



ANTARES Life Cycle Solutions GmbH

Spare Parts Solutions for Machines, Vehicles and Engines



A young company with many years of international industry experience

Our Vision



We are the leading specialists for small series and spare parts in our target industries including but not limited to off-highway, marine, commercial vehicles, industrial engines, mechanical engineering and their suppliers.

Our Mission



We support our customers in increasing their profits through improved spare parts availability and the optimization of their product range.

We are solution providers for innovative manufacturing processes for small series and spare parts

Sustainability

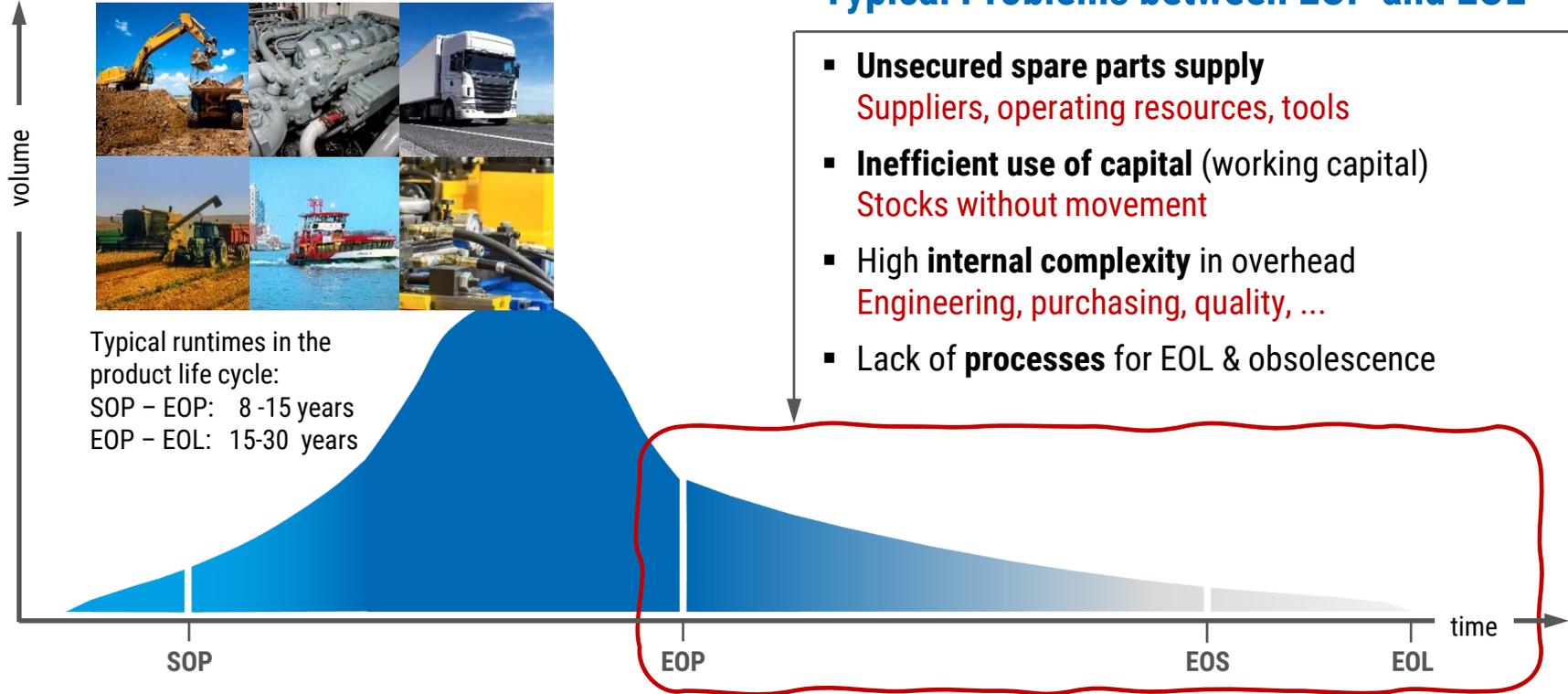


Obsolescence management is critical for reducing waste and promoting sustainability. With our solutions for reserve engineering and supply of spare parts which have reached already their EoL (End of Life), we ensure that even older capital goods have a longer lifetime.

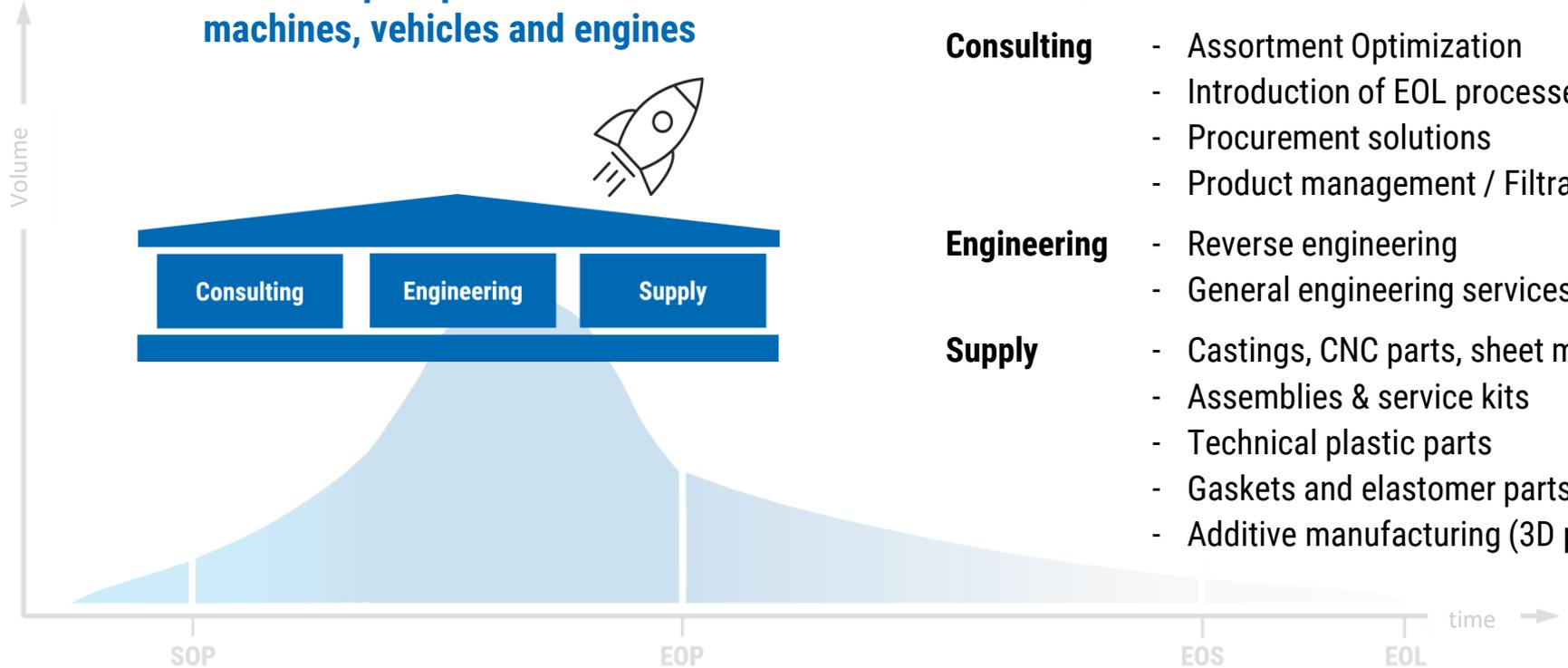
Quality Management



The high quality requirements of our customers are always our benchmark. We are certified according to ISO 9001:2015. We guarantee our customers and partners transparency about our organization as well as the objective evaluation of our performance.



ANTARES: spare parts solutions for machines, vehicles and engines



Our range of services

Consulting

- Assortment Optimization
- Introduction of EOL processes
- Procurement solutions
- Product management / Filtration

Engineering

- Reverse engineering
- General engineering services

Supply

- Castings, CNC parts, sheet metal
- Assemblies & service kits
- Technical plastic parts
- Gaskets and elastomer parts
- Additive manufacturing (3D printing)

Industrial Engines



Agricultural Machines



Construction Machines



Marine Propulsion



Commercial Vehicles



Mechanical Engineering



Our target industries: durable capital goods



Filtration



Engine Parts

- Spare Parts
- Assemblies and components at the end of the life cycle
- Small and very small series at the start and ramp-up of production



PowerTrain



Hydraulics

AGCO (Fendt, Massey Ferguson)

Boll & Kirch

Caterpillar MWM

John Deere

MANN+HUMMEL

Claas

Deutz

Hengst

Liebherr

Rolls Royce *mtu*

Wärtsilä Quantiparts

MAN Truck & Bus

Drache Umwelttechnik

CNH



Reverse engineering and supply from a single source

*For old products, there are usually no up-to-date design documents (2D, 3D) available; we support our customers through our in-house **reverse engineering** to be up-to-date again.*



Vendor consolidation and flexibility of technologies

*We have established an extensive partner network, which enables us to cover all relevant manufacturing processes as your **one-stop-shop***

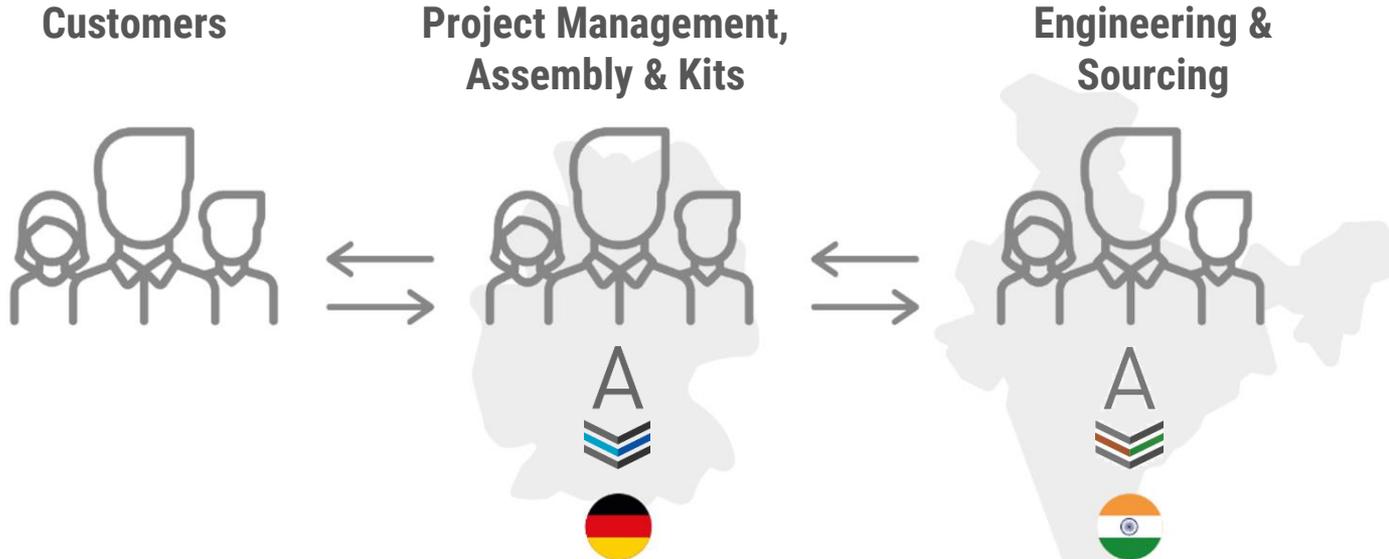
We do assembly and service kits, also we can take care of your one-time online shopping.



Clear focus on small volumes

Our unique selling proposition is management of small volumes. Keep this challenge in our expert hands.

Our Operating Model: Global Business with Best Cost Countries



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Infantry Road, Bangalore – 560 001
+91 (080) 23154182
info@antaresengineering.com

- Contact person, technical lead and project management in Germany
- Operational implementation and sourcing in India and other “Best Cost Countries”
- Supply to international customers throughout Europe and beyond

Our management team - in Germany and India



Jens Hähn

Sales & Marketing, Commercial Functions, Consulting

Since 2019 **Managing Partner & Co-CEO**
ANTARES Life Cycle Solutions GmbH

2013 – 2018 VP Global Sales & Marketing
MANN+HUMMEL DE

2010 – 2013 VP Product Management & Marketing
MANN+HUMMEL DE

2005 – 2010 Director Product Management
MANN+HUMMEL DE

2003 – 2005 Produktmanager
MANN+HUMMEL DE

1997 – 2003 Design Engineer
Ingersoll Rand, MANN+HUMMEL DE



Kumar Ramaiah

Operations and Delivery India

Since 2020 **Managing Partner & CEO**
ANTARES Engineering Solutions India

2016 – 2018 Director Engineering & Product
Management APAC
MANN+HUMMEL India

2012 – 2016 Engineering Manager
MANN+HUMMEL India

2005 – 2012 Engineering Manager
Arvin Meritor, India

2003 – 2005 Senior Design Engineer
Arvin Meritor, USA

2000 – 2003 Design Engineer
Arvin Meritor, India

1993 – 2000 R&D Engineer



Ralf Bauder

Design & Development, Operations, QM

Since 2019 **Managing Partner & Co-CEO**
ANTARES Life Cycle Solutions GmbH

2012 – 2018 Engineering Manager
MANN+HUMMEL DE

2009 – 2012 Engineering Manager China
MANN+HUMMEL China

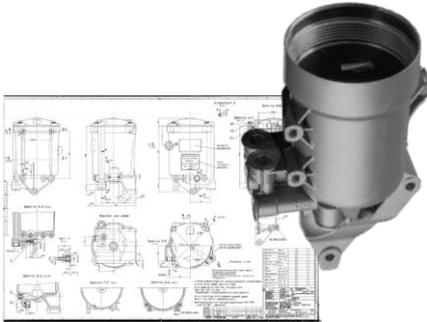
2002 – 2009 Product Developer and Project Manager
MANN+HUMMEL DE

1996 – 2002 Design Engineer



Initial Situation

- Sample parts
- Sketches / 2D drawings
- Miscellaneous product documents (e.g. Measurement reports, approvals, testing reports, etc.)



Reverse Engineering

- Component measurement
- 3D modelling
- Integration of product-specific know-how (e.g. filtration technology)
- Creating 2D drawings
- Creating Bill Of Materials
- Simulation / FEM



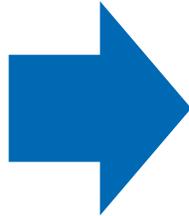
Result

- Up-to-date product documentation
- Production documents for serial parts from AM processes
- Fast delivery with serial products



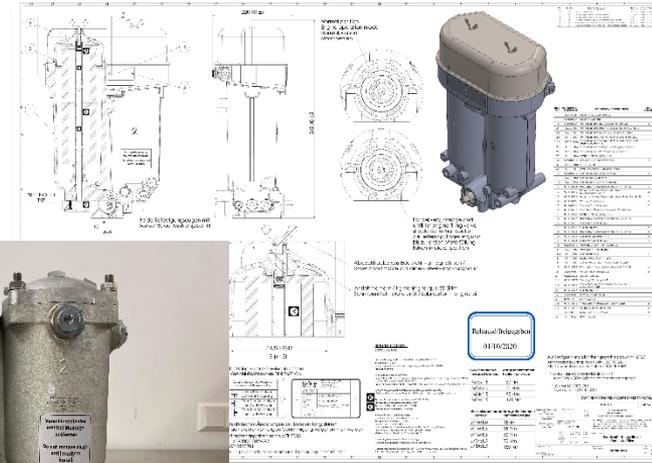
Customer Requirement

- Original supplier has canceled supply because of low volumes for 3 filter families
- Customer needs spare parts for new business, field service and re-man
- Only samples and assembly drawings available



Our Solution

- Reverse Engineering of all components, sub-assemblies and assemblies (300+ components)
- Identification of sources for some critical parts
- Drawings, BOM, Supplier selection ready

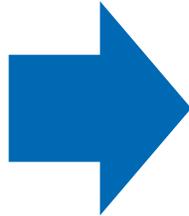


Customer Requirement

- Original supplier has canceled supply because of low volumes
- Customer needs spare parts for field service
- Only sample available, no drawings

Our Solution

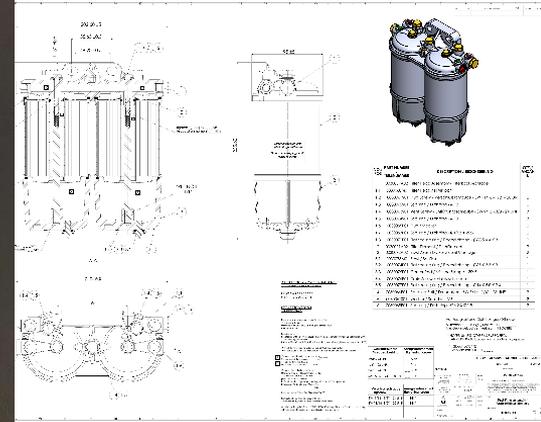
- Reverse Engineering of all components
- Identification of sources for all parts
- Drawing, BOM, Samples
- Procurement of components and supply of products in small quantities



Dec. 15th 2020: arrival of samples



Jan. 22nd 2021: drawings, samples, quotation ready



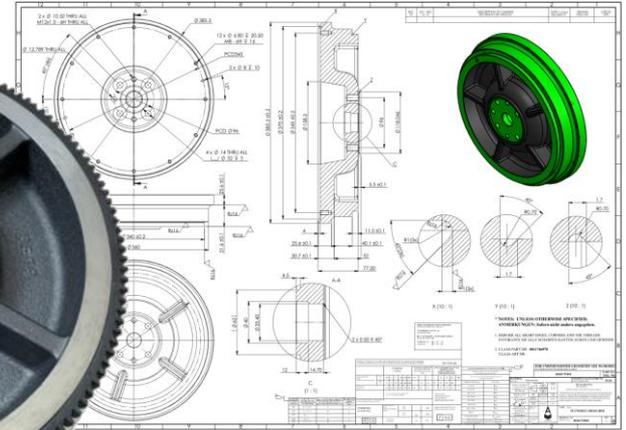
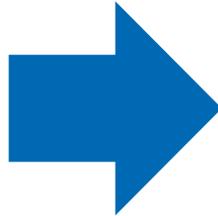
Customer Requirement

- Original supplier has canceled supply because of low volumes
- Customer needs spare parts for field service
- No sample available, no drawings

Our Solution

- Sample procurement through web shop in the USA
- Reverse Engineering of all components
- Sourcing of casted parts, machining and balancing
- Delivery to customer

PART NUMBER

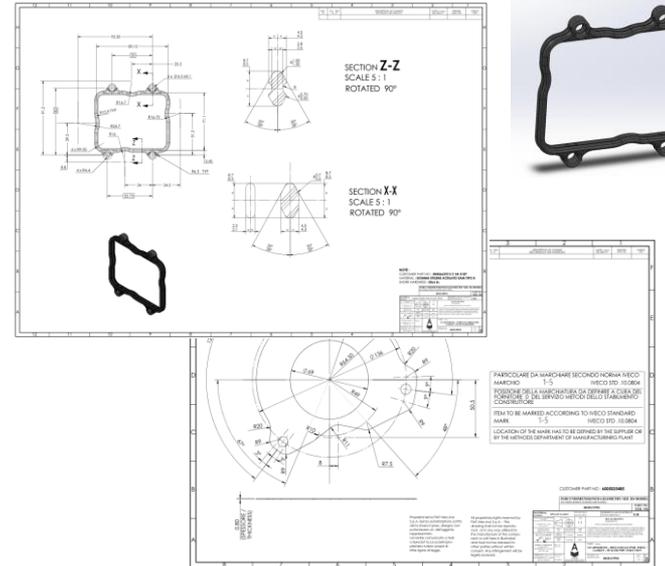
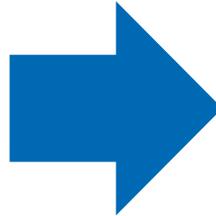
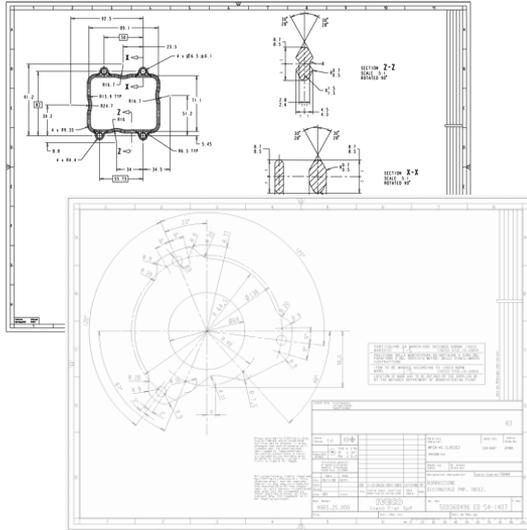


Customer Requirement

- Original supplier has canceled supply because of low volumes
- Customer needs spare parts for field service
- No samples available, only old 2D drawings

Our Solution

- Reverse Engineering of all components based on drawings
- Sourcing of gaskets (incl. tooling)
- Delivery to customer

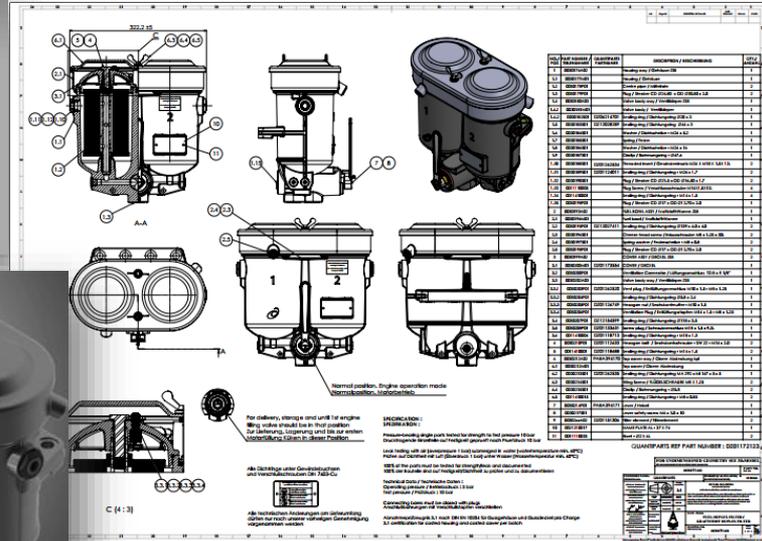
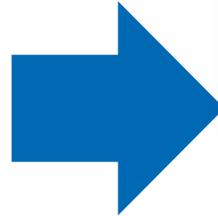


Customer Requirement

- Original supplier has canceled supply because of low volumes
- Customer needs spare parts for field service
- Only sample available, no drawings

Our Solution

- Reverse Engineering of all components
- Identification of sources for all parts
- Drawing, BOM, Samples, Quotation ready
- Production order confirmed; lead time: 4 weeks

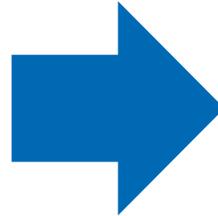
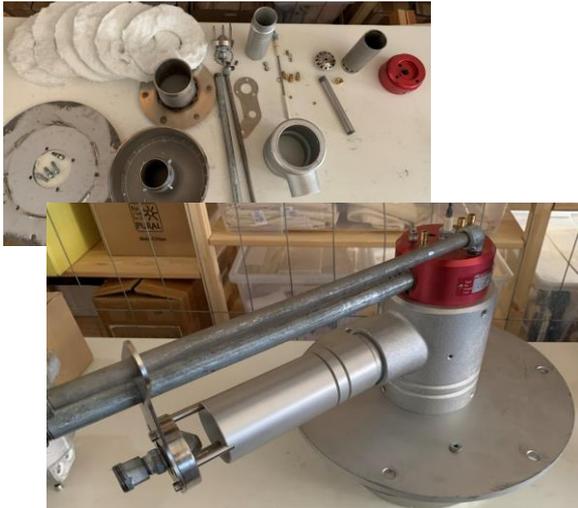


Customer Requirement

- Original supplier has canceled supply
- Customer needs spare parts for new business, field service
- Only samples and assembly drawings available

Our Solution

- Reverse Engineering of all components, sub-assemblies and assemblies (60+ components)
- Identification of sources for some critical parts
- Drawings, BOM, Supplier selection ready



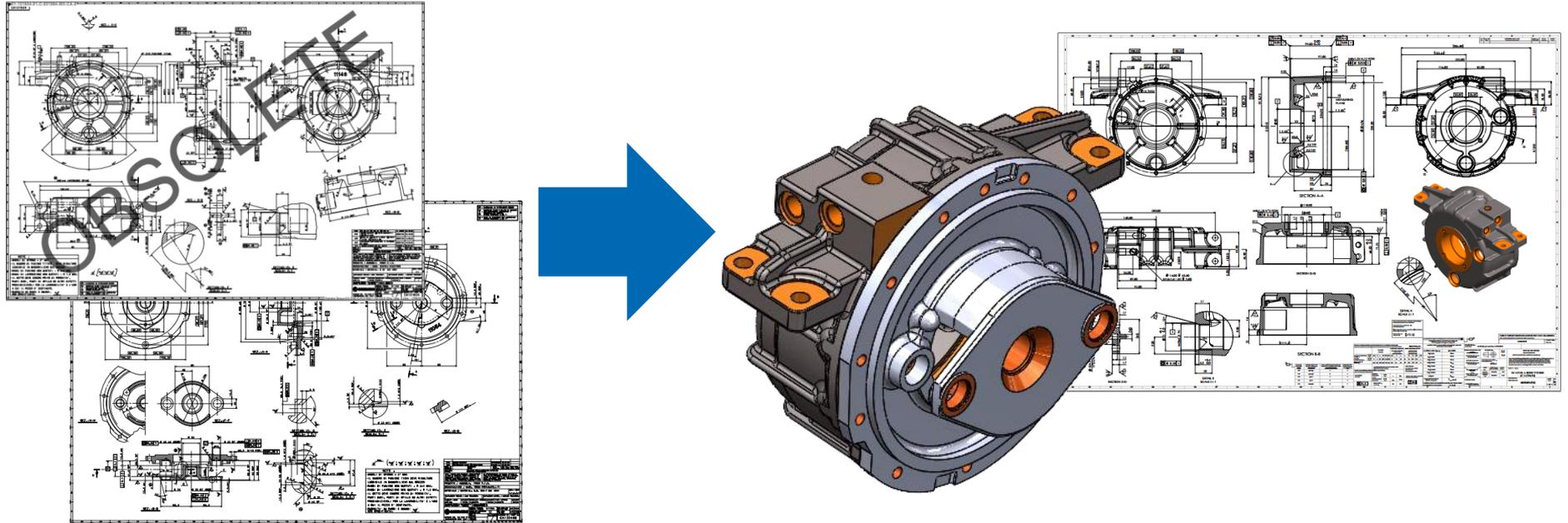
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Customer Requirement

- Original supplier has canceled supply because of low volumes
- Customer needs spare parts for field service
- Only drawing available

Our Solution

- Reverse Engineering of all components using old drawing
- Identification of sources for some critical parts
- Drawings, BOM, Supplier selection ready.

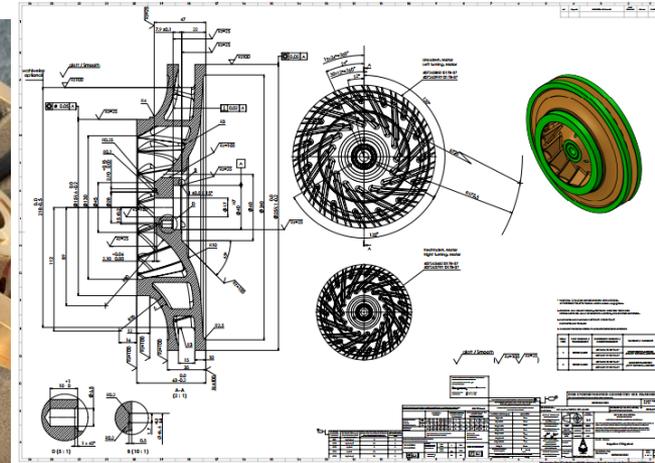
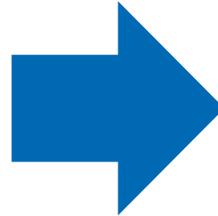
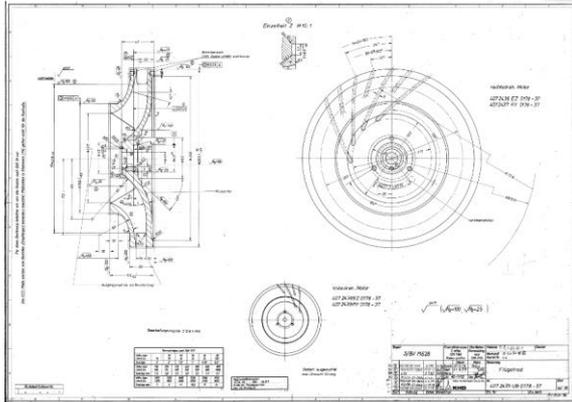


Customer Requirement

- Original supplier has canceled supply because of low volumes
- Customer needs spare parts for field service
- Only samples and assembly drawings available

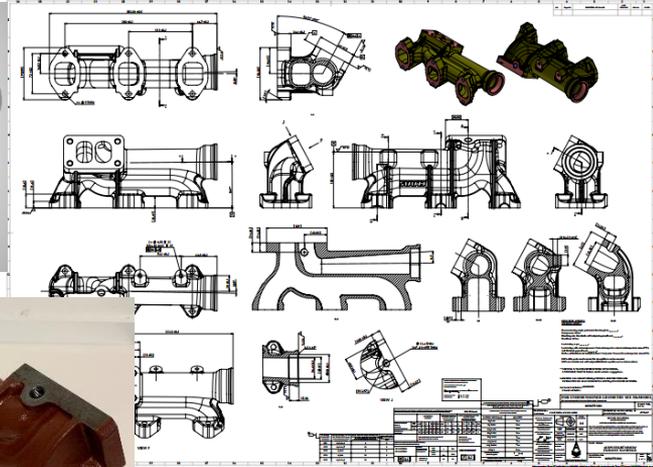
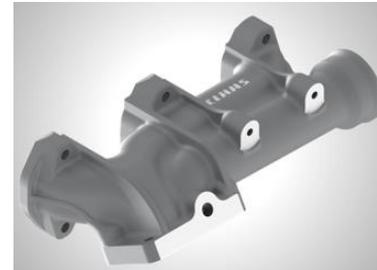
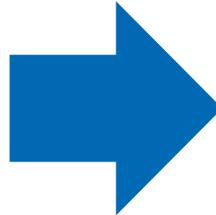
Our Solution

- Sample procurement through web shop
- Reverse Engineering of all components
- Delivery to customer (lead time 14 weeks (10 weeks for casted parts))



Customer Requirement

- Original supplier has canceled supply because of low volumes
- Customer needs spare parts for field service
- Only samples available with no drawings.



Our Solution

- Sample procurement through web shop
- Reverse Engineering component.
- Drawings, 3D modelling & Identification of Supplier , selection ready.
- Delivery to customer Still on ongoing



Engineering Design

- Engineering / Reverse Engineering
- CAD Modeling and Detailing
- Conceptual Design
- Tolerance Studies
- Benchmarking
- Intellectual Property / Patent Research



Engineering Analysis

- Finite Element Analysis (FEA)
 - Thermal
 - Static
 - Structural
 - NVH
 - Fatigue Life Estimation
- Optimization
 - Topology
 - Shape
 - Size
- Computational Fluid Dynamics (CFD)
- Performance Prediction and Analysis



Testing and Validation

- Material Testing
- Component Testing
- Functional Testing
- Climatic Chambers
- Acoustic Room
- Field Testing
- Vibration Testing
- Tomography

Products / Commodities:

- Castings, sheet metal parts, CNC parts
- Assemblies and kits
- Starter motors, alternators
- Diesel injection technology
- Techn. plastic parts
- Seals and other elastomer parts
- Forged parts ... and much more



Applications:

- Filtration
- Hydraulics
- Transmission/Powertrain
- engine components
- Spare parts for machines and equipment
- ... And much more



Product Management

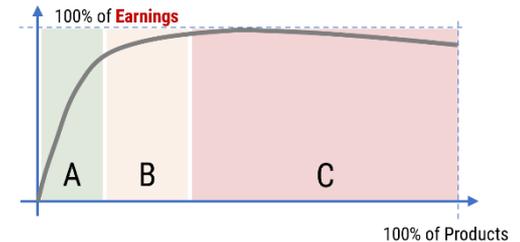
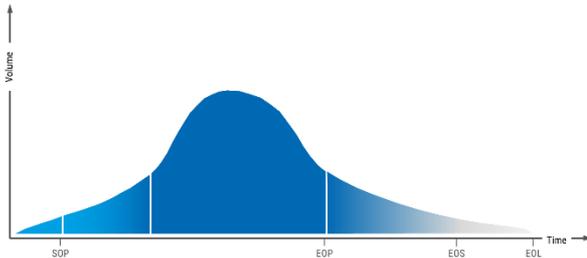
- Technology and product road-mapping
- New product release processes
- Product care
- End-of-Life management

Business Development

- Strategic positioning
- Segment diversification
- Regional diversification
- Sales channel development
- Product range definition
- IP strategies and tactics

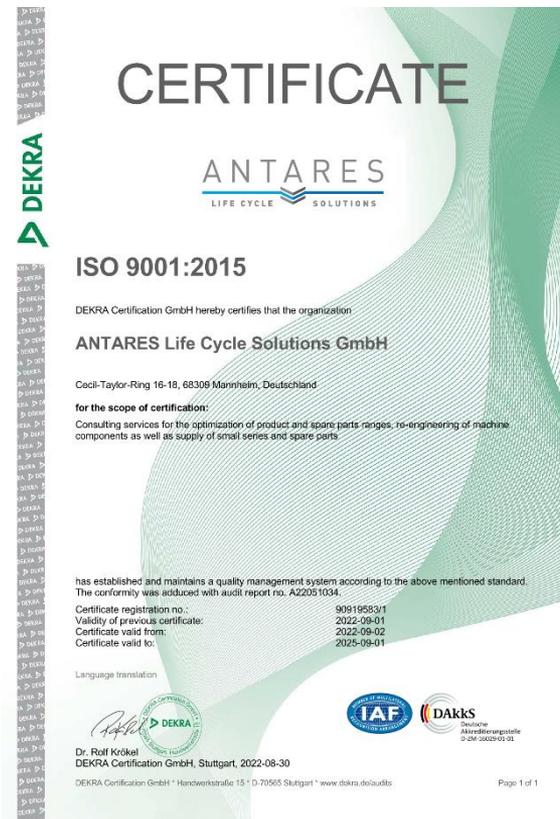
Product Range Optimization

- Analysis of product ranges
- Development and execution of improvement measures
- Design and implementation of End-of-Life processes



We are certified according to DIN ISO 9001:2015

Initial Certification:	September 2019	✓
1 st Surveillance Audit	August 2020	✓
2 nd Surveillance Audit	August 2021	✓
Recertification Audit	August 2022	✓



Your Advantages

- Improved **delivery performance** to the end customer
- A streamlined and **more profitable** product range
- **Less complexity** in operations and overhead functions



Our Services

Consulting

Engineering

Supply

Contact Details

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