

# Industrie Service Rhein-Ruhr GmbH



**ISRR**  
Industrie  
Service  
Rhein-Ruhr

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

## Fields of work:

### New part manufacturing

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

### Engineering

- ▶ Project engineering and development

### Industrial purchasing

- ▶ Strategic procurement of products in Germany and abroad

### Maintenance service

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



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## Zertifizierungen:

### Quality management ISO 9001 : 2015

Certificate of TÜV Saarland

### WPK-Certificate acc. to EN 1090-1,-2,-3 description scope of supply and C - 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 certificate EN 1090-1/-2/-3 EXC 3 steel/ or aluminum structures

Certificate of DVS SLV Duisburg

### Employer of the future

Certificate of Deutsches Innovationsinstitut für Nachhaltigkeit und Digitalisierung GmbH

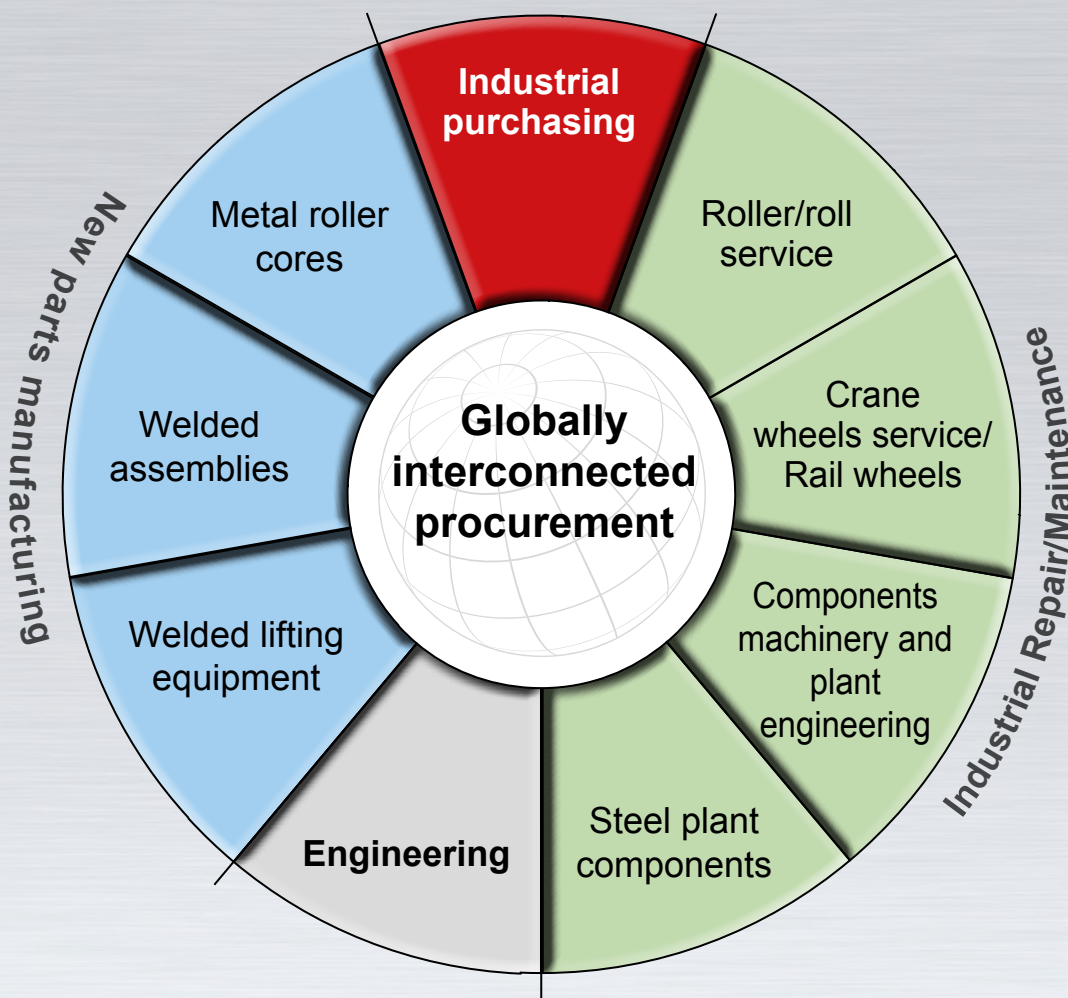


Certificates can be viewed at: [www.isrr-gmbh.de/certificates](http://www.isrr-gmbh.de/certificates)

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

- Steel producing industry
- Steel processing industry
- Aluminium industry
- Chemical industry
- Petrochemical industry
- Plant engineering
- Mechanical engineering

### Fields of activity



Roller/roll types (selection)

- Squeeze rollers for belt systems
- Squeeze rollers for electrolytic coating systems
- Deflection pulleys
- Stabirollers/galvanizing bath
- Roller path rollers
- S rollers
- Rolling mill rolls
- Hearth and oven rollers
- Gearbox rollers
- Pressure rollers
- Drive rollers
- Tensioning drums
- Rope drums up to 25 t weight
- Skale master cassettes

Maximum dimensions

Diameter 2000 mm  
Total length 8000 mm  
Weight 12 t

Wuchten

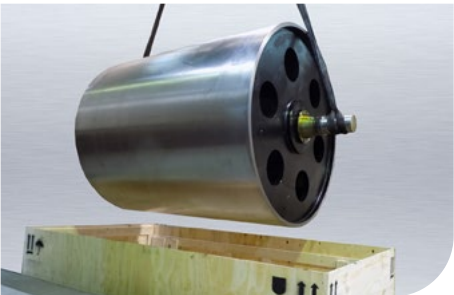
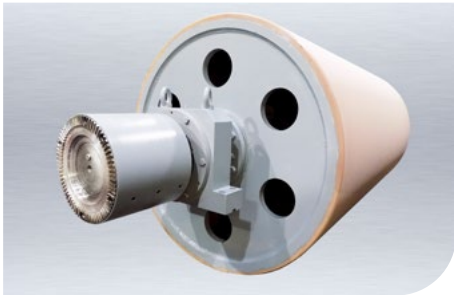
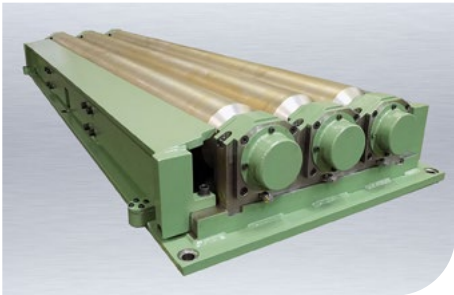
Static balancing  
Dynamic balancing according to DIN ISO 1940

Materials

Steel  
Stainless steel  
Aluminium

Coatings

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



### 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

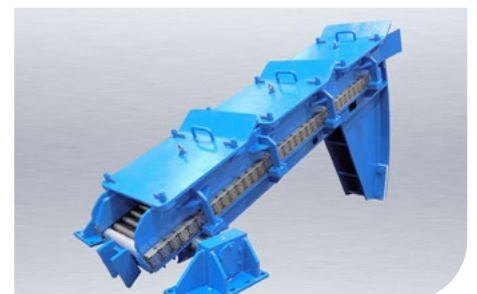
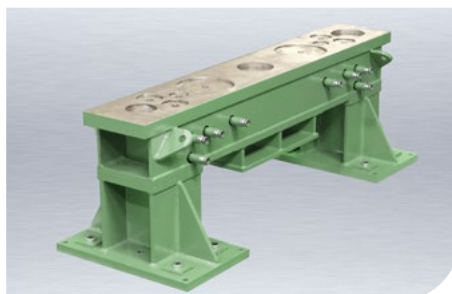
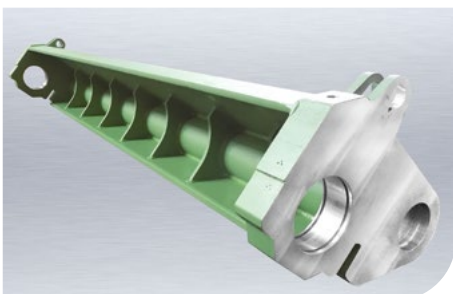
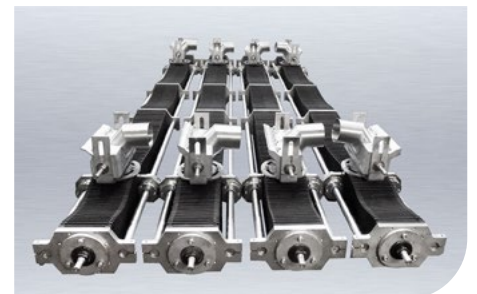
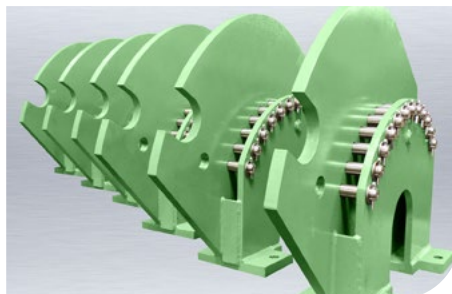
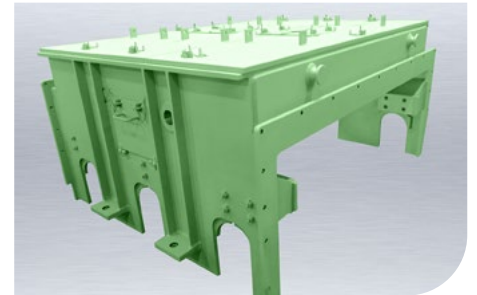
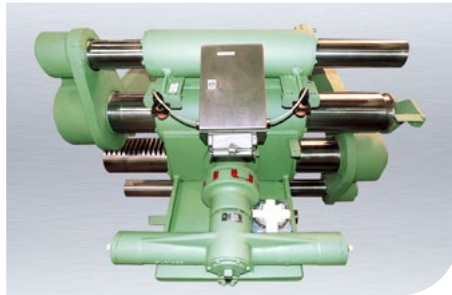
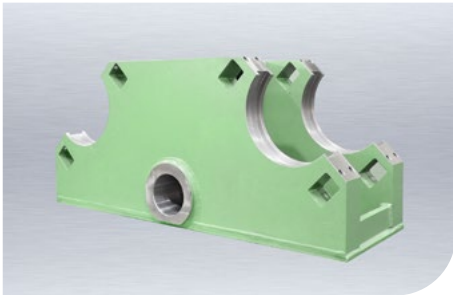
### Welded assemblies up to 20 t weight including complete mechanical processing with boring and milling machine

As a certified welding specialist according to DIN ISO EN 3834-2 and EN 1090-1/-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  $\text{CE}$  marking
- Welding certificate 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)



### 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
- Heavy duty beams 60 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
- EN 15085-2 / rail vehicles level CL1 including repair according to DIN 27201-6
- EN 1090-1/-2/-3 EXC 3 / steel and 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

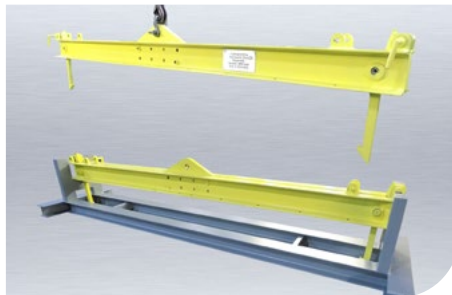
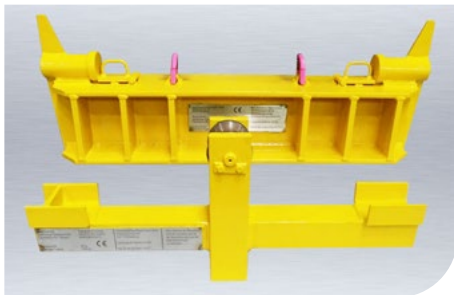
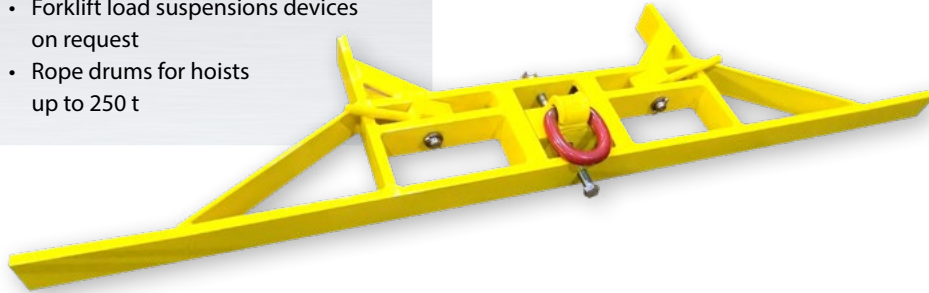
EC Machinery Directive 2006/42/ EC as well as according to the standard DIN EN 13155: 2009-08 - Non-fixed load lifting equipment and according to the standard DIN EN ISO 12100 part 1 - general design principles

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.



Our engineering services are based on our decades-long know-how for product-specific applications in the steel mill industry as well as in plant and machinery engineering.

Our focus is on practical and cost-effective solutions with defined customer benefits.

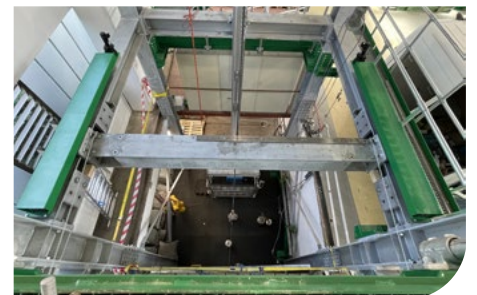
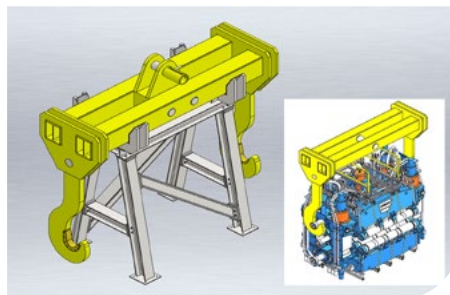
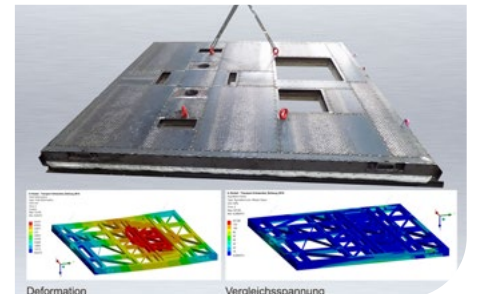
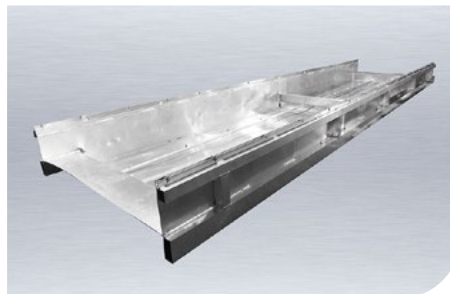
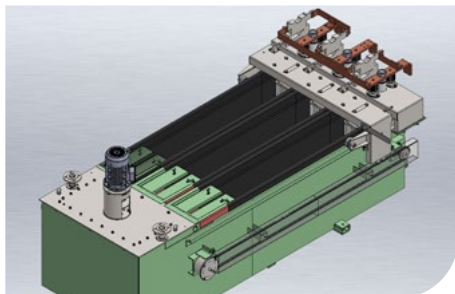
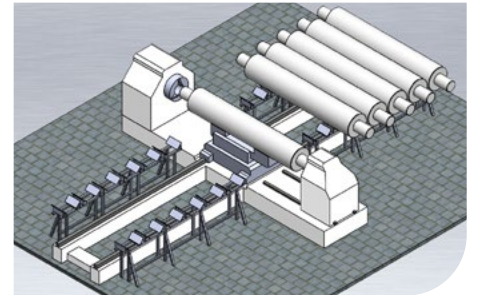
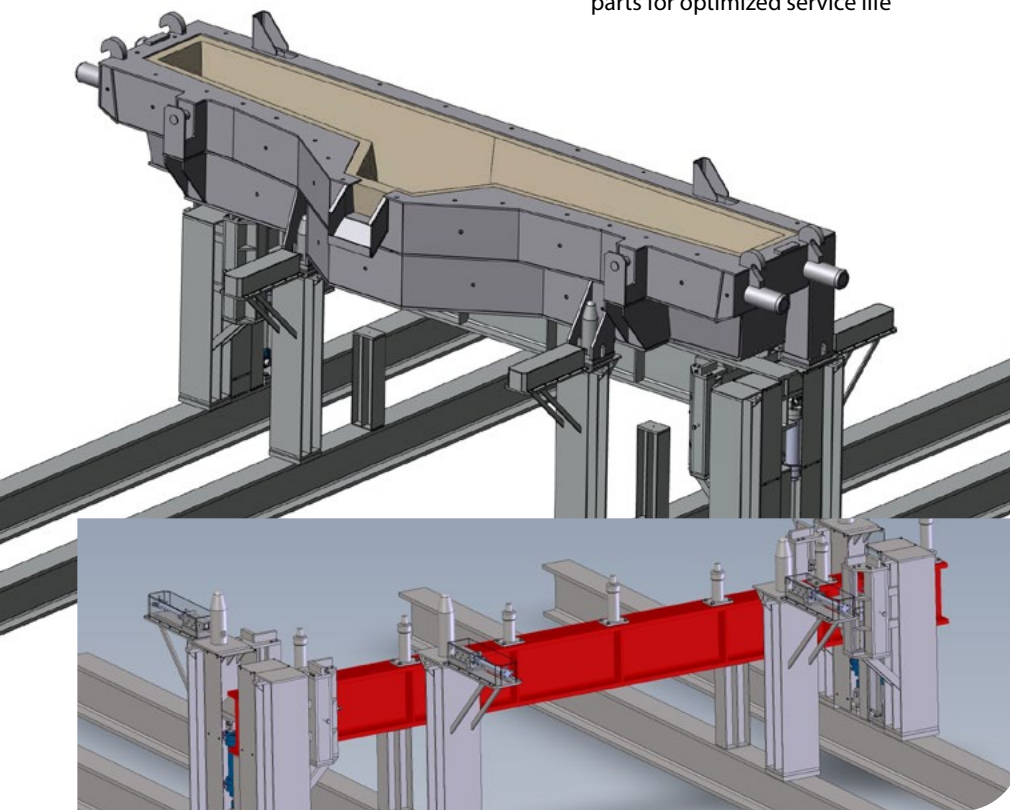
Qualified employees and modern analogue and digital systems are at our disposal to efficiently solve our tasks.

## Our engineering / development area includes the following tasks:

- Conversions in machinery and plant engineering
- Extension structures
- Modernization of production facilities
- Re-engineering of existing components based on samples
- Heavy-duty lifting equipment according to DIN 13155
- Test equipment
- Welded assemblies
- Industrial equipment
- Development and optimization of wear parts for optimized service life

## Scope of services:

- Construction including complete drawing creation
- Technical calculations (stresses, deformations)
- Risk analysis in accordance with the current Machinery Directive 2006/42/EC
  - Research of the guidelines and standards to be adhered to
  - Danger and risk analysis based on DIN EN ISO 12100, considering the measures taken to date and load calculations carried out (part of the design)
  - Defining risk mitigation measures
- Declaration of conformity in accordance with the current Machinery Directive DIN EN ISO 12100
- CE-mark assignment and component marking (manufacturer's plate)





#### Examples of industrial purchasing

- Components for machinery and plant engineering
- Welded assemblies, machine frames
- Railway technology
- Crane and lifting technology
- Rope drums weighing up to 25 t
- Rope pulleys
- Rolls/rollers for belt systems
- Components of mill technology
- Forgings
- Machined castings
- Mould tubes for continuous casting plants
- Wear parts optimized in terms of service life
- Bearings
- Special roller bearings up to an outside diameter of 1800 mm

We take on the purchasing service covering the complete handling of your requirements for industrial goods and materials including logistics.

We support your purchase with the following services:

- KI-supported global supplier selection price
- comparison for optimal supply chains and quality
- Use of international platforms
- Participation in tenders
- Technical expertise for complex parts/ components

Handling will take place on behalf of our customers for own account including the complete assumption of the purchasing risk.

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

- Capital goods according to customer specifications
- Raw materials / semi-finished products
- Consumer goods for production
- Welded assemblies
- Drawing parts on demand
- Product improvement with our own engineering

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

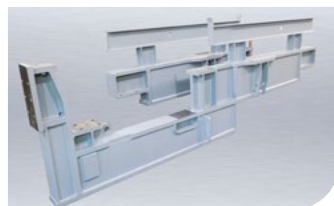
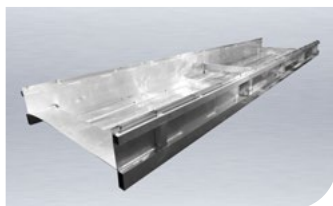
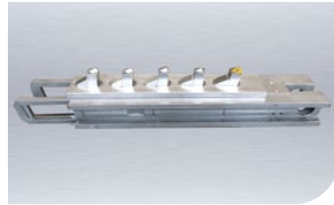
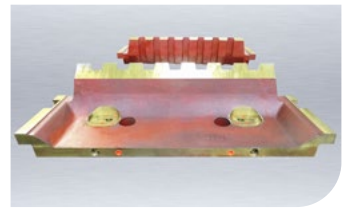
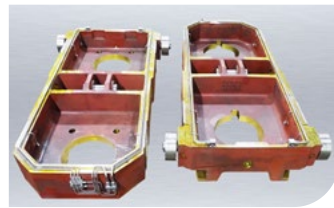
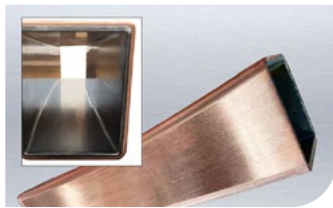
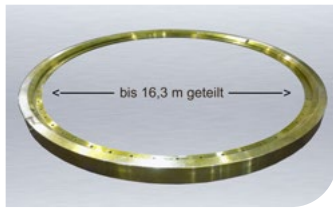
Our procurement strategy is based on a data-supported purchasing and procurement process.

When procuring products from Germany and abroad, we guarantee the desired quality by using our local quality management systems (see our certificates).

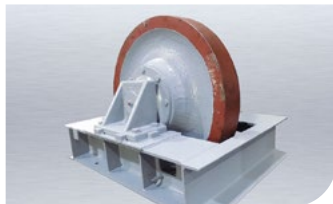
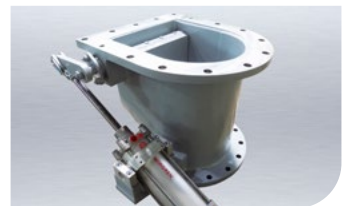
This includes the certification of our suppliers according to our quality standards. Technical acceptance of our products abroad is carried out by internationally recognized testing and classification companies such as:



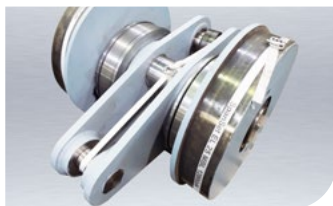
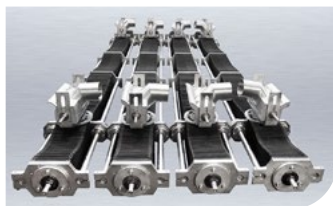
## Plant engineering



## Machinery engineering



## Mill technology



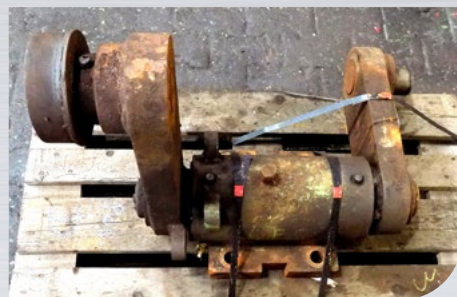
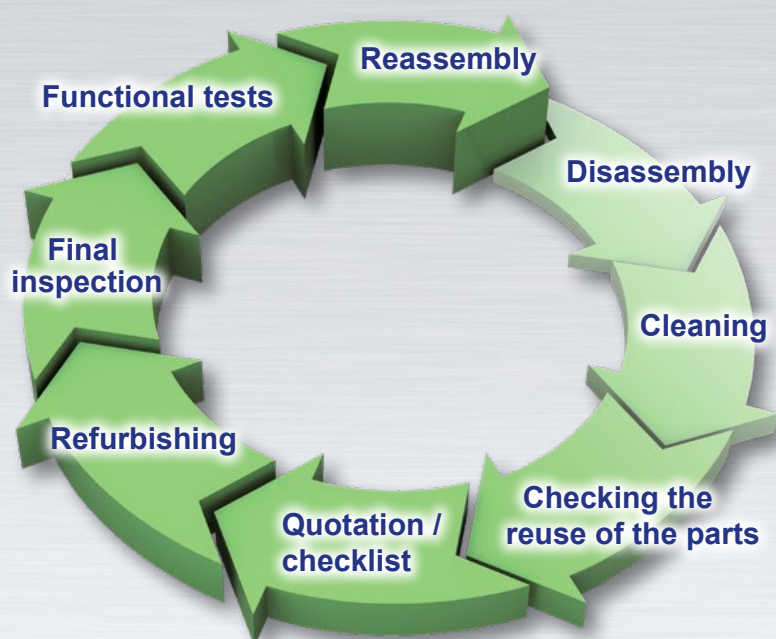
## Railway technology





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.

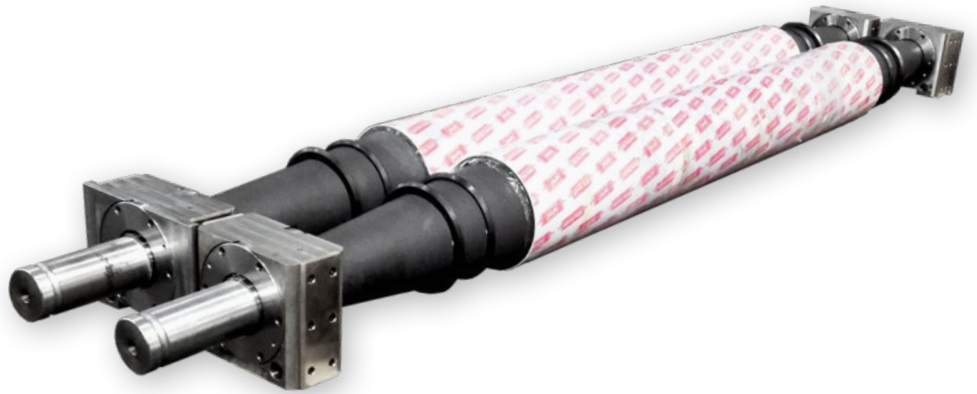


### Periodic maintenance for:

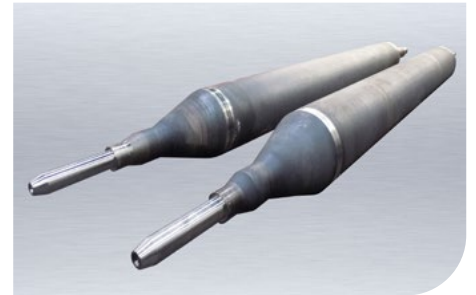
- Squeeze rollers for belt systems
- Squeeze rollers for electrolytic coating systems
- Deflection pulleys
- Segment rolls
- S rollers
- Mill rolls
- Hearth and oven rollers
- Gearbox rollers
- Pressure rollers
- Drive rollers
- Tensioning drums
- Straightening rollers
- Straightening cassettes
- Guide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

### Leistungsumfang

- 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)

## Maintenance service

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) Level 2
- Magnetic particle testing (MT) Level 2
- Penetrant testing (PT) Level 2

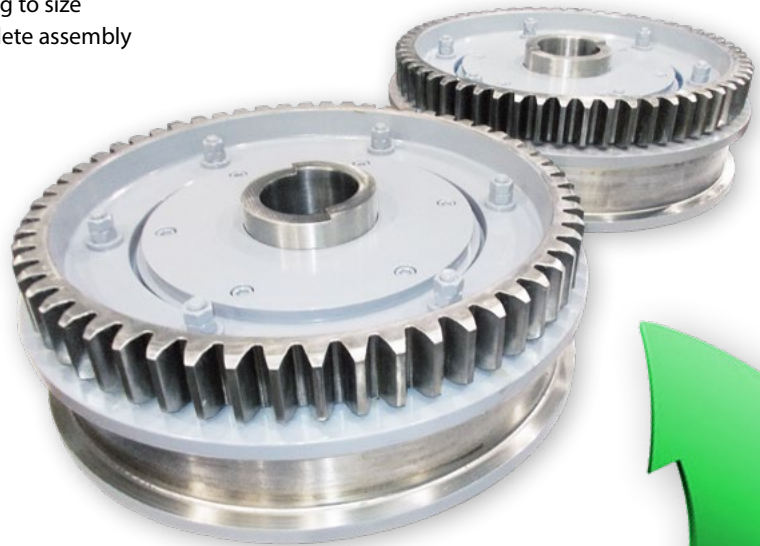
## Overhauling of crane wheels and rail wheels Repair welding

### Scope of services:

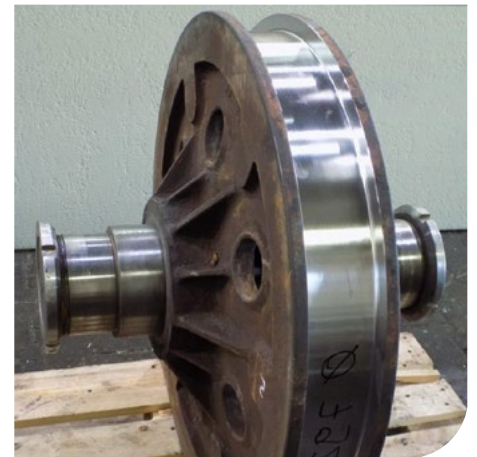
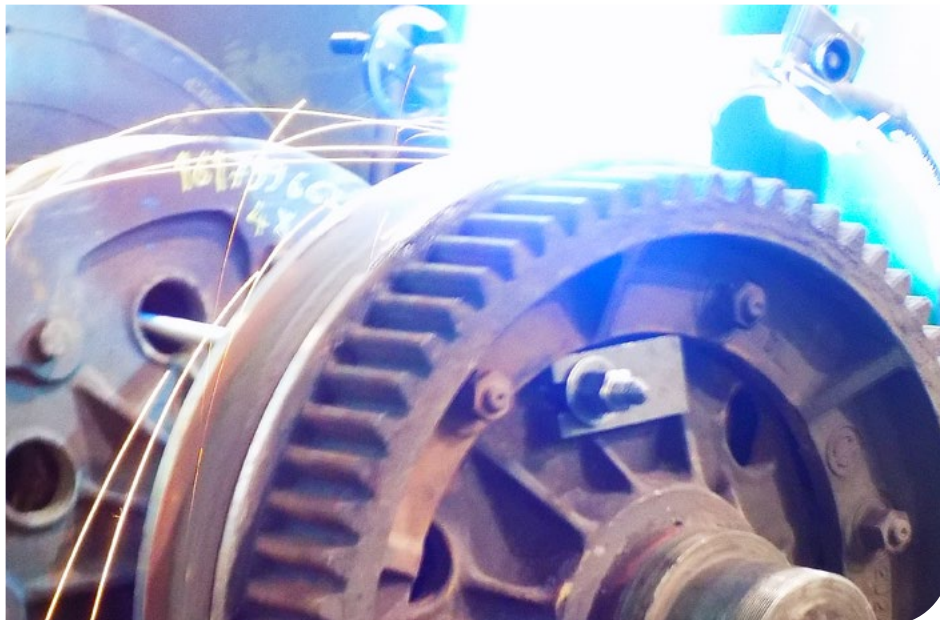
- Information assessment
- Rough turning of wheel surfaces
- Surface welding of wheel surfaces to restore the geometry
- Determining and documenting the absence of cracks using NDT
- Turning to size
- Complete assembly

**Costs: approx. 30 – 60 % of investment new parts depending on the degree of wear**

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



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



## Maintenance service

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

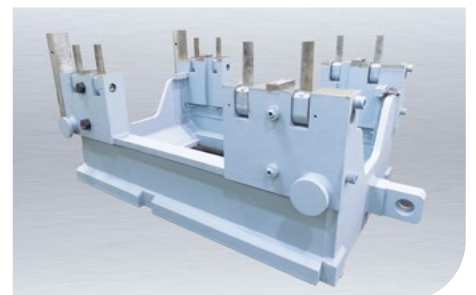
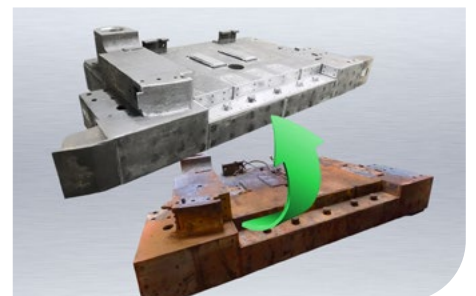
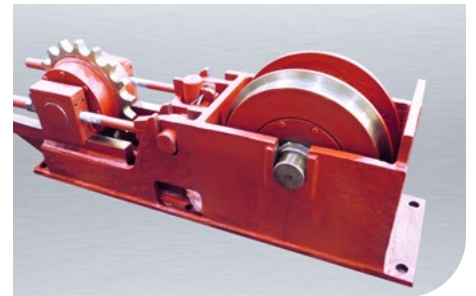
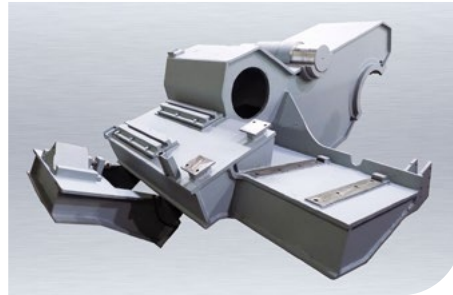
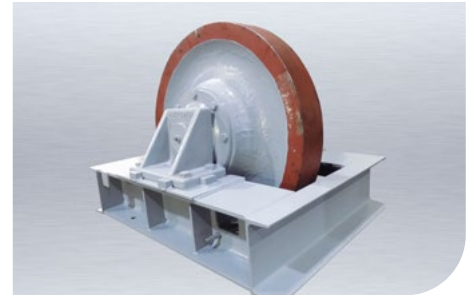
- Steel producing industry
- Steel processing industry
- Chemical industry
- Petrochemical industry
- Cement industry
- Municipal utilities
- Aluminium Industry
- Port industries

**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).

## Industrial maintenance for machinery and plant engineering





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Industrie  
Service  
Rhein-Ruhr

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