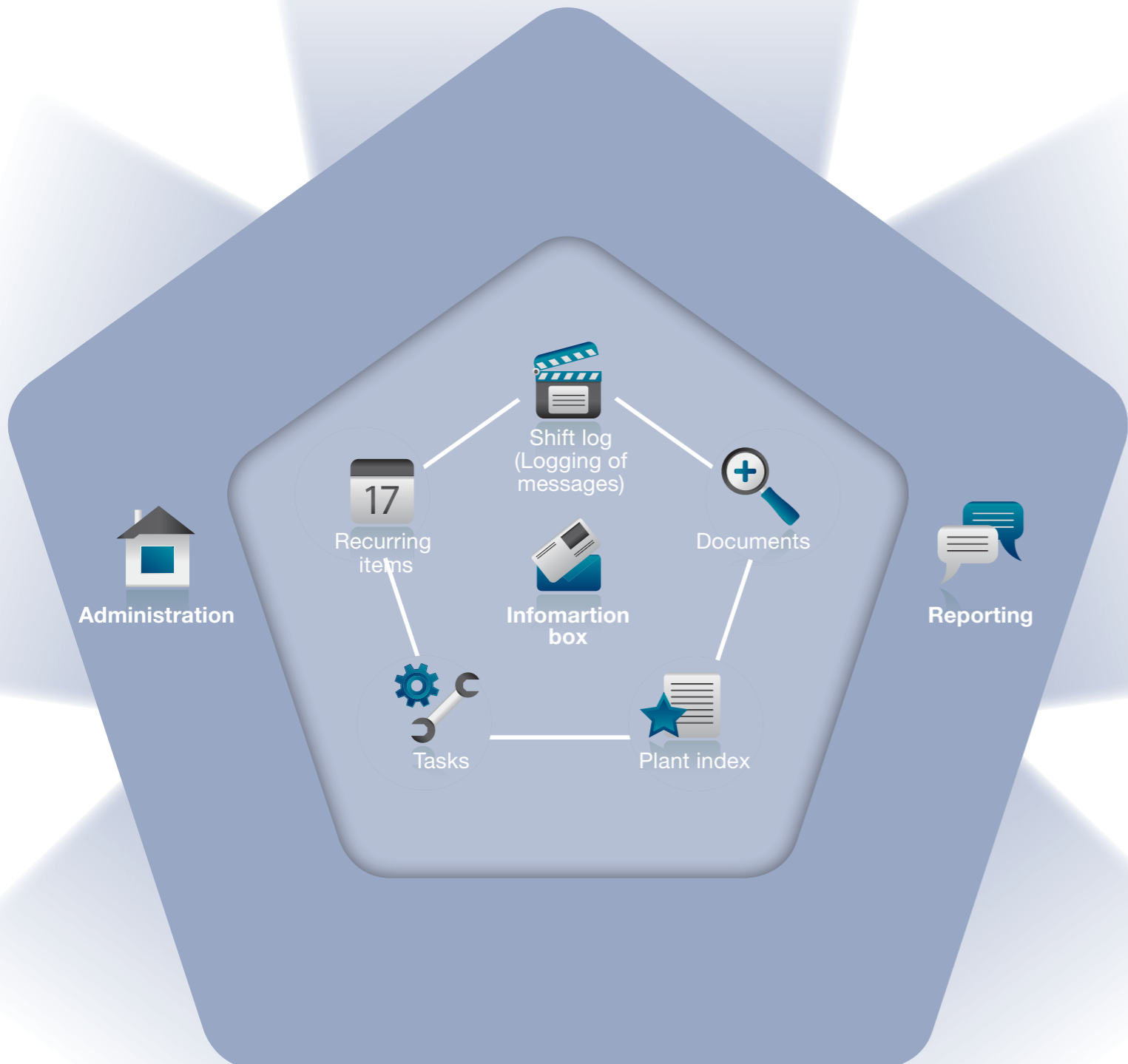
The solution package "Operation & Maintenance" in SI®/PAM offers you a very powerful standard platform for the change management, which supports you in the following tasks:

- Easy generation of a change request for corresponding documents out of each work order
- Permanent linkage of a change request with a work order
- Efficient workflow as a work order can be closed after its execution in spite of an open change request

- Consistent change management as the request for adjusting a document remains as a reminder until the documents have been changed

### Results you benefit from:

- Effective implementation of change management as an important component of the corporate strategy
- Minimal effort for implementing the change management
- Complete documentation of all relevant changes
- Continuous up-to-dateness of all important documents and data
- Smooth implementation of renewed modifications on machinery and plants on the basis of e.g. current technical drawings and plans
- High cost-efficiency owing to more transparent processes
- More systematic and easier work scheduling



# The Modules of SI®/PAM

## Standardized flexibility with a lot of advantages

A special feature is the modular structure of SI®/PAM. The modules can be applied and expanded on demand, depending on the task. Thus you receive a solution that is perfectly adapted to your requirements and offers you a wide range of additional options as well as a high degree of future-oriented flexibility. When the requirements increase, SI®/PAM as a highly scalable CMMS system will grow accordingly.

### Structured look at your plant inventory

The module "Plant Index" displays all component parts of the plant in a clear tree diagram and shows you all relevant plant data at a glance.

#### Your benefits:

- Any hierarchical structuring at will
- Clear visualization in a tree diagram
- High flexibility by naming at will
- Free distribution of plant components to own "tabs"
- Individually and thus freely definable attributes
- Systematic encryption with the possibility to use different designation systems in parallel
- Immediate access to all plant-related documents, technical data, messages, orders, and recurring items

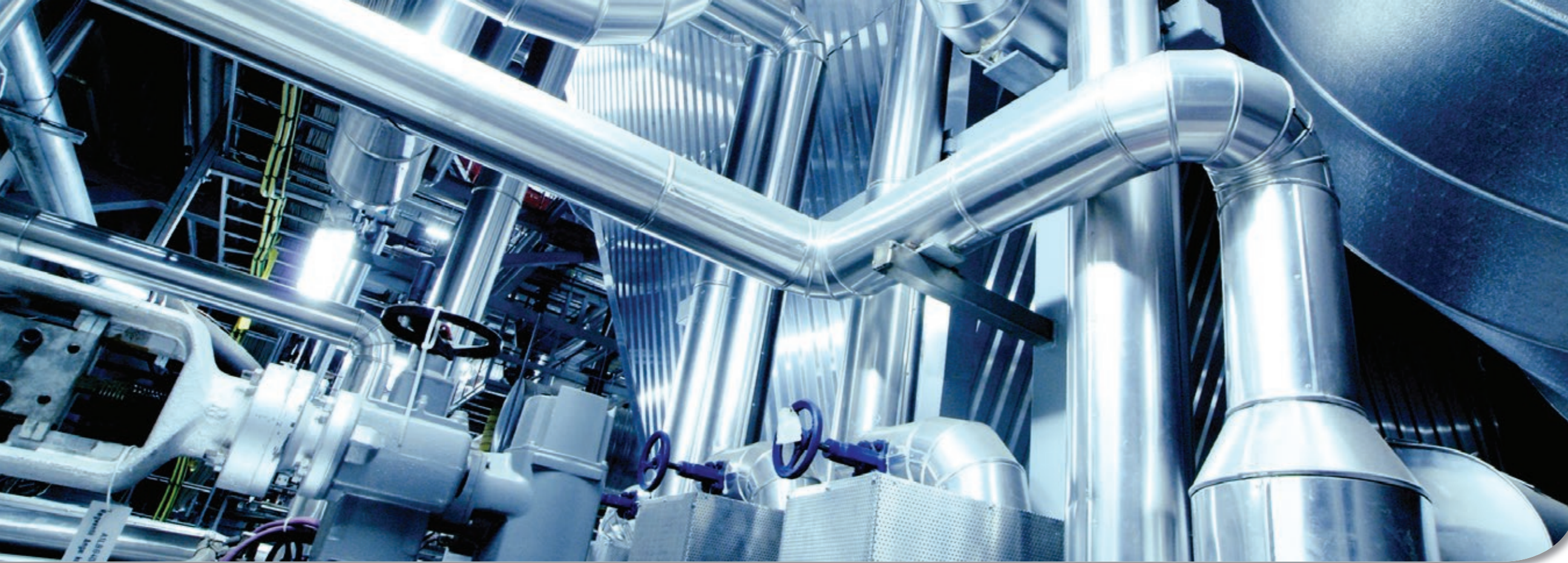
### Event Log: Keeping track at all times

The module "Event Log" can be used for any kind of structured message recording, which you can save protected from changes as required.

The "Event Log" is fully incorporated into the CMMS system. Thus, in contrast to external solutions, the module can be seamlessly integrated into other fields like e.g. the order processing. To do so, any number of "Event Logs" can be created at will. Moreover, the module can be used by various groups of persons e.g. for shift logs, damage reports, machine logs, etc.

#### Your benefits:

- Seamless integration into all CMMS functions
- Flexible structure
- Any number of message types per shift log, log, etc.
- Freely definable data fields
- Consistent and safe documentation
- High degree of security by limitation to authorized users and the option to chronologically limit or completely block subsequent changes



#### Tasks: Never forget anything important anymore

With the module "Tasks and Deadlines" you won't forget any important activities anymore. Especially the execution of measures required by law can be systematically controlled and completely proven at any time by means of this module. Jobs to be carried out regularly can be clearly represented in the list of recurring items, and asset-specific deadline strategies can be preconfigured in a time-saving manner as well.

#### Your benefits:

- Flexibly configurable tasks
- Any number of task types with free workflows
- Automatic generation of recurrent tasks in lists of recurring items
- Time-saving preconfiguration of plant-specific deadline strategies
- Dynamic allocation of responsibilities according to rules

#### Information Box / Workflow: Information and communication center

In SI®/PAM, each user can be assigned an own "Information Box" that lastingly supports various workflows and thus can do a lot more than e.g. an e-mail account. As all the information important to the respective user arrives in this module, each authorized person remains up to date on all events at all times, which allows to react to all processes immediately.

#### Your benefits:

- Customized "mailbox" for each user
- Lasting support of various workflows
- Proactive messages on upcoming tasks and relevant entries in the Event Log / Log / Shift Log
- Direct access to the editing procedure
- Automated determination of the correct recipients according to the most various criteria
- Fast reaction to all processes
- Consistent, uninterrupted flow of information and thus prevention of missed deadlines

#### Document Management: Everything at your fingertips, everywhere and at all times

In the module "Document Management" you can store and organize all important documents, or you can create links to documents that are stored outside of SI®/PAM. Centrally, via one user interface, you always receive an overview of all important data. SI®/PAM allows you to add corresponding documents to any object. It is even possible to link documents to multiple types of objects.

#### Some typical applications are:

- Piping and instrumentation diagrams and constructional drawings
- Manuals and maintenance instructions
- Checklists and test reports

#### Your benefits:

- Efficient document management via one central user interface
- Comfortable full-text search in the metadata of the documents and in the content of more than 150 file types
- Quick overview by adding documents to any object type
- Higher level of security and easy handling owing to the storage of documents in a database
- Flexible assignment by multiple linking of documents
- Faster finding of „external“ documents due to linking
- Easy integration of existing document management solutions



### Reporting: Prompt reports, always based on the latest data

The uninterrupted acquisition of “key performance indicators” creates a verifiable data base that allows you to document the contribution of maintenance to the corporate added value e.g. by promptly informing management about the most important maintenance measures. You can also flexibly adjust your maintenance strategies to changing circumstances by means of demand-specific ad-hoc evaluations.

#### Your benefits:

- Uninterrupted acquisition of KPIs (key performance indicators)
- Precise overview of current maintenance measures
- Prompt reporting owing to fast evaluations
- Quick reaction to changing circumstances by demand-specific ad-hoc evaluations

### Administration: A quick start – no ifs, no buts

You receive SI®/PAM in a field-tested standard configuration that is adjusted to your individual requirements in the context of the project development. In addition, the “wizard” function of SI®/PAM allows you to make subsequent adjustments to the configuration without any problems.

### More mobility and freedom

Meanwhile, smartphones and tablet PCs have become indispensable in many industrial sectors. As a complement to the existing data processing with SI®/PAM, SI®/PAM Mobile makes consistent use of the potential capabilities of these technologies to lastingly facilitate the work of the staff on site on machines or plants regarding maintenance, repair, inspections, recording of faults, and safety isolations. In combination with proven bar code and RFID technologies, SI®/PAM Mobile prevents media disruptions as all feedback from the field can be entered into a smartphone or a tablet PC without great effort directly on site and can then be transferred to SI®/PAM as the central CMMS system on completion of the activities.

The entirely positive effects should appear soon: no manual transferring of feedback into the central CMMS system and, as a result, a systematic prevention of potential sources of error, greater time-saving, more efficient workflows, leaner processes and thus noticeable cost savings.

### CMMS system for your “pocket”

With SI®/PAM Mobile as an app for smartphones or tablet PCs (operating systems: Android, iOS, and Windows 8.1) you always have a handy CMMS system on site. The native app is particularly adjusted to SI®/PAM as target platform and offers a wide range of applications and features.

#### Your benefits:

- Mobile operation of the central CMMS system on a smartphone or tablet PC
- Customer-specific configuration of SI®/PAM is available also during mobile maintenance
- Powerful mobile system which, compared to PDAs, allows to use and edit more data “offline”
- Comfortable synchronization between the central CMMS system and the smartphone/tablet PC via WiFi or USB interface



## Mobile Isolation: Higher Occupational Safety, Operational Safety, and Process Stability

The software module “Mobile Isolation” of SI®/PAM raises the occupational safety in the context of isolation measures and thus lastingly increases the operational safety. Moreover, with this solution, long distances and media disruptions due to paper-based isolation or additional documents are finally a thing of the past.

With SI®/PAM Mobile as an app for smartphones or tablet PCs in combination with an unequivocal designation by means of bar codes or RFID transponders, you can unambiguously identify machines and plants or components directly on site and thus reliably prevent possible mistakes or isolation conflicts.

Here the “Mobile Isolation” of SI®/PAM provides all the information required for a planned isolation on a smartphone or tablet PC. This facilitates the work immediately at the point of isolation and increases the safety both for simple measures and for more complex isolation processes.

The feedback for the isolation measures can be transferred directly into SI®/PAM via WiFi or a USB interface to keep the central CMMS system up to date.

### Your benefits:

- Lasting increase in occupational safety and operational safety
- Significant ease of work as paper-based isolation or additional documents are no longer required
- Unambiguous identification of machines, plants or components directly at the point of isolation
- Comfortable provision of all information required for an isolation on a handy mobile device
- Greater safety by preventing potential mistakes, isolation conflicts, or switching errors
- Durable and thus never “unreadable” plant designation by means of RFID chips
- Easy and reliable transfer of all feedback for isolation measures into the central CMMS system without media disruptions and thus prevention of potential sources of error



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