

A nighttime photograph of an industrial facility, likely a steel mill or power plant. Several tall, dark smokestacks with red safety lights are visible against a deep blue twilight sky. The facility itself is illuminated with various lights, showing complex structures and piping. In the foreground, there are some trees and a fence, partially obscuring the view of the plant.

Industrie Service Rhein-Ruhr GmbH

ISRR
Industrie
Service
Rhein-Ruhr

Maintenance service • New part manufacturing • Engineering • Strategic procurement service

ISRR Industrie Service Rhein-Ruhr GmbH
is a long-term maintenance partner for
companies in Germany and abroad in the
following industries:

Fields of work:

Maintenance service

- ▶ Industrial maintenance for machinery and plant engineering
- ▶ Roller / roll service
- ▶ Gearbox service
- ▶ Maintenance of crane wheels and rail wheels
- ▶ Repair welding

New part manufacturing

- ▶ Metal roller cores
- ▶ Welded assemblies
- ▶ Lifting equipment

Engineering

- ▶ Project engineering in mechanical and plant engineering

Purchasing and strategic procurement service

- ▶ Strategic procurement of products in Germany and abroad

Certificates:

Quality management ISO 9001 : 2015
Certificate of TÜV Saarland

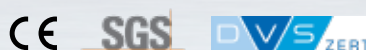
WPK-Certificate acc. to EN 1090-1,-2,-3 description scope of supply and CE - marking
Certificate of DVS ZERT

Welding specialist company DIN EN ISO 3834-2 – Mechanical engineering
Certificate of DVS ZERT

Welding specialist company DIN EN 15085-2 CL1 – Rail vehicles including maintenance DIN 27601-6
Certificate of DVS ZERT

Welding specialist company DIN 1090-1,-2 EXC 3 – Steel structures
Certificate of DVS SLV Duisburg

Welding specialist company DIN 1090-3 EXC 3 – Aluminium structures
Certificate of DVS SLV Duisburg



Certificates can be viewed at: www.isrr-gmbh.de/certificates

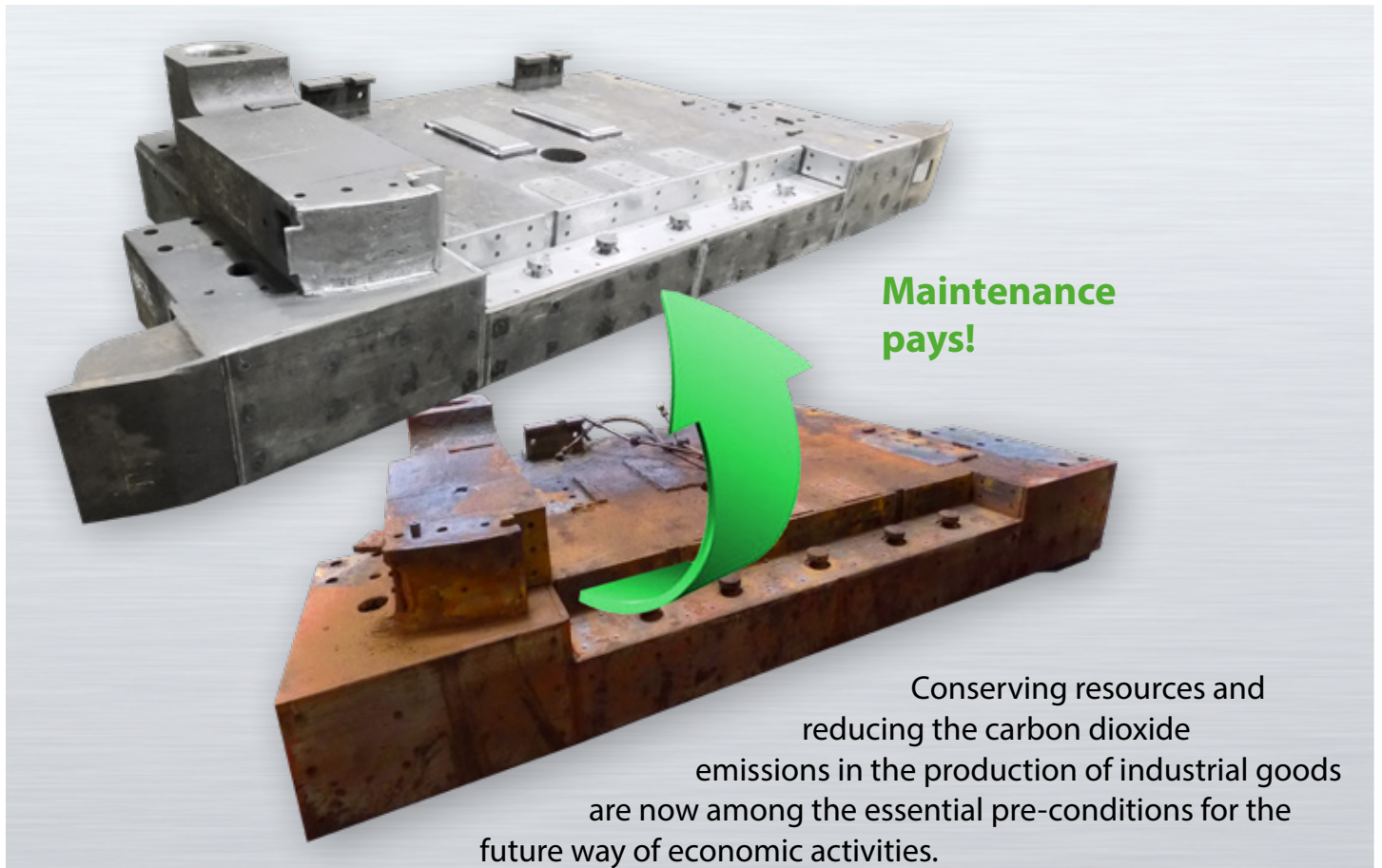
Industrie Service Rhein-Ruhr GmbH

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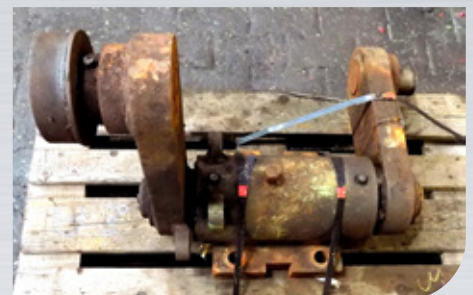
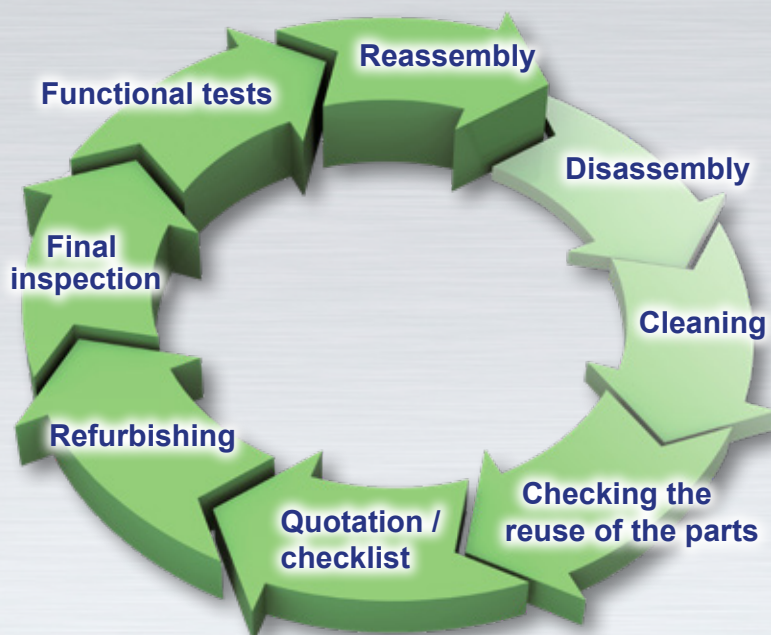
info@isrr-gmbh.de
www.isrr-gmbh.de

Maintenance philosophy



Industrial overhauling of complete systems and machines of all kinds offers here an economic alternative to new procurement of these components!

The basic idea of overhauling is to make new parts from worn parts in order to extend the technical service life of the worn out parts and to avoid costly investments whenever possible.



Industrial maintenance for machinery and plant engineering

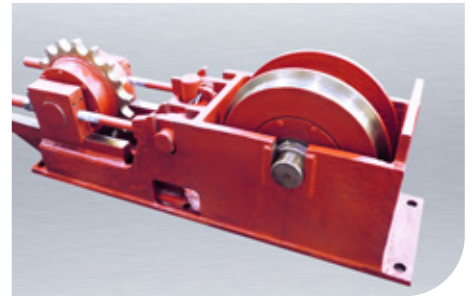
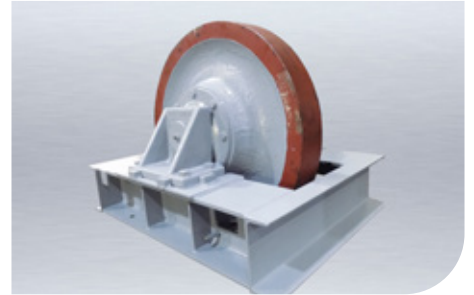
We have many years of experience in industrial overhauling for machinery and plant engineering in the following industries

- Steel producing industry
- Steel processing industry
- Chemical industry
- Petrochemical industry
- Cement industry
- Municipal utilities
- Aluminium Industry
- Port industries

The economical alternative to new investment!

It is of economic benefit to preserve the value of the parts used and to turn them back into their original condition by means of a professional maintenance.

The economic efficiency of industrial overhauling is always given when its maintenance is profitable (with evidence of economic efficiency).



Overhauling of crane wheels and rail wheels Repair welding

Even after longer service times, crane wheels and rail wheels can be repaired to a like new condition in 90 to 95% of all cases. There will then be no investment costs for new replacement wheels.

As a certified welding company, we offer the complete overhaul of crane wheels and rail wheels of various types, considering the relevant standards and regulations.

Wheel diameter: up to 1,250 mm
Types: with / without tyre

Non-destructive test methods (NDT)
Build-up welding / Repair welding

- Visual testing (VT)
- Magnetic particle testing (MT)
- Penetrant testing (PT)

Scope of services:

- Information assessment
- Rough turning of wheel surfaces
- Surface welding of wheel surfaces to restore the geometry
- Determining and documenting the absence of cracks using NDT
- Turning to size
- Complete assembly



Costs: approx. 25 – 30 % of investment new parts

Period: 5-10 working days, can also be planned for short downtimes

Gearbox service

Applications:

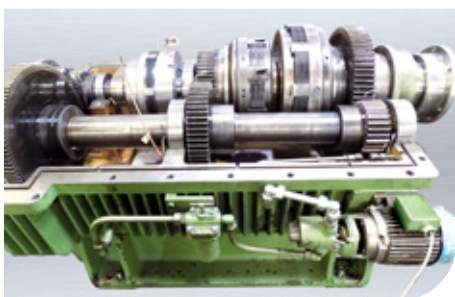
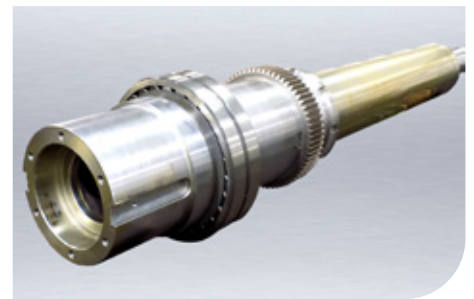
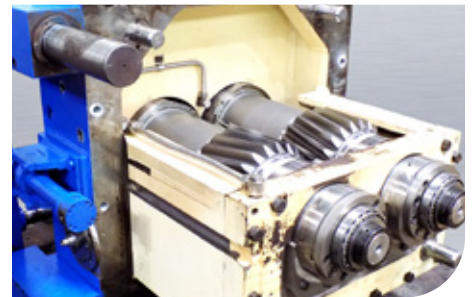
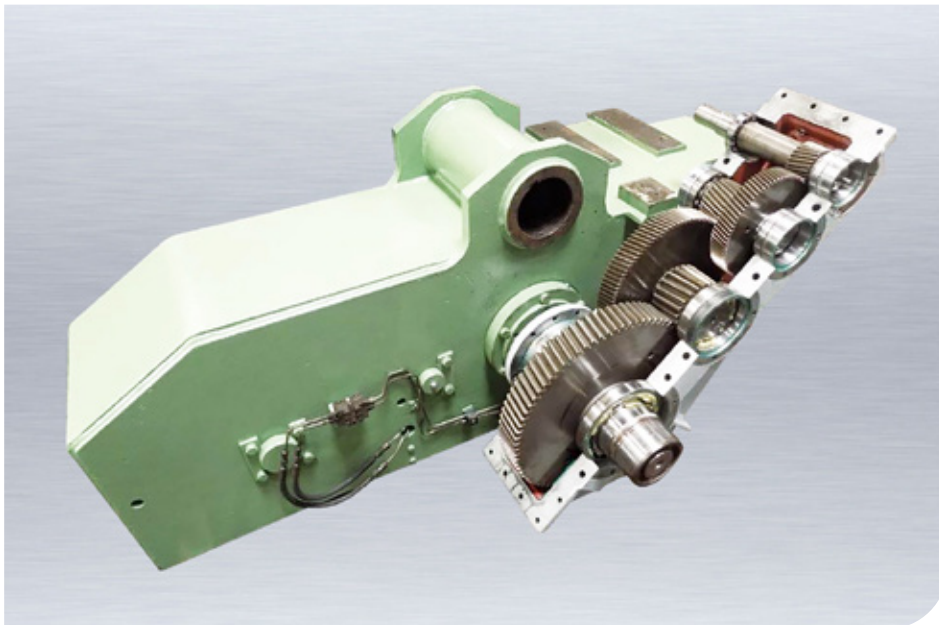
- Construction machinery
- Commercial vehicles
- Vehicle drives
- Industrial drives
- Rolling modules
- Conveyor technology

We have decades of experience in the overhauling, repair, conversion and upgrade of gearboxes of well-known manufacturers.

Ask us about the repair and overhauling of damaged gearboxes before investing in new gearboxes.

Scope of services:

- Installation and removal
- Diagnosis, analysis
- Gearbox overhauling
- Repair and conversion of gearboxes
- Repairs (replacement of bearings and worn parts)
- Adjustment of speed and power
- Commissioning / test run – on site, if required



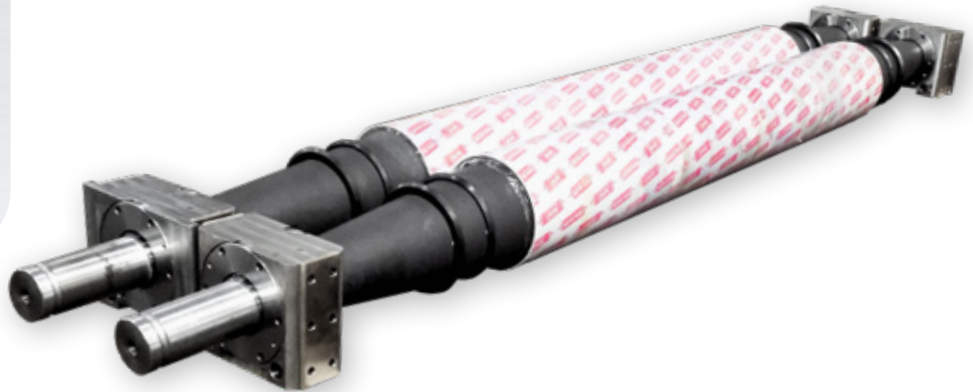
Roller / roll service

Periodic maintenance for:

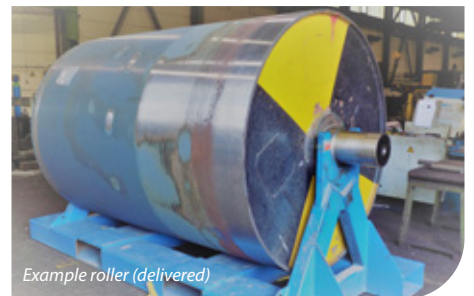
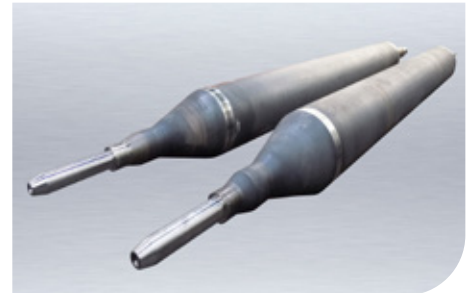
- Squeeze rollers for belt systems
- Squeeze rollers for electrolytic coating systems
- Deflection pulleys
- Segment rolls
- S rollers
- Mill rolls
- Hearth and oven rollers
- Gearbox rollers
- Pressure rollers
- Drive rollers
- Tensioning drums
- Straightening rollers
- Straightening cassettes
- Guide rollers
- Rope drums

Scope of services:

- Cleaning
- Complete disassembly
- Condition / damage analysis
- Checking reuse of the parts
- Journal repairs
- Journal replacement
- Checking rollers / rolls for eccentricity
- Hot / cold straightening for eliminating radial runout
- Coatings according to customer requirements
- Grinding of all types of coatings
- Bearing inspection, bearing service
- Bearing replacement
- Static and dynamic balancing
- Assembly / final inspection
- Dechroming
- Chrome plating



The scope of services is determined with customer-specific checklists / cost estimates (cost transparency)



Example roller (delivered)



Metal roller cores
Steel / Stainless steel / Aluminium

Roller/roll types (selection)

- Squeeze rollers for belt systems
- Squeeze rollers for electrolytic coating systems
- Deflection pulleys
- Segment rolls
- S rollers
- Mill rolls
- Hearth and oven rollers
- Gearbox rollers
- Pressure rollers
- Drive rollers
- Tensioning drums
- Rope drums up to 25 t weight

Maximum dimensions

Diameter 2000 mm
Total length 8000 mm
Weight 12 t

Wuchten

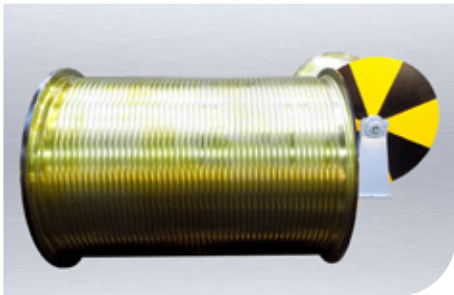
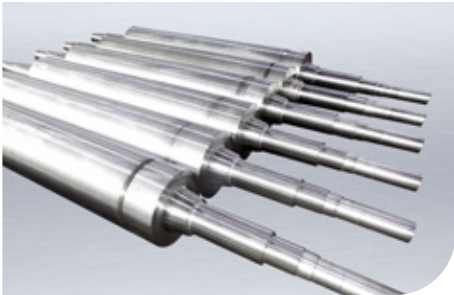
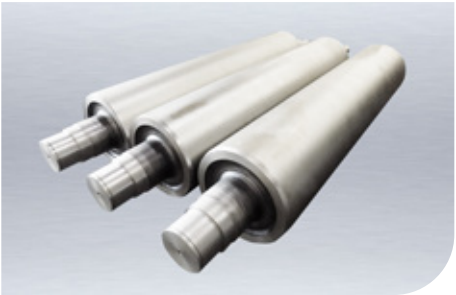
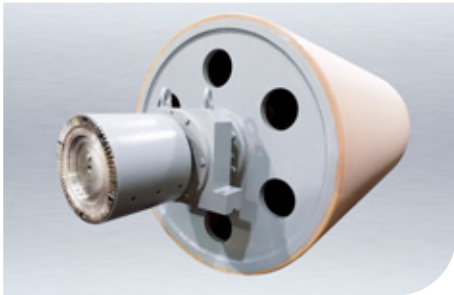
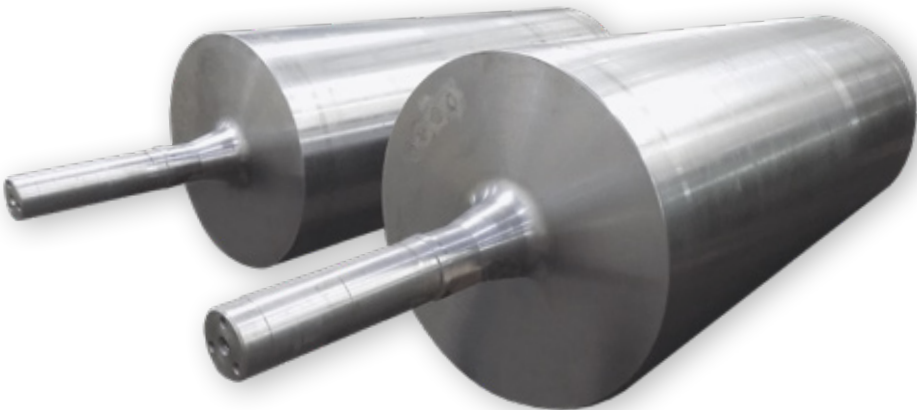
Static balancing
Dynamic balancing according to DIN ISO 1940

Materialien

Steel
Stainless steel
Aluminium

Coatings

Rubber coatings
PU coatings
Hard chromium plating
Ceramic coatings
Build-up welding
Sintering
Armouring
Chrome plating



Welded assemblies / Repair welding

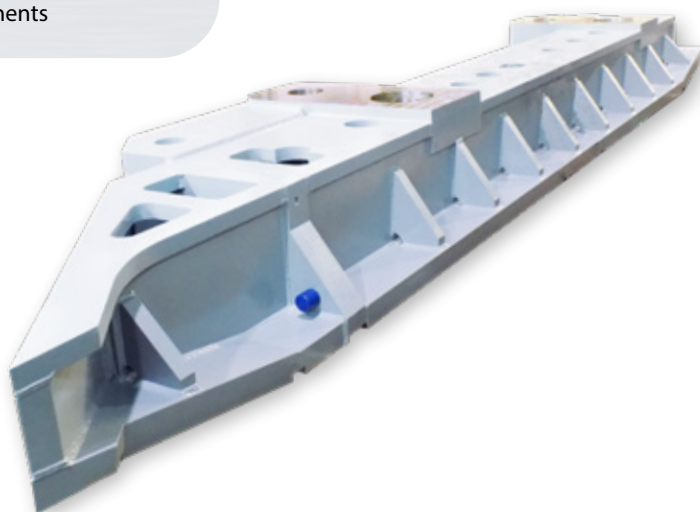
Steel / Stainless steel / Aluminium / Titan

Examples

- Steel components
- Aluminium components
- Stainless steel components
- Machine frames
- Platforms
- Scrap buckets• Foundation frames
- Heavy-duty lifting devices
- Frame constructions
- Traverses
- Working platforms
- Apparatus components

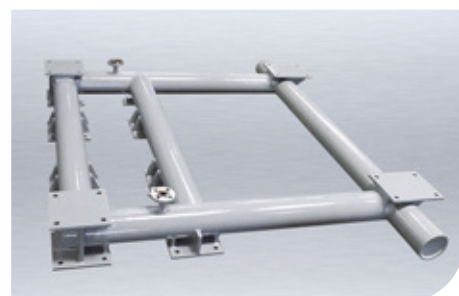
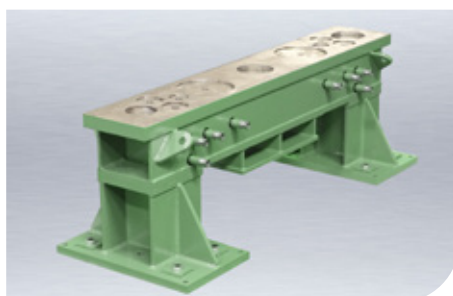
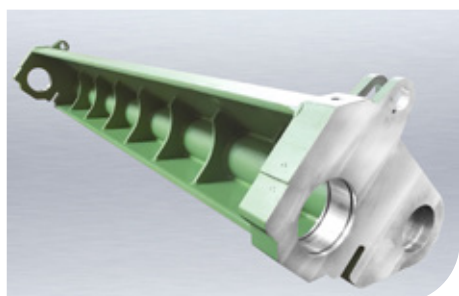
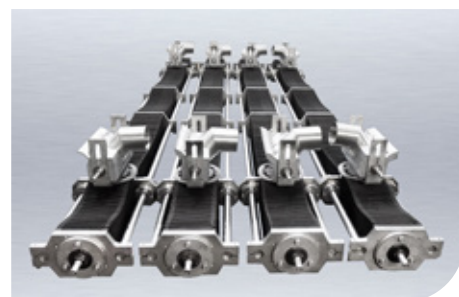
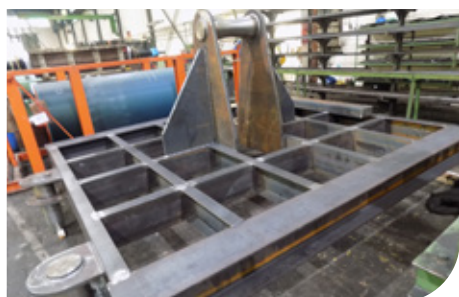
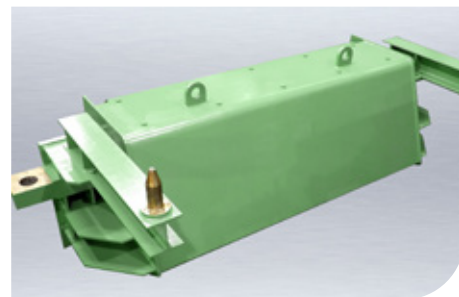
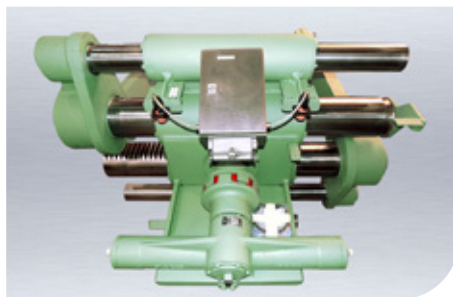
Welded assemblies up to 15 t weight including complete mechanical processing with boring and milling machine

As a certified welding specialist according to DIN ISO EN 3834-2 and EN 1090-2/-3 EXC 3 we have the necessary facilities and qualifications for the production of welded assemblies in steel, stainless steel and aluminium.



ISRR execution of welded assemblies:

- WPK certification EN 1090-1/-2/-3 EXC 3 with $\text{C} \in$ marking
- Welding certificate DIN EN 15085-2 / rail vehicles level CL1 including repair according to DIN 27201-6
- Welding certificate EN 1090-1/-2/-3 EXC 3 steel/ or aluminum structures
- Internationally recognized certificate DIN ISO EN 3834-2 of DVS ZERT
- Special welding engineer (International Institute of Welding), DVS certificate
- Quality management system according to ISO 9001: 2015.
- Certified welders according to new standard DIN EN 9606-1, DIN EN 9606-2
- Quality of the welds according to DIN EN ISO 5817 Class B.
- Inspection of welds by certified in-house inspectors.
- Visual Inspection Certificate (VT Testing Level 2)
- Penetrant testing certificate (PT Penetrant Testing Level 2)



Lifting equipment

Examples

- Casting ladle hangers 250 t
- Casting crossbeams 64 t
- Lamination hook 55 t
- Crane hook 35 t
- C hook / coil hook 35 t
- Dump hook 28 t
- Load beams 15 t
- Transport frames rollers / rolls 11 t
- Assembly and disassembly crossbeams 5 t
- Carrying baskets 3 t
- Crane beams 2 t
- Transport containers on request
- Heavy duty lifting equipment on request
- Special load suspension devices on request
- Forklift load suspensions devices on request
- Rope drums for hoists up to 250 t

Welded lifting equipment according to DIN 13155 corresponding to customer requirements

As a certified welding company we hold the following certificates:

- QM system according to ISO 9001: 2015
- DIN EN 15085-2 / rail vehicles level CL1 including repair according to DIN 27201-6
- DIN EN 1090-1/-2/-3 EXC 3 / steel or aluminium structures
- DIN EN ISO 3834-2 / mechanical engineering
- WPK according to EN 1090-1/-2/-3 EXC 3 (C €-mark)

We have the necessary facilities and qualifications to produce welded structures made of steel, stainless steel, aluminium and titanium.

Holding the certificate WPK 2451-CPR-EN1090-2018.0255.001, we are entitled according to the EU regulations, as a manufacturer of welded lifting devices of all types according to the

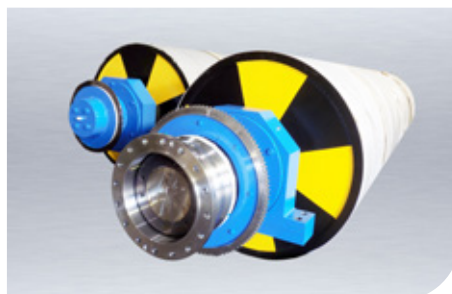
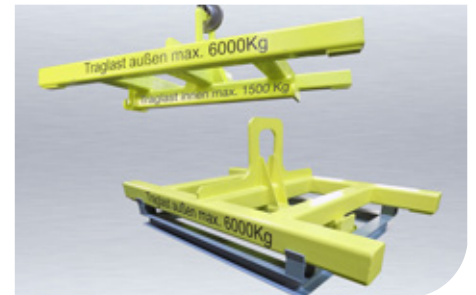
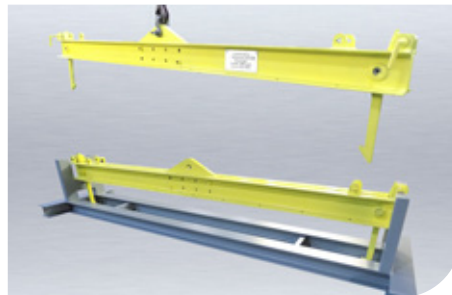
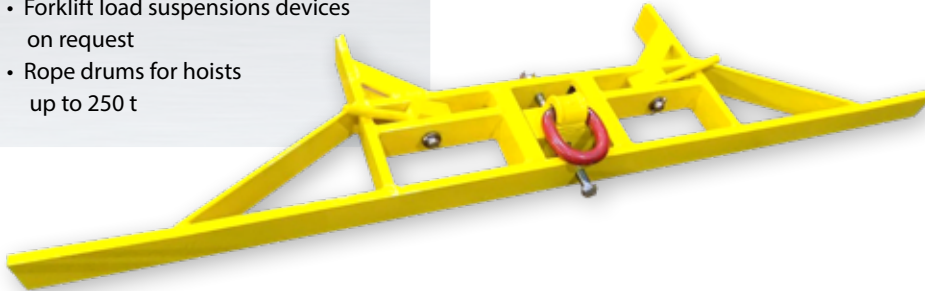
EC Machinery Directive 2006/42/ EC as well as according to the standard DIN EN 13155: 2009-08 - Non-fixed load lifting equipment and according to the standard DIN EN ISO 12100 part 1 - general design principles

to provide a declaration of conformity and to assign a C € mark for welded lifting equipment

The notified body is:
DVS Zert GmbH · Id-No.: 2451


Upon request, the lifting equipment manufactured by us can also be accepted and put into operation by the TÜV.

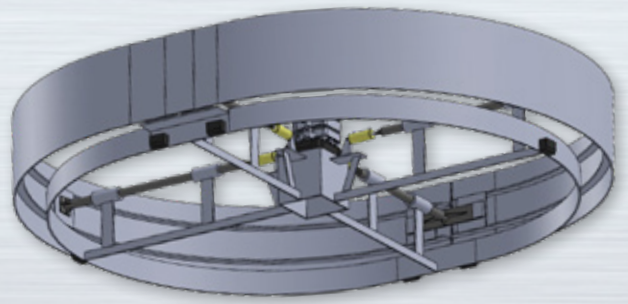
Lifting equipment according to requirements according to DIN 13155, execution according to customer requirements.



Project engineering in mechanical and plant engineering

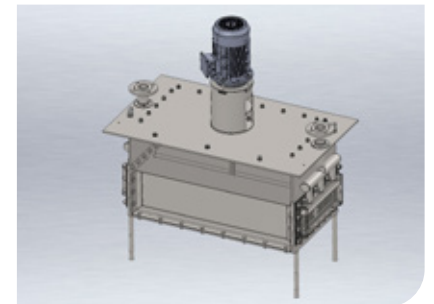
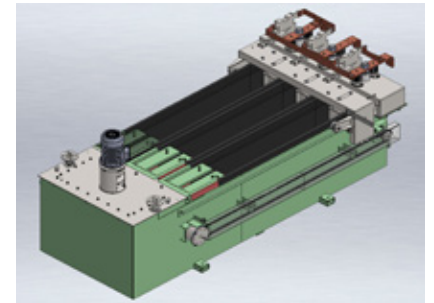
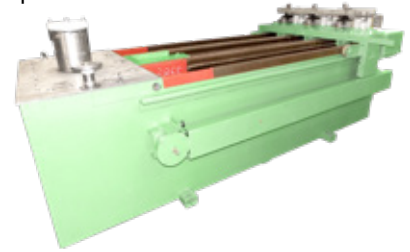
Long-term expertise is the basis of our engineering services for intelligent industrial maintenance and the production of innovative products. We focus on practical, cost-effective solutions. Qualified employees and modern analogue and digital systems are at our disposal to efficiently solve our tasks.

- **Creation of complete drawing documents**
(Drawings as DXF and PDF files, 3D constructions, parts lists as Excel files)
- **Development and design of lifting equipment according to DIN 13155** (case study 2+3)
(Construction, technical calculations, technical approvals, declaration of conformity with -marking and TÜV approval)
- **Re-Engineering of existing constructions** (case study 1)
- **System solutions to reduce wear damage**
(e.g. wear analysis, interchangeable inserts, optimized material pairs)
- **3D scan jobs with mobile laser**
(scanning of products, processing the scan data, 3D models of the scanned products, preparation of drawing documents)
- **Technical calculations / strength tests**
- **Special design products in steel, stainless steel, aluminium and titanium**
- **Castings as welded structures**



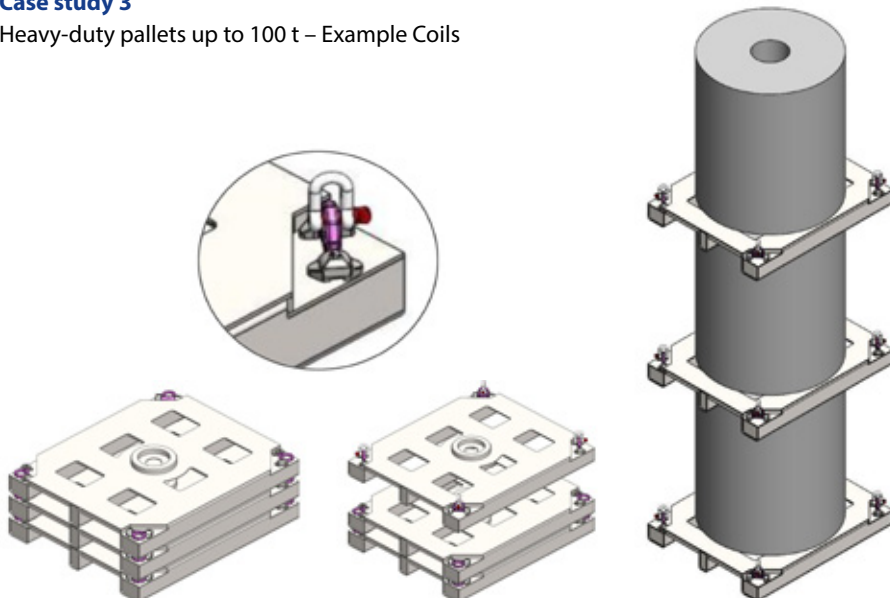
Case study 1

Re-Engineering of Siemens liquid starter

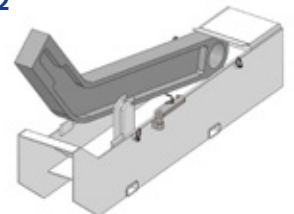


Case study 3

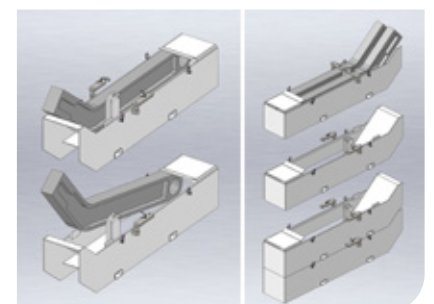
Heavy-duty pallets up to 100 t – Example Coils



Case study 2



Development / design of lifting equipment



Purchasing and procurement service / Industry purchasing

Strategic procurement of products in Germany and abroad

Examples of industry purchasing

- Machinery and equipment components
- Forgings
- Castings for rest bars
- Castings for traverses
- Apparatus components
- Components of mill technology
- Drive elements
- Live rings up to 12 m in diameter (segmented)
- Rolls/rollers for belt systems
- Gear parts
- Drawing parts
- Rope drums weighing up to 25 t
- Special roller bearings up to an outside Ø up to 1800 mm
- Individual weights up to 80 t

As specialists for the procurement service, we take on the complete handling of your requirements for goods and materials, from order to delivery.

Handling will take place for your own account including the complete assumption of the purchasing risk.

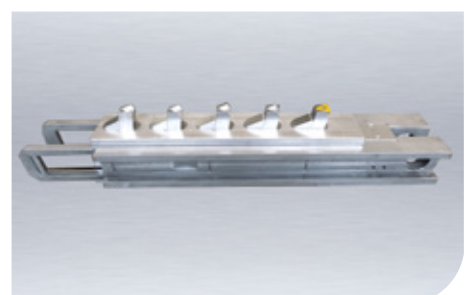
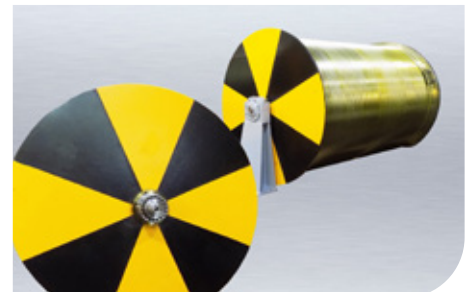
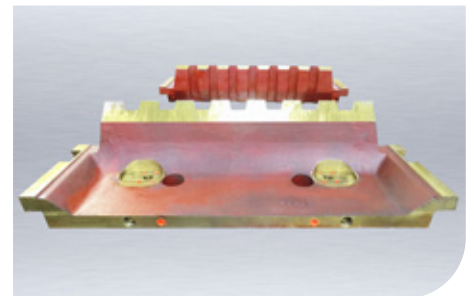
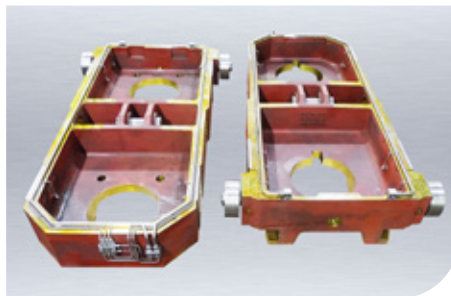
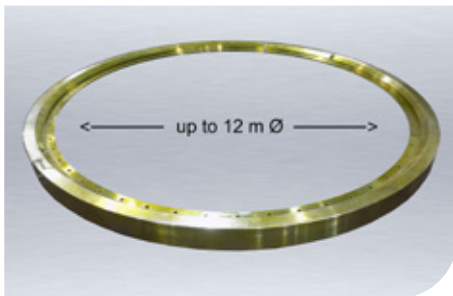
On behalf of our industrial customers (SMEs and corporations), we take on the procurement of the following goods and materials:

- Capital goods according to customer specifications
- Consumer goods for production
- Raw materials / semi-finished products
- One-time requirements / special parts
- Initial procurement of innovative products (e.g. vertical farming)
- Production requirements
- Special materials according to customer specifications

Our worldwide activities result in cost-optimized solutions for our customers with measurable economic success.

When procuring products from abroad, we guarantee the desired quality by using our local quality management systems.

This includes the certification of our suppliers according to our quality standards. Technical acceptance of our products abroad is carried out by internationally recognized testing and classification companies such as:





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Service
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