POWERFUL, USER-SAFE AND PROVEN AROUND THE WORLD

The as1 concrete control and order processing system is based on the powerful as1 system platform, designed to cope with the challenges of the future. It offers high connectivity and is an essential prerequisite for end-to-end process digitalisation. The as1 industrial hardware has been designed specifically for use in tough conditions, and it guarantees maximum system availability. Detailed implementation of process technology ensures mix of high quality – and satisfied customers.

FIELDBUS SYSTEM WITH DIGITAL ADDED VALUE
Thanks to the Ethernet-based fieldbus system, your plant can easily cope with the challenges of the digital era. The system integrates field devices on the plant into a network, ensuring reliable and robust exchange of all types of information.

HIGHLIGHTS
• Intuitive, safe and reliable plant operation
• Quick and flexible order processing on the plant
• Consistently high mix quality thanks to highly automated processes
• Designed for reliable operation in harsh environments
• Prepared for the digital future
• Professional hotline and support organisation ready to assist across the globe

ELECTRICS DESIGNED FOR OPERATION IN HARSH CONDITIONS AROUND THE CLOCK
The power panels have to withstand extreme stress around the clock. Ammann only makes use of tried-and-tested quality components from renowned manufacturers that are available worldwide.

HOTLINE AND SUPPORT
PLANT AVAILABILITY GUARANTEED
Malfunctions can be located quickly by the own specialists, with the help of the efficient as1 diagnostic tools. Ammann’s professional hotline can access the plant for remote maintenance at any time, for assistance with fault diagnosis or for servicing purposes – thus saving costly interventions on site.
Innovative control technology and end-to-end digitalisation have evolved into critical competitive factors in the construction materials processing sector.

To meet the challenges of today and tomorrow in a dynamic market environment, Ammann offers a comprehensive range of products to control and network your production plants.
AS1 CONTROL SYSTEM
FOR CONCRETE, GRAVEL AND DOSING PLANTS

HIGHLIGHTS

• Clear overview: plant operation is simple and safe
• Precise dosing: dynamic self-learning overrun correction function
• Highly accurate W/C: automatic consistency control
• Maximum use of recycled water: dynamic recycled water addition
• Flexibility: each recipe is individually controlled according to one of the EN consistency standards or the Ammann consistency standard
• All-rounder: the as1 can also control gravel, ballast and dosing plants
THE NO-WORRIES PACKAGE

FAST SERVICE FOR CUSTOMERS
• Efficient selection, search and filter functions
• Missing master data can be entered directly in the ordering process
• Comprehensive handling of delivery notes

SAFE PLANT HANDLING
• Well-structured, logical plant visualisation
• Immediate overview of the current operating status at all times
• Many useful functionalities to make day-to-day work easier

CONSISTENTLY HIGH MIX QUALITY
• Ongoing humidity measurement throughout the dosing process
• Automatic overrun correction for dosing processes
• Automatic consistency control with recipe-specific control parameters

STANDARDS SUPPORTED
• Meets the requirements as per EN 206 and DIN 1045
• Available in a version that can be calibrated, compliant with OIML R51-1 (automatic balances)
• Consistency values as per EN standard, e.g. spread, compaction, slump and slump flow parameters, as well as the Ammann consistency standard

ONBOARD FEATURES TO ADJUST AND OPTIMISE THE PLANT
• Calibration assistant for belt weighing units and weigh hoppers
• Calibration assistant for various humidity measuring sensors
• Extensive parameterisation options to optimise the plant

DIAGNOSTIC TOOLS FOR TROUBLE SHOOTING
• Integrated tools for fieldbus diagnosis
• Recording tool for digital and analogue signals
• Professional 24/7 hotline support via integrated remote maintenance access

THE BASIS FOR THE DIGITAL FUTURE
• Electronic data exchange with customer’s ERP systems
• Configurable PlantX data interface (REST-based)
• Software service for data exchange with cloud-based Q Point services

COMPREHENSIVE DATA STORAGE AND MANAGEMENT
• Detailed logging and a full-scale statistics package
• Integrated material management tool
• Structured browser-based document archive

CUTTING-EDGE TECHNOLOGY
• Microsoft Windows 10 IoT operating system
• Microsoft SQL database
• Real-time subsystem
• Ethernet-based PROFINET fieldbus system
AS1 RETROFIT CONTROLS
READY FOR THE DIGITAL FUTURE

THERE ARE MANY REASONS FOR A CONTROL SYSTEM RETROFIT!
In many cases, technically outdated plant controls no longer meet today’s requirements for the availability of spare parts, operational reliability and comfort, or traceability of manufactured products.

**ECONOMIC DECISION CRITERIA**

<table>
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<th>Large</th>
<th>Retrofit Control System</th>
<th>Retrofit Control System Power Panels</th>
<th>Retrofit Control System</th>
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<td>small</td>
<td>Production/year</td>
<td>Useful lifetime</td>
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**HIGHLIGHTS**
- Modular as1 conversion kits for proprietary plants and third-party products
- Short conversion times thanks to prefabricated interfaces
- Flexible, needs-oriented extensions possible at any time
- Efficient service and support

**TECHNICAL DECISION CRITERIA**

<table>
<thead>
<tr>
<th>Functional scope</th>
<th>Spare parts availability</th>
<th>Support</th>
<th>Retrofit</th>
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**POSSIBLE CONVERSION OPTIONS**

<table>
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<td>Computer system equal for all options</td>
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<table>
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<th>New panels or interfaces</th>
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<table>
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<td>Conversion kit</td>
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<table>
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<th>No New Panels</th>
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</table>

<table>
<thead>
<tr>
<th>Conversion kit</th>
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</table>
AS1 PLANT NETWORK / FLEET AND DELIVERY PLANNING

KEEP CONTROL OF PLANT UTILISATION AND LOGISTICS COSTS

Our solutions for multi-plant networking of production locations deliver benefits such as simplified operating processes and reduced fixed costs across all administrative processes.

Unused production and fleet capacities cost a lot of money. The as1 fleet and delivery planning module aims to maximise utilisation of the fleet and production facilities while ensuring high compliance with delivery deadlines. The as1 module helps schedulers to accomplish this very complex task.

AS1 ADD-ON MODULES

GET MORE OUT OF YOUR PLANT!

as1 Electronic Signature
Another step towards the paperless plant, with potential for saving costs in the back office.

as1 Sample Planning
Tested quality according to EN 206.

as1 Document Archive
Protocols, reports and key statistics are automatically converted into PDF files and stored in a structured way.

as1 Call Recorder
The simple way to record telephone purchase requests and assign them to orders.

as1 Integrated Maintenance Management
Provides support for planning necessary maintenance work.

as1 Excel Add-In
Essential for detailed evaluations of as1 data in Excel.

as1 Traffic Control
Controls the loading sequence on the plant.

as1 Truck Weighing System
Can be integrated into the order processing module, based on the same master data.

as1 Data Interfaces
Flexibly configurable interfaces for a wide range of different requirements.

MOBILE MIXING PLANT MANAGEMENT IN THE DIGITAL ERA

THE AS1 IS READY FOR Q POINT CLOUD SERVICES

You can benefit from mobile access to your plant’s key values as well as production logs or statistics – via the internet, from anywhere!

Create added value for your customers by making current documents such as delivery notes available for viewing and download on an end customer portal.
For additional product information and services please visit:
www.ammann.com