

ams.group

The world of
project management ERP

Simply unbeatable!

Intelligent processes
for fast climbers



ams
The ERP-Solution

Understanding processes. Creating transparency.

Seeing things up-close



The world of project management ERP

The ams.group specialises in the project management requirements of make-to-order, assemble-to-order and variant manufacturers. The Group's expertise has been gained over the course of more than one thousand successful ERP customer applications throughout Europe in the areas of machinery, plant and apparatus engineering, tool/mould construction, steel/metal/turnkey construction, shipbuilding and the maritime industry, as well as in shopfitting and interior fittings, special-purpose vehicle construction and contract manufacturing.

As an ERP specialist, our **ams.erp** software solution supports processes across the entire supply chain. Our offering includes consulting, training and service as well as a comprehensive management consultancy.

Based in several locations across Germany, Austria and Switzerland, our large team of qualified consultants, software developers, programmers, and colleagues in Support, Quality Assurance and Sales is closely connected to its customers.

ams.erp for companies

working in the following fields:

- Make-to-order manufacturing
- Assemble-to-order manufacturing
- Variant manufacturing
- Contract manufacturing
- Manufacturing according to lot size
- Small-lot manufacturing
- Subcontracting
- Consolidated manufacturing

Keeping pace with the times

Thanks to the onward march of digitisation and Industry 4.0, companies are being confronted with a host of new challenges. Internal and external processes are changing and have to be mapped appropriately in the ERP system.

In order to organise end-to-end information and material flows, ERP systems have to support a service-oriented architecture. The underlying data management concepts should ideally be based on widely used, open industry standards. An architecture such as this allows the easy integration of third-party systems via web services with minimal programming effort.

ams.erp functions as a central integration hub, consolidating the data formats of the connected systems. This permits the multi-directional exchange of all relevant status information for the respective sub-process. The real-time availability of process information means that all systems in the value chain are able to continually optimise their own processes.

ams.erp offers make-to-order, assemble-to-order and variant manufacturers a modern, industry-specific ERP solution that caters to all of their requirements. Through efficient processes and transparent data, complex projects can therefore be planned, costed and ultimately managed successfully.

We've got your goals in sight

Implementing individual customer requirements while ensuring a high degree of profitability and production efficiency, outsourcing work to subcontractors where necessary, and meeting delivery dates are all part of your day-to-day business.

Understanding your processes from A to Z

Your processes need to map costing, quotation, planning and control of workflows in a manageable, transparent manner, while simultaneously giving you control and customization options. Identify and rectify potential sources of error and complicated processing paths that cause disruptions to your business processes without additional effort.

ams.erp – see the big picture

ams.erp also supports the areas of Finance, Business Intelligence (BI) PDM/ DMS and Customs Handling.

Success through absolute process transparency

ams.erp stands for the process-optimised implementation of customer-oriented standard ERP solutions. Our goal is always to achieve cross-order process transparency, from quotation costing, business processing and lean manufacturing process design to final assembly and service.

Permanent planning reliability for business processes

For many business areas with high growth rates, adherence to delivery deadlines and speed in both quotation management and order processing are of the utmost importance. This demands a practical and flexible suite of solutions that offers long-term planning certainty and reliability for your business processes and procedures. As a reliable consulting and development partner, we work with you to shape your future success.



*The ams Management Team
At your service*

ams.erp

Industries served

ams.erp ENGINEERING

Plant engineering incl. wind turbines
Drive technology/engine manufacture
Apparatus engineering
Industrial valves and fittings
Machine tool manufacturing
Automation engineering
incl. mechanical handling technology
Electrical engineering/electronics
incl. control cabinets
Aircraft engineering/maintenance
Warehousing incl. conveyor systems
Special machinery and plant engineering
Hydraulic systems/presses
Measurement and control technology
Pump construction
Packaging and transport systems
R&D

ams.erp STEEL

Steel and metal construction, turnkey construction
Sheet metal processing
Hall construction
Metal construction/metalworking

ams.erp MARITIME

Shipbuilding
Maritime industry

ams.erp TOOL

Tool/mould construction
Prototype/jig making

ams.erp VEHICLE

Special-purpose vehicle construction

ams.erp INTERIOR

Shopfitting
Interior fittings
Furniture/contract furniture

ams.erp INDUSTRY

Contract manufacturing

We speak your language

The **ams.erp** standard software maps the extensive requirements of all business processes of make-to-order, assemble-to-order and variant manufacturers throughout the entire dynamic value chain. The flexibility of **ams.erp** allows order BOMs and their routings to be changed at any time irrespective of status.

Our industry expertise

Many of our customers are true hidden champions from the most varied SME industries. Different industries require different things of an ERP system. To accommodate this, ams offers a complete, integrated, tailored ERP solution designed by expert developers and consultants, creating specific industry solutions that ensure optimum process transparency across the company.

Your consulting partner at eye level “ams.going-better”

Our 5-phase approach gives you peace of mind for the smooth implementation of your company-specific **ams.erp solution**. Our consultants and developers have the industry-specific experience and best practice expertise required to ensure an optimal implementation with the objective of achieving fewer and shorter processes with maximum transparency. Step by step, from process analysis and the initial organisational consultation, to modelling of the company's actual business process structures, customising of standard components and preparations for going live, all the way to the go-live itself. This guarantees reliable, on-schedule implementation of the entire project.

Moving forward with confidence “ams.benefit”

The partnership between **ams** and our customers is dedicated to satisfaction and reliability through continuous optimisation of your individual business processes and improvements in their quality. A vital part of this approach is **ams.benefit**, a cost-benefit analysis that we prepare jointly with you. Initially, this is done 24 months after the **ams.erp** implementation and is then repeated every two years. Based on needs assessments and weak point analyses, we develop catalogues of measures for further optimisation. Customer satisfaction surveys have confirmed that the consulting services and support we provide is second to none. To ensure that you always have access to the software functions you need, we continue to develop **ams.erp** strategically, systematically and holistically.





Custom manufacturing



Our philosophy

We treat our customers with the respect they deserve as our partners. We view our employees as our greatest asset, and our ability to work together in a spirit of trust is the very cornerstone of our success.

Growing intelligently

Strategic project planning, scheduling and resource planning for greater growth and sustainability: For make-to-order manufacturers, early detection of potential time and resource bottlenecks is vital to ensure that corrective action can be implemented in a timely and cost-effective manner. Unlike series manufacturers, make-to-order manufacturers often don't have bills of material or routings on which to base their costings.

To help them create meaningful forecasts in spite of this, the strategic planning tool included with **ams.erp** offers cross-order rough planning, which allows future capacity requirements to be calculated on the basis of both the preliminary costing data of the order to be scheduled and the data of orders on hand.

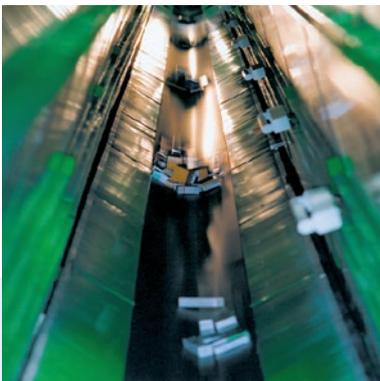


Organising and managing growth

For many companies, the onward march of success is often accompanied by commensurate growth. This must be fully supported and implemented in the company's processes. Today, the main challenges faced by companies include intense pricing pressure, tight deadlines, market globalisation, and increasingly shorter technology cycles. Consistent and cost-efficient information processing across all locations and beyond growth limits is essential. On both a national and international scale. International customer and organisational structures in particular present a whole new set of challenges for many companies and their IT systems.

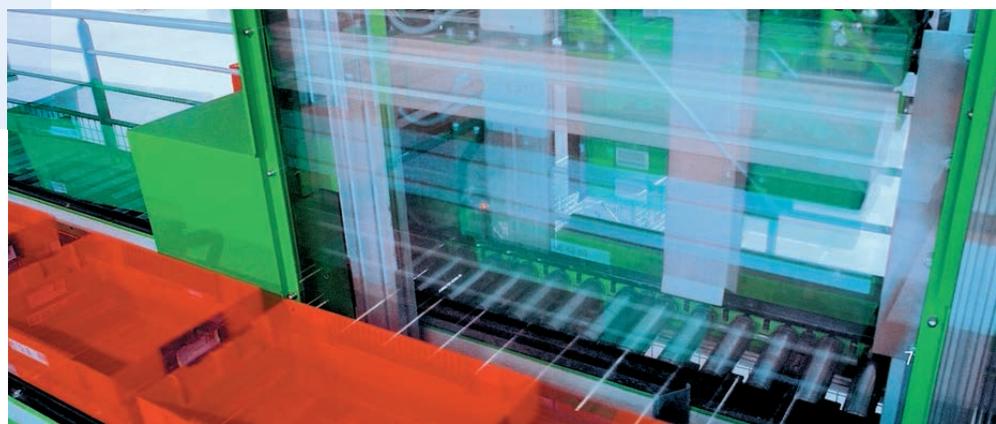
Information advantage for global competitiveness

Increasingly complex national and international organisational structures involve risks such as scheduling problems, as well as production or assembly downtime caused by inadequate shipping logistics and technical documentation. In many cases, legacy standalone solutions have no small part to play in this. In particular, decentralised order processing across various production sites and the inclusion of external production partners and local assembly companies make an integrated, end-to-end solution essential – that solution is **ams.erp**



A clear, streamlined and seamless data landscape

Employees from all areas of the company access a single IT system, which they use to control all processes. Any necessary changes and adjustments can be made at any time, from any location. Optimised collaboration between departments – always traceable, always coordinated, and fully documented. You can check in real time whether you can meet delivery deadlines and stay within budget with the resources available. The ability to detect problems is key to survival. No data redundancies, all data in real time, no unnecessary stock postings, and everything transparent in the order – that's the **ams.erp** information advantage for global competitiveness.





Planning and information advantage

Besides a continual reduction of operational costs and lead times, greater planning reliability is key to helping companies improve adherence to deadlines and customer satisfaction. In this area in particular, an investment in the **ams.erp** system will soon pay off. By optimising process flows, we save our customers time and money. We work with our customers to implement efficient resource, capacity and HR management in order to cut production costs whilst increasing flexibility and competitiveness.

Integrated resource management

With **ams.controlling**, you can access chart-based KPI analyses for all key areas of the company. Described by users as a user-friendly, "lean" system, **ams.erp** enables efficient planning and utilization of all resources across the entire company, right through to plant data collection (PDC) and service management. **ams.erp** is an integrated complete package, which can be flexibly enhanced on an ongoing basis with modular enhancement.

Business Intelligence (BI)

All reports from **ams.bi** are based on a multi-dimensional OLAP cube. This means that data can be extracted from transaction systems across all clients and locations, formatted for subsequent analysis, and displayed on any mobile device.

Benefits of ams.erp at a glance:

- Quotation costing
- Project planning and engineering from the start
- End-to-end, order-based customer and supplier relationship management
- Order status can be checked at any time right up to execution of the operation
- Simultaneous and final costing for all orders
- Shorter lead times
- Complete document management
- Optimal on-time delivery
- Integration of technical order documentation
- Controlling across the entire value chain
- Service management



Process optimisation the key to success



ams.solutions

ams.consulting

Process analysis
Process definition
Process documentation
Business process modelling (BPM)
Model studies
Cost-benefit analysis with CIP
Catalogue of measures

ams.erp

Quotation management
CRM/XRM functions
Order costing
Purchasing/order planning
Materials management
Master and order BOMs
Master and order routings
Production management
External assignments/subcontracting
Product and variant generator
Project controlling
Strategic planning
Human Resource Planning
Dispatch control
Document management
Archive & find
Technical order documentation
Workflow
Checklists
Reporting
Collating
Service management
Intercompany

ams.bi

Controlling (dashboards, reports)
Management cockpit
ams.bi mobile

ams.time

Order time tracking
Time and Attendance
Access Control
Mobile data entry

ams.mobile

Mobile solutions for service,
warehouse management, shipping
and time management

ams.finance

Financial Accounting
Asset accounting
Cost accounting

ams.HR/HR management

Payroll accounting
Travel expense accounting

ams.dms

Document management
Automatic archiving of printed reports
Full-text search

ams.pdm

Design, parts and assembly management
Automatic creation of order BOMs from CAD models
Engineering change management
and version management
Design adaptation
Long-term archiving

ams.control centre

Visualise and simulate
Graphical planning table

ams.export

AES/IVEAS
Sanction monitor

www.ams-erp.com/solution

ams.erp features

CRM customer + XRM supplier Relationship management

- Integrated customer and prospect management for the duration of the project and through to service management
- Integrated supplier management for subcontracting and supplier logistics
- Professional integrated e-mail marketing

Strategic Project Planning

- Multi-project rough planning for dates, capacities and resources as bar charts including simultaneous dispatching of quotations
- Integration with Detailed Planning
- Continuous comparison of planning data for detailed planning

Quotation management

- With and without item numbers
- Preliminary costing based on system-supported supplier RFQs
- Combined rough and detailed costing
- Quotation checklists

Order processing

- With and without item numbers
- Custom definition of various order types (project/main orders, service orders, spare parts orders, investment orders, stock orders)
- Merging of several orders into one project
- Order checklists

BOM Management

- Growing BOM with or without reference to the item master
- Items without an item master record may also contain custom quantity, price and supplier information
- BOMs may be edited at any time – irrespective of order status



Purchasing

- RFQs for purchased parts/services from quotations and orders
- PO handling with and without an order reference
- Real-time MRP and material shortage checks
- Goods and invoice receipt

Materials management

- Automatic warehouse evaluation
- Warehouse order evaluation (statistics/transaction statistics)
- Evaluations of semi-finished products in orders/projects
- Continuous/periodic inventory

Production management

- Separation of design structure and production structure
- Work centres
- Master routings
- Permanent change of make-to-order BOMs (expanding BOM)
- Release of assemblies or similar order BOM lines
- Production-related documents
- Subcontracting control

Product data management

- Integrated PDM/PLM functionality (ams.plm)
- Standardisation and characteristics table
- Purchased and production parts without item master
- Clear separation of master BOMs and order BOMS
- Central drawing management and archiving with version control
- Concurrent design using growing order BOMs
- Changes to order BOMs possible even after assembly, irrespective of status
- Design release at component/assembly level

Designing transparent processes



Product/Variant Generator

- Generation of parameterisable variants in quotation and order processing
- Quotation and order BOMs
- Generation of routings and working time and individual sales texts
- Order/time and attendance data collection
- Order time tracking, time and attendance, and assembly time recording

Service management

- Support management/support RFQs
- Spare part processing/requests/quotations
- Resource planning and maintenance services

Mobile

- Service (material and order time tracking)
- Service reports
- Warehouse management (material and inventory postings)
- Shipping (collation)
- Time management (time and attendance and order times)

Intercompany

- Request (RequestForQuotation)
- Quotation (Quotation)
- Purchase order (PurchaseOrder)
- Purchase order change (PurchaseOrder)
- Order confirmation (OrderConfirmation)
- Status request (OrderStatusRequest)
- Order status (OrderStatus)
- Dispatch notification (DispatchNotification)
- Invoice (Invoice)

Project controlling

- Preliminary and final costing
- Simultaneous online costing

Financial budgeting

- Comparison of a company's total revenue and expenditures over time
- Financial budgeting for strategic and planning purposes

Controlling/BI

- KPI-based analysis using dashboards and reports

Document management

- Managing and organising documents as customer project files
- Audit-compliant document management
- Archive & find

Workflow

- Custom configurable, status-related automatic information system, including an e-mail system with data change histories and appointment management
- Managing dynamic project checklists

Export/customs

- Electronic notification for customs export procedure declaration
- Processing of electronic overload messages
- Processing of electronic completion messages

Dispatch control/collation

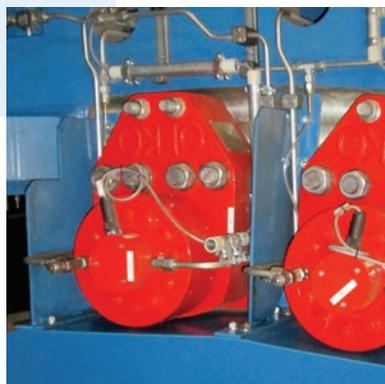
- Collating deliveries and managing them in customer packing units
- Function-dependent packing lists

Control Centre

- Lean scheduling

A customer-focussed care and support concept

- Service portal
- Customer service centre



Testimonials

Abeking & Rasmussen GmbH & Co. KG
Shipbuilding

Broetje-Automation GmbH
Mechanical/plant engineering

Ganter Interior GmbH
Timber construction/interior fittings

Grünig-Interscreen AG
Mechanical engineering

Hanjes + Co Stahlbau GmbH
Contract manufacturing

Hoffmann Maschinen- und Apparatebau GmbH
Mechanical/apparatus engineering

KEBO AG
Tool design and construction

Keller HCW GmbH
Plant engineering & construction

LAWECO Maschinen- und Apparatebau GmbH
Mechanical engineering

MAE. Maschinen und Apparatebau Götzen GmbH
Mechanical/plant engineering

M&C TechGroup GmbH
Apparatus engineering

Oschatz GmbH
Plant engineering

Rhein-Nadel Automation GmbH
Mechanical/plant engineering, feeding technology

Reisch Maschinenbau GmbH
Mechanical/plant engineering

SCHÖMA Christoph Schöttler Maschinenfabrik GmbH
Mechanical/steel engineering

Stickel GmbH
Tool design and construction

W. Husen Stahlbau GmbH & Co. KG
Steel construction

Abeking & Rasmussen GmbH & Co. KG

"Exacting tasks require a sophisticated ERP system."

Broetje-Automation Group

"We've reduced the workload for our designers and cut time spent on design by 15-20%."

Ganter Interior GmbH

"We were impressed by both the software and the ams organisational consultants. It was, without question, a major advantage to have the provider's future project manager on board with us right from the sales phase."

Grünig-Interscreen AG

"We hope to regain control over our processes by expanding our planning horizon. Along with our growth of previous years, we have also seen an increase in complexity, which would be increasingly difficult to cope with without the necessary IT support. I am delighted that, with ams.erp, we now have an integrated system with which we can optimise our process planning."

Hanjes + Co Stahlbau GmbH

"This increased transparency allows us to manufacture our products in volumes that ensure we can continue to provide the best possible customer service and use our resources in the most cost-efficient manner. Our stock of raw materials is optimised in parallel with our finished goods. In addition, our Planning department can now, for the first time, order the materials required across orders and customers, ensuring that we get the best possible purchase prices."

Hoffmann Maschinen- und Apparatebau GmbH

"We are using ams.erp to bring together the technical and commercial information from our projects, resulting in a single, company-wide database that we can analyse in real time – yielding knowledge that we can leverage to meet delivery deadlines, ensure project profitability, and steer the development of our business as a whole."

KEBO AG

"For us, the key benefit of the ams.erp system is that it allows us to attach our gradually growing BOMs directly to the sales orders. As a result, there was no need for us to set up a separate item master."

Keller HCW GmbH

"ams.erp is a tried and tested solution for make-to-order manufacturers, providing us with a complete, forward-looking overview over all of our projects."

LAWECO Maschinen- und Apparatebau GmbH

"Even though quotation generation faces increasingly complex requirements, we, as a make-to-order manufacturer, have increased the output of technical sales while also improving the quality of our quotations."

MAE. Maschinen- und Apparatebau Götzen GmbH

"Aside from simultaneous costing, ams.erp also provides us with a wealth of options for evaluating our current performance, even across multiple orders. The company management and executives use key figures above all for generating quotation forecasts, incoming orders and warehouse stock, as well as updates on the revenue and liquidity situation and current profit and loss statements. All of these figures are immeasurably helpful in keeping track of our business development and predicting future developments early and reliably."

M&C TechGroup GmbH

"We use the ams.erp cross-location order management system to open up international markets."

Oschatz GmbH

"Many ams consultants and product developers have previous work experience in the area of make-to-order manufacturing. That's why they speak our language and think in terms of our processes."

Reisch Maschinenbau GmbH

"Thanks to ams.erp, we are able to keep track of the capacity utilisation of all of our machinery at all times, meaning that any free capacity is flagged up at the earliest possible opportunity."

Rhein-Nadel Automation GmbH

"The growing BOM is a key element of ams.erp. This meets our project management requirements perfectly. It is clear that ams perfectly understands the complexities of make-to-order manufacturers from the many functions that support our day-to-day work," adds Patrick Pirnay, giving as an example item number maintenance, just one of the standard tasks of an ERP user working in design.

SCHÖMA Christoph Schöttler Maschinenfabrik GmbH

"Order-based controlling provides planning reliability. With ams.erp, we are able to identify discrepancies from the outset. This transparency helps us complete current orders more cost effectively and provide more attractive costings for future projects; in the growth market of second-hand machines for example."

Stickel GmbH

"With ams.erp, we decided upon a comparatively lean system that was developed exclusively to meet the needs of make-to-order and assemble-to-order manufacturers. Thanks to this specialisation, we make use of 98% of the functions in the standard software. Ultimately, our decision to go with this system was swung by the high degree of coverage offered and by the consulting expertise provided by ams.Solution AG."

W. Husen Stahlbau GmbH & Co. KG

Time is money – greater transparency as a result of mobile time recording; "In fact, the increase in transparency achieved with ams.erp extends well beyond current projects. Step by step, we are using it to create a clearly documented knowledge base that will allow us to use to cost future construction projects more precisely and implement them more reliably."

**Happily ever
after...**





Brand leaders rely on ams.erp



SSI SCHÄFER

SSI Schäfer in Graz, Austria, specialises in modular picking systems. The company, which only makes customised solutions, plans, develops and manufactures highly dynamic conveyor systems for storage bins and boxes. The *ams.erp* order management system forms the backbone of SSI Schäfer's IT, allowing the company to integrate its entire value chain. Service management plays a particularly important role. In order to meet the challenging requirements of its customers in terms of maintenance and servicing in a cost-efficient way, the company worked with *ams* to establish a globally accessible service portal, which enables transparent control of all service orders. Because the portal is embedded in *ams.erp*, all business processes associated with service operations can be planned and controlled automatically. "The Service Management Portal has significantly reduced our workload", says Michael Stancer, Head of IT and Organisation at SSI Schäfer in Graz, summarising the value added by *ams* to the company.



Job-lot and make-to-order manufacturer M&C TechGroup, a gas analysis specialist based in Ratingen, operates globally as both a system supplier and complete provider. As a result of a strong increase in international business, the company required a more transparent organisation of its business processes. To handle the growing complexity, M&C introduced the *ams.erp* order management system and linked all business processes across locations. "Working with 'O parts' proved to be one of the most effective filter criteria. For economic viability reasons, we do not enter these in the item master but our colleagues in Purchasing and Manufacturing access them constantly," explains Head of IT Florian Trappmann. As a make-to-order manufacturer, M&C made a conscious decision not to enter item numbers, as these were not reusable in the context of purely order-based production.



Hoffmann Maschinen- und Apparatebau has established a leading position in the cooling lubricant processing market. This make-to-order manufacturer from Lengede, Germany, is the first port of call for major manufacturers of grinding machines. It is using the *ams.erp* order management system as its central integration tool. The company is now pushing ahead with an Industry 4.0 solution expansion, focussing primarily on preventive maintenance and paperless manufacturing. "The increase in transparency for order control is certainly one of the key added benefits that we have experienced with our company-wide ERP solution," comments Elke Latton, Operations Manager at Hoffmann Maschinen- und Apparatebau. "We are using *ams.erp* to bring together the technical and commercial information from our projects, resulting in a single, company-wide database that we can analyse in real time – yielding knowledge that we can leverage to meet delivery deadlines, ensure project profitability, and steer the development of our business as a whole."

Memberships

- ASU** Verband der Familienunternehmer (German association for family businesses)
- BITKOM** Federal Association for Information Technology, Telecommunications and New Media
- DSTV** German Association of Steel Construction
- dlv** Deutscher Ladenbau Verband (the German association of shopfitters)
- FIR** German Research Institute for Operations Management
- ife** Institut für Einzelfertiger (German institute for make-to-order manufacturers)
- Software-cluster** Coordination centre Darmstadt, Northern Baden area (Karlsruhe)
- VDMA** German Engineering Federation
- VDWF** Verband Deutscher Werkzeug- und Formenbauer (German society of tool and die makers)



Microsoft Partner

Gold Application Development