

Your benefits at a glance

... in the words of our clients:

- "Only 7 months after project launch, more than \$ 3.9 million have been saved already."
 (just one example from a railway company)
- "Multifaceted consultation that also gives you the tools you need." (universal opinion of seminar participants from electronics production)
- "The software-supported process achieved a **return on investment of 23 to 1.**" (independent evaluation by a client from the military industry)
- "Our **eyes** have been **opened!** Contents are conveyed **well** and in a **practical** manner." (from a consultancy project with participants from the scientific sector)
- •— "Process cost saving of at least 30 % were realised in less than 12 months." (various client analyses from mechanical and plant engineering)
- "Excellent unlimited recommendation." (client opinion from the aerospace sector)



Life Cycle Management

Life cycle management helps companies to **analyse risks** and **evaluate opportunities** to use the findings as a basis to **derive profitable strategies.** Especially in relation to **durable capital goods**, technical and organisational measures **reduce life cycle costs**, for all parties involved in the supply chain - **from manufacturer to operator.**

Obsolescence Management (OM)

- Discontinued! Now What?
- No longer procurable?
- Secured spare parts supply?
- Who takes care of that?

Costly supply bottlenecks arise when a component, material, tool, process, assembly, software or standard necessary for the production or repair of a company's own product is **no longer available from the manufacturer**. This is known as 'obsolescence'. That is why it is becoming increasingly important to practice active management to reduce or completely **avoid unplanned costs**.

Change Management (CM)

- Specifications Change?
- Changes not documented?
- Traceability ensured?
- Status of changes not clear?

If **changes to configurations** (master data) are not adequately managed throughout the entire life cycle, errors are created that require remedy through **expensive rework**. In order to avoid this, configurations must have a **clean structure** and chance to it must be fully documented. This is realised by a **consistent change process** 'from the cradle to the grave' and adequate **digitisation**.

Risk Management (RM)

- Availability status predicted?
- Solutions planned proactively?
- Lifetime extension possible?
- What are the risks?

If **risks such as non-availability** of spare parts, production materials or failure probabilities of a product are not known, **unplanned costs** are incurred for their remedy as well as production downtimes. Risk management facilitates **proactive identification of threats, evaluation** of their **effects** and the **development** of **risk mitigation or prevention strategies** to **control** life cycle costs.

Free tool for your change and obsolescence management



In accordance with the VDMA Standard Sheet 24903, the COG smartPCN Standard and the JEDEC J-STD-046, J-STD-048 standards, you can use the PCNGenerator to generate **standardised change (PCN) and discontinuation notices (PCN) in a PDF and digital format** and send these out via email. The tool allows you to verify your digital data and process it if necessary.

www.pcngenerator.com



AMSYS Service Portfolio

Are you an **operator or manufacturer** of durable capital goods? If so, we can offer you **individual consultations and a portfolio of solution options** through:

- Workshops & trainings
- Process audits & coaching courses
- **—** Concept development & definitions
- Process implementations
- Operational processings & realisations
- Contract design & tenders
- (Master) Data cleaning
- Preparation of risk analyses
- Development of supply strategies

We are happy to assist you in the development, expansion, reorganisation and daily operation in your organisation in relation to the following topics:

- **●** Obsolescence & discontinuation management
- Configuration and change management
- Risk & life cycle management

Your benefits

You will already reduce and avoid high downtime costs within the first few months!

Our **customised solutions** are executed sustainably, enabling you to minimise and prevent production downtimes and service interruptions **throughout the entire life cycle** – even when the planned service life of plants, machinery or means of production is extended.

You will benefit from our **systemic expertise** in problem solving, as well as our **extensive experience** in the planning, design and execution of process changes, all the way to **'outsourcing' your responsibilities in our solution.**

Our **AMSYS experts** are specialised in making sure that the implemented solutions are applicable to you - we bear this guarantee in our name: **Applicable Management Systems!**

Contact us without obligation!

We advise you individually which service components are the right ones for you, your requirements and your success. Life Cycle Management

Finally

consultancy and software from a unique source.

Successful project guaranteed

Thanks to our **extensive experiences in a vast range of sectors**, we can analyse your processes extremely fast, and design, implement and digitise necessary improvements.

With us, you will receive the most competent consultation together with perfect software.







Our modular, web-based **Life Cycle Management (LCM) Client** is the optimal solution for the **automated**, **digitised and transparent** design of your **reactive**, **proactive or even strategic process**.

The LCM Client comprises **3 modules** which you can either operate as a **combined solution** or as a **separate application** – fully customised in accordance with your requirements.



Our module for **obsolescence management (OM) individually** maps your **process pursuant to the IEC 62402**.
Automate the management of your obsolescence cases. **Determine the effects** of discontinuations on your products and facilitate **full traceability** of the actions taken. Achieve enormous resource savings through **interfaces with external data bases** and internal systems with full integration of the **smartPCN & VDMA 24903** standards for your communication with suppliers and customers.





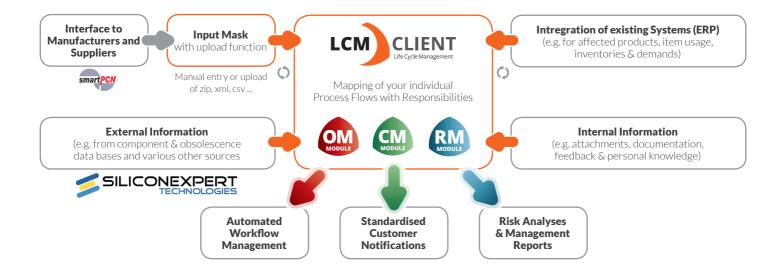
Our **change management (CM)** module facilitates complete and digital management of changes to your configurations. Easily identify **effects of changes** and integrate all persons involved in the solution. You will have an overview of the **configuration status** (master data) as well as the planned and implemented changes to it. The CM module with **integrated workflow management** brings light into the darkness of change tracking.





Our module for **risk management (RM)** enables you to present **overall risks based on international standards** through **live aggregation** of likelihoods of occurrence at component level which have an impact on your products. Solution options are linked automatically. Manage proactively against economic and technical risks with **risk mitigation or risk prevention strategies**. This module can also be connected to data bases and **customised for you**.





	MODULE	CIV	RIVI
LCM CLIENT Life Cycle Management			MODULE
Automated management process conforming to standards	● e.g. IEC 62402	e.g. ISO 10007	e.g. ISO 31000
Customised process flow and input fields acc. to your requirements*	•	•	•
Creation, management & monitoring of cases (case management)	•	•	
Integrated upload function to add file attachments	•	•	
Allocation of responsibilities (task & workflow management)	•	•	
Clear product breakdown structure to the smallest exchangeable item		•	•
Automatic risk assessment of all items of your products			•
(Alarm) Notification if a certain obsolescence status occurs	• reactive	_	• proactive
Mapping of hardware (not limited to electronics) & software	•	•	•
Import & export functions (e.g. for .xls, .xml, .csv, .txt, .zip)*	•	•	•
Automatic output of standardised notifications & reports	•	•	•
Various cockpits, dashboards & graphics	•	•	•
Interfaces to other information systems (data bases, ERP, etc.)*	•	•	•
External input mask with upload function (e.g. for suppliers & manufacturers)	e.g. VDMA 24903	e.g. VDMA 24903	
Manual addition or reprocessing of data sets	•	•	•
Sophisticated high-performance search functions (keywords & filters)	•	•	•
User management & administration (read & write privileges)	•	•	•
History function with (re-)traceability	•	•	•
Modern and scalable technology (web-based & mobile-enabled)	•	•	•
Hosting on the company's own or a dedicated AMSYS (SaaS) Server	•	•	•
System maintenance, regular updates, support & backups	included	included	included
* Depending on the level of customisation, an additional one-off fee may apply			

References (excerpt)

Rail, transportation and public transport:

Berliner Verkehrsbetriebe AöR, Deutsche Bahn AG, Knorr Bremse SfS Berlin, NS Nederlandse Spoorwegen, ÖBB-Technische Services GmbH, Rheinbahn AG, Schweizerische Bundesbahnen, Stadler Pankow GmbH, VAG Nürnberg, etc.

Aerospace, marine and military sectors:

Airbus Defence and Space, DLR Gesellschaft für Raumfahrtanwendungen mbH, ESG GmbH, Krauss-Maffei Wegmann GmbH & Co. KG, Rheinmetall Waffe Munition GmbH, Rockwell Collins Inc., RUAG AG, Schiebel Elektronische Geräte GmbH, etc.

Industrial engineering, automation and energy:

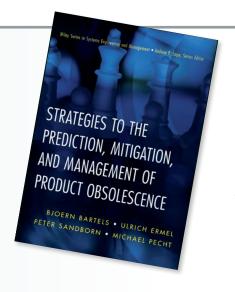
ABB AG, Belimo Holding AG, Komax AG, Océ Printing Systems GmbH & Co., Robert Bosch GmbH, Schurter AG, Sick AG, SMA Solar Technology AG, Siemens AG, T-Systems International GmbH, Vattenfall GmbH, ZF Friedrichshafen AG, etc.

Automotive and medical technology:

Audi AG, **CLAAS** Selbstfahrende Erntemaschinen GmbH, Conti Temic Microelectronic GmbH, Dr. Ing. h.c. F. **Porsche** AG, **Hirschmann** Car Communication, **Maquet** GmbH, **Melag** Medizintechnik oHG, **Truma** Gerätetechnik GmbH & Co. KG, **Volkswagen** AG, etc.

We go the extra mile for you.

AMSYS is the official business partner of the COG (Component Obsolescence Group Deutschland e.M.), 'Endorsed Trainer' of the IIOM (International Institute of Obsolescence Management), German Spokesman for Standards Revision for reliability topics of the IEC (International Electrotechnical Commission), head of working groups at VDI (Association of German Engineers), co-author of VDMA (Mechanical Engineering Industry Association) Standards, partner of the Institute of Process Excellence, co-autor of the specialist publication 'Strategies to the Prediction, Mitigation and Management of Product Obsolescence' and also developer & hosting provider of the largest exchange portal for transport companies in Europe (www.obsolescence-management.net).









Talk to us.



AMSYS GmbH

Roentgenstrasse 5 | 82152 Planegg - Munich | Germany

+49 (0) 89 9974080 00

info@am-sys.com

www.am-sys.com