

# **TAM** — Technical Order Management

# The Direct Connection Between AMS and Your Process Control Systems

The unique TAM connection allows you to send data from AMS directly to the process control system or to receive data from your systems and process it in AMS. This bidirectional communication takes place in real time.

TAM guarantees the closing of the gap between the commercial administrative data level of your company and the value adding (heat) treatment, regulated by the process control system and field level of the equipment control system.

The Technical Order Management (TAM) enables electronic assignment of time-temperature-process documentation to AMS loads and job items and guarantees unique, automated and transparent traceability of all process steps.

Industry 4.0. — Process data exchange directly with the systems! Only AMS can do that!



### **Your Benefits:**

#### **Seamless Documentation**

All process steps are digitally backed up, inseparably linked to job data and can be retrieved at any time.

#### **Optimized Traceability**

Track the path of the components throughout the entire process.

#### **Process Management in Real Time**

The current treatment status is visible at all times.

#### **Perfect Quality Assurance**

Fulfillment of numerous requirements from common management systems such as DIN ISO 9001, IATF 16949, NADCAP and others.

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# An Overview of the Technical Order Management

## The TAM Connection is Available for the **Following Process Control Systems:**

- · Aichelin Group
- · CIEFFE Thermal Systems srl.
- · Codere SA
- · Demig Process Automation GmbH
- · DiffPro Frank Schubert
- · ditec Dr. Siegfried Kahlich & Dierk Langer GmbH
- · Eltro GmbH
- · Fire Bee Techno Services
- · Ipsen International GmbH
- · KSL Automation
- · MESA Electronic GmbH
- · Nitrex Metal Inc.
- · OCSS GmbH
- · PLATIT AG
- · Preiss Anlagenbau GmbH
- · Rübig GmbH & Co. KG
- · Seco/Warwick S.A.
- · SSI Technologies, LLC
- · STANGE Elektronik GmbH
- · SYSTHERMS GmbH
- · TAV Vacuum Furnaces
- · United Process Controls GmbH
- · Voestalpine Eifeler Group

(other systems upon request)

### **Connection to the Following Energy Consumption Systems Possible:**

- · Dibalog GmbH
- · Enerchart (Krumedia GmbH)
- · Nitrex Metal Inc.
- · Rübig GmbH & Co KG
- · STANGE Elektronik GmbH
- · United Process Controls
- · VacuTec GmbH

(other systems upon request)

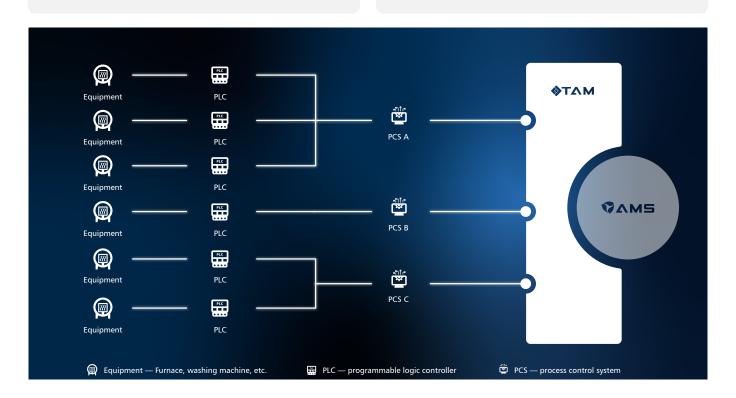
## Communication with the Process Control **Systems in Real Time:**

With the TAM connection to the PCS, AMS gains access to the equipment data. Users transmit the required load and program data from AMS to the process control system level and access medium consumption values and status messages.

TAM provides the status data from the equipment technology in AMS for process documentation and the provision of production transparency for all employees.

#### The main benefit:

The program is selected in advance during the loading process. Operating errors are therefore reduced.





# An Overview of the Technical Order Management

# The Following Basic Functions Support You in Your Daily Work:

- · Selection and display of a list of possible equipment filtered as needed
- · Access to the program list of the selected equipment
- · Equipment status (ready for operation, in operation, etc.)
- · Receive process information from the control systems
- · Transfer of load data to the process control system and selection of the program
- Automatic transfer of process times for running programs into the AMS load
- · Delegate alarms and trigger item-related reactions
- · Subsequent assignment of items also possible after starting the treatment cycle

#### **Documentation Options:**

- · Process documentation as PDF for internal use with a complete level of detail
- Export of the time-temperature-diagrams as a corporate design document and customized level of detail for forwarding to customers
- · Export of the complete treatment process for the loads of a job item (incl. time-temperature-diagram)
- · View and transfer consumption information (sensors must be installed at the factory)
- · Transmission of alarms in the treatment cycle for evaluation at a later date

# Distinct Status Display Clarifies the Equipment Assignment:

- · "Waiting for process start" after transfer to the operating memory
- · "Active" after process start
- · "Finished" after process end
- · Display of the start/stop time for subprocesses (e.g. washing, oil bath, etc.) possible

#### **Safety Function:**

Loads can be released by authorized employees to be transferred to the equipment before the process starts. The correct process sequence can be validated at the end of the process by opening the time temperature diagram. Subsequent process steps can only be started after process control has been completed.

# **Required Licenses:**

The Technical Order Management (TAM) is part of the AMS basic installation.

### **Recommended AMS Modules:**

AMS Module Charging

AMS<sup>mPDC</sup> Mobile Production Data Capture

incl. Mobile Charging

AMS<sup>mPO</sup> Mobile Production Overview

AMSPDC Production Data Capture



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