P/\RT SOLUTIONS

ASSEMBLY IN MOTION GMBH
Process optimization in engineering and purchasing

USER REPORT

AIM

ASSEMBLY IN MOTION GMBH

BRANDS OF AIM

ELWEMA AUTOMOTIVE GMBH
ROHWEDDER MACRO ASSEMBLY GMBH
ROHWEDDER MICRO ASSEMBLY GMBH

PARTSOLUTIONS IS THE SYSTEM, THAT PROVIDES ALL PARTS INFORMATION FOR AIM'S ENGINEERING AND PURCHASING

Limit part proliferation with PARTsolutions and optimize company processes

The newly established subsidiary of the Günther Holding GmbH, AIM – Assembly in Motion GmbH with its business divisions ELWEMA Automotive, Rohwedder Macro Assembly GmbH and Rohwedder Micro Assembly GmbH, is a company specialized in the field of cleaning, testing and assembly technology. AIM products are especially used in the automotive-, medical equipment-, electronics-, consumer and general industry.

To improve management of supplier and self-designed parts, AIM – Assembly in Motion – has been using CADENAS' Strategic Parts Management PARTsolutions since 2009. CINTEG AG, a leading IT computer retailer for product development and management, initially introduced and paved the way for the software solution.

It is the aim of PARTsolutions to find CAD components faster and easier within the company, to reduce and manage them and thus save costs in the long term. Moreover the cooperation between engineering and purchasing is optimized, since CADENAS' software solution enables both departments to have access to all parts information. CADENAS' PURCHINEERING strategy is targeted on bringing both departments closer together. The term PURCHINEERING is a combination of the words "purchase" and "engineering".
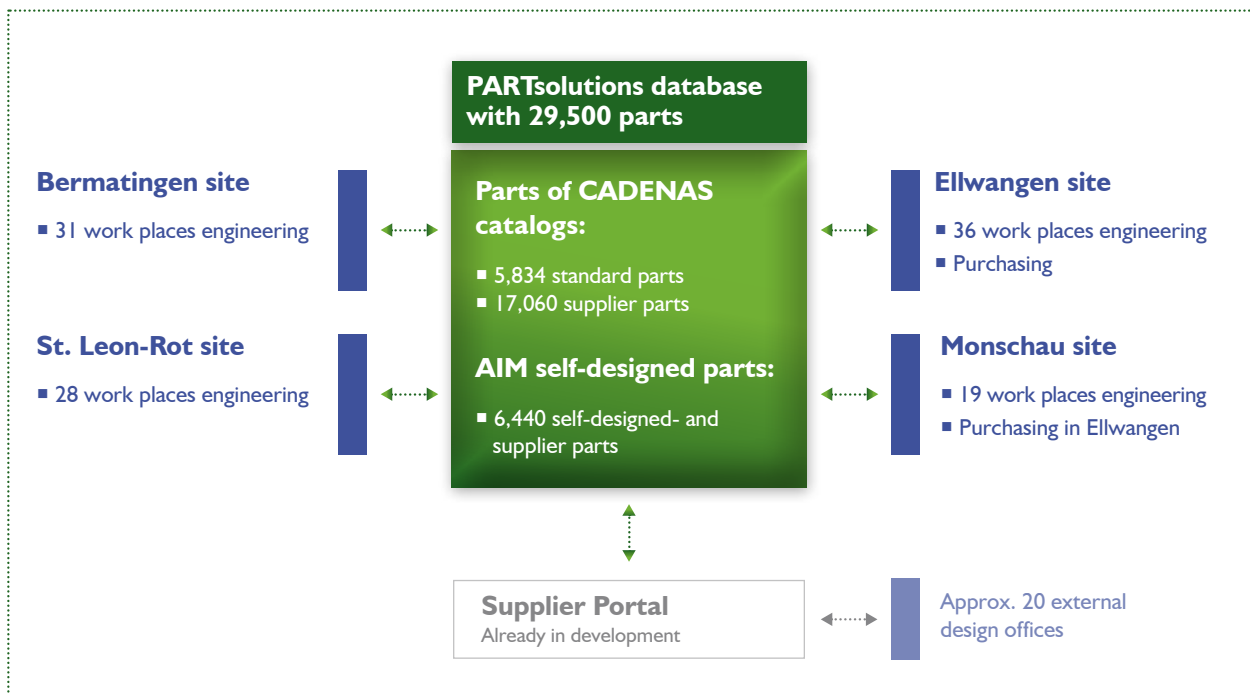

Production line of ELWEMA Automotive GmbH

"With CADENAS PARTsolutions we have a uniform structure in our parts information data for the first time. Due to a clear catalog structure parts can be found easily and part proliferation, that has prevailed so far, can now be limited in a reasonable way."

EBERHARD ILG, TECHNICAL MANAGER
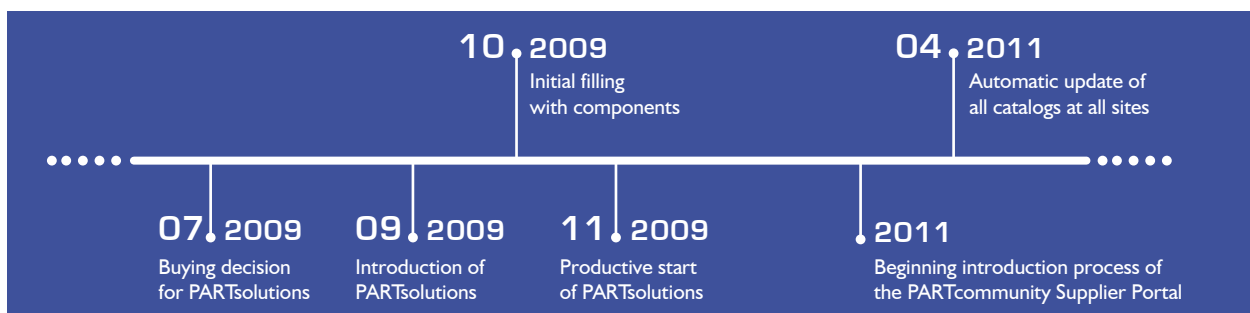*ELWEMA Automotive GmbH (AIM - Assembly in Motion GmbH)*

Currently the PARTsolution's database at AIM comprises about **29,500 parts** (as of 2012) and is used at **114 work places** in mechanical engineering and purchasing departments at the four company sites in Germany.

PARTsolutions database with 29,500 parts

Bermatingen site
- 31 work places engineering

St. Leon-Rot site
- 28 work places engineering

Parts of CADENAS catalogs:
- 5,834 standard parts
- 17,060 supplier parts

AIM self-designed parts:
- 6,440 self-designed- and supplier parts

Ellwangen site
- 36 work places engineering
- Purchasing

Monschau site
- 19 work places engineering
- Purchasing in Ellwangen

Supplier Portal
Already in development

Approx. 20 external design offices

Initial situation at Assembly in Motion

- There was no uniform system to manage parts in engineering and purchasing.
- Parts were managed on a server with a simple folder structure. Searching was always very tedious.
- If a part couldn't be found on the server, the CAD model was downloaded from the internet and sometimes only saved locally. This led to many duplicate copies.
- The master and CAD data have so far been managed in two different systems.
- There was no review of the current parts version. In consequence there was an increased error potential and high cost for corrections.

Milestones of introducing PARTsolutions

10 **2009**
Initial filling with components

04 **2011**
Automatic update of all catalogs at all sites

07 **2009**
Buying decision for PARTsolutions

09 **2009**
Introduction of PARTsolutions

11 **2009**
Productive start of PARTsolutions

2011
Beginning introduction process of the PARTcommunity Supplier Portal

PARTSOLUTIONS INTEGRATION INTO THE AIM SYSTEM ENVIRONMENT

Overcome fading Ciba Vision, Cooperation of Rohwedder Macro and Micro Assembly GmbH
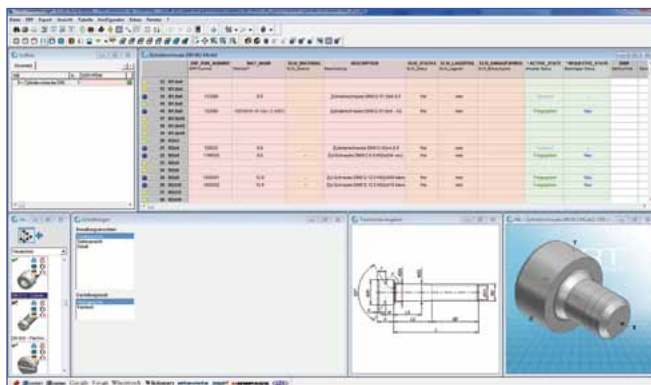
PARTsolutions shows all parts information at a glance

Due to interfaces to the previous system environment of AIM, PARTsolutions is the central system to manage all parts information for engineering and purchasing at the manufacturer for cleaning-, testing- and assembly technology.

Commercial information like prices, availability and warehouse location are imported overnight from the ERP system proALPHA® Production into PARTsolutions.

Thanks to the interface to the CAD systems Autodesk® Inventor® and AutoCAD® Mechanical, CAD models can be imported from PARTsolutions in a simple and fast way and inserted into the existing design in the respective CAD system.

IMPROVEMENTS AND OPTIMIZATION AT AIM BY USING PARTSOLUTIONS

The Strategic Parts Management system PARTsolutions is used across all sites and optimizes numerous work processes of engineering and purchasing at the Assembly in Motion GmbH.

For instance, it enables purchasing to consolidate the number of suppliers by labeling preferred parts. Furthermore the amount of duplicate copies is reduced and the reuse of parts is optimized. Engineering profits from an accelerated engineering process, since engineers can find existing parts in a simple and easy way and numerous predesigned CAD models are available.

"To AIM a very important benefit of PARTsolutions is the fact, that the engineer can concentrate on his actual designing work again."

MATTHIAS KIENLE, MECHANICAL ENGINEERING
ELWEMA Automotive GmbH (AIM - Assembly in Motion GmbH)

Automatic data synchronization of all four AIM sites

With its automatic synchronization, PARTsolutions enables AIM, access to part data which is always highly up-to-date, from all sites. This way it can be ensured, that assembly dependencies can no longer be lost. Moreover the simultaneous creation of CAD duplicate copies at different sites is excluded. Besides the automatic synchronization there is also an overnight synchronization update.
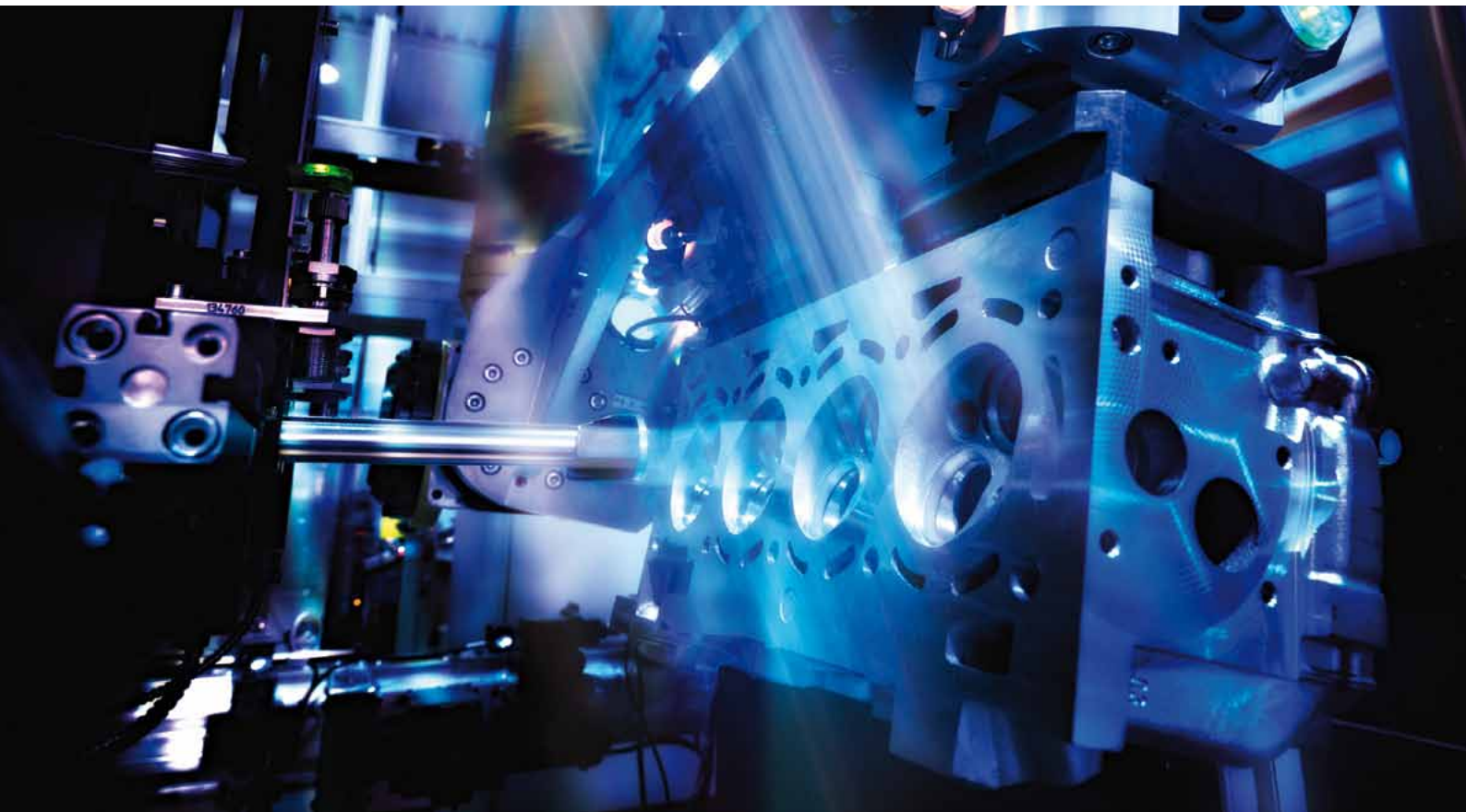
Avoid creating duplicate copies

Besides standard- and supplier parts, self-designed AIM parts, assemblies and company standards are managed in PARTsolutions. Due to the catalog structure of PARTsolutions all component information are clearly structured and can be found in an easy and fast way since there are numerous search possibilities.

Overview catalog structure in PARTsolutions

Among the search methods are the following: browse the catalogs, search by catchwords, search with the ERP number and search with a simple 2D sketch.

When PARTsolutions was introduced at AIM in 2009, the creation and release of new CAD components was uniformly structured at the same time. Today the manufacturer has a central unit that approves newly created components in PARTsolutions and releases them for engineering.

Combined with the central release point, PARTsolutions helps that no new duplicate copies are created at AIM and the reuse rate of components is increased.

Supplier consolidation

Due to an interface to the ERP system proAlpha® Production engineers can also see all important commercial information like prices, availability, warehouse location and stock position of the respective component. Moreover purchasing can label components engineering should use preferentially. This contributes to the fact that the amount of component suppliers can be limited in a reasonable way and thus larger orders can be bought on more favorable terms. The availability of components is shown by a so called traffic light.

Traffic lights in PARTsolutions

The traffic lights in PARTsolutions allow the following possibilities at AIM:

|		
🟢	=	Part is in stock
🔵	=	Part is available in the warehouse of another site
🟡	=	Part is a discontinued model and will be replaced by a new part
🔴	=	Part is no longer in stock and locked in the ERP system

"PARTsolutions shows our engineers a reasonable choice of available parts, that have been predefined by purchasing. This significantly supports the consolidation of our suppliers."

THORSTEN RAABE, DESIGN MANAGER, MECHANICAL DEVELOPMENT
Rohwedder Micro Assembly GmbH (AIM - Assembly in Motion GmbH)

Predesigned CAD models make the working process of engineers easier

Due to CADENAS PARTsolutions, predesigned CAD models of standard- and supplier parts from currently more than 100 renowned manufacturer catalogs, installed in the company, are at AIM's disposal. This way the engineers at AIM can integrate different variations of a component into their design in a fast and simple way and try out which CAD model is the most suitable one. The predesigned 3D CAD models are of high quality and thus the error potential is minimized, that would even occur from modeled components. Moreover they considerably simplify the working process of the engineer, since engineers can completely concentrate on the challenges of designing.
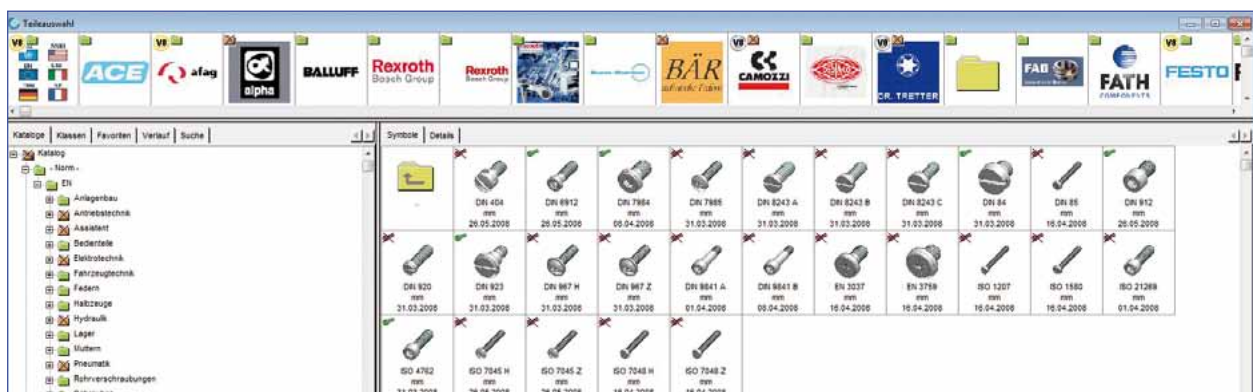
Standard- and supplier parts in PARTsolutions
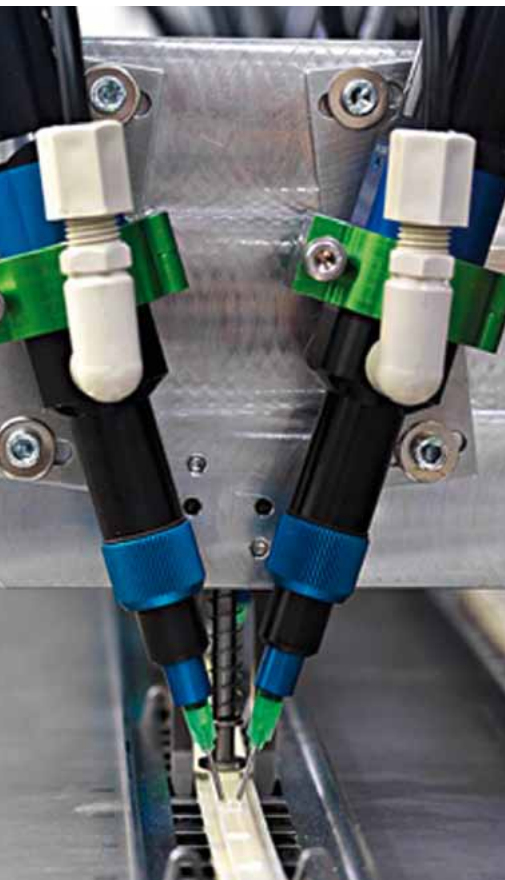
SAVINGS AT AIM,
DUE TO THE STRATEGIC PARTS MANAGEMENT

- The working process of engineers is simplified by predefined 3D CAD models
- Numerous standard parts in PARTsolutions make procurement easier
- Minimize the number of duplicate copies due to intuitive search possibilities
- Consolidate suppliers by displaying preferred parts which leads to larger ordering amounts
- The supplier portal allows external design offices a simplified reading of CAD data

Projects that have already been planned together

Soon the current version 9 of PARTsolutions will be introduced at the Assembly in Motion GmbH. The Strategic Parts Management PARTsolutions version 9 offers AIM numerous search functions, for instance the topology search by means of specific characteristics of the CAD component. Moreover a shaded view of the 2D derivation can be generated.

Furthermore it is planned for the near future, that 20 external design offices will be integrated more closely into the designing process of AIM by means of the supplier portal, based on the PARTcommunity technology. So far the design offices of AIM periodically get ZIP files that contain the current data. After their installation the components will be displayed in an explorer view.

AIM's supplier portal will access the database of PARTsolutions and will allow the design offices to have all released parts that have been created so far at disposal on their own platform. They can insert them into their design projects for AIM in a simple, fast and error-free way. The parts will be displayed, just like at AIM, in a clear catalog overview and allow quick finding of CAD models. The external access of AIM parts, that are identical and always up-to-date, will further improve parts consolidation by averting the creation of new duplicate copies and increasing the reuse rate.

Moreover it will be possible to easily add CAD models, that were externally designed, to the drawing administration of AIM.

AIM's supplier portal will offer a clear overview of catalogs to external design offices.

The companies

AIM – Assembly in Motion GmbH

AIM

ASSEMBLY IN MOTION
GMBH

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ROHWEDDER MICRO ASSEMBLY GMBH

Through the newly established subsidiary of the Günther Holding GmbH, AIM – Assembly in Motion GmbH, essential business divisions of the Rohwedder AG were acquired. ELWEMA has been part of the Günther Holding for many years and together with Rowedder it is excellent complement concerning products and customer retention.

Fields of activity in detail

ELWEMA Automotive GmbH develops and builds highly flexible equipment solutions for the production of engine components – such as cylinder heads and crankcases – and supplies a unique manufacturing technology with its RPM (cleaning, testing, assembly) suite.

Rohwedder Macro Assembly GmbH (based in Bermatingen) specializes in the development and manufacture of semi- and fully automatic assembly lines for gear units, steering systems and clutches, as well as of standardized manufacturing systems for medical equipment.

Rohwedder Micro Assembly GmbH (based in St. Leon-Rot) designs and manufactures high-precision assembly systems for micro-level technology devices such as injectors, printed circuit boards or mobile phone loudspeakers.

www.aim-holding.de

CADENAS GmbH

CADENAS is a leading software developer in the areas of Strategic Parts Management and reduction (PART-solutions) as well as Electronic Product CAD catalogs (eCATALOGsolutions).

CADENAS tailorable software solutions act as a link between component manufacturers, their products and the buyers.

With its 300 employees at fourteen international locations, the name CADENAS (Spanish for chains) has stood for success, creativity, consulting and process optimization since 1992.

www.cadenas.de

CADENAS UNITES

COMPONENT MANUFACTURERS & SUPPLIERS WITH THE INDUSTRY!

CADENAS SOLUTIONS
for **industrial buyers** of components

THE STRATEGIC PARTS MANAGEMENT

Sustainable cost reduction of standard, supplier and company parts for engineers and purchasers.

THE GEOMETRIC SIMILARITY SEARCH

Find available CAD geometries in a smart way and classify them semi-automatically.

CADENAS SOLUTIONS
for **manufacturers & suppliers** of components

THE ELECTRONIC PRODUCT CATALOG

The software solution to create and promote Electronic CAD Product Catalogs.

THE SUPPLIER PORTAL

The platform improves the communication to external suppliers.

THE VERTICAL MARKETPLACES

Numerous online marketplaces to multiply your Electronic CAD Product Catalog.

THE PURCHINEERING CONCEPT

Improves the cooperation between purchasing and engineering.