

THE WORLD OF CRANE COMPONENTS



# ATLAS



## WHEEL BLOCK SYSTEM

RB 160 - RB 500

 ALWAYS SAFE. ALWAYS THE FIRST CHOICE.



# ATLAS

ALWAYS SAFE. ALWAYS THE FIRST CHOICE.

## KARL GEORG wheel blocks shoulder GIANTS

Crane system, roof construction or stadium turf; Ice cold or highly explosive;  
Fast or slow; Cleanroom or extremely harsh environment!

### WHEEL BLOCK SYSTEM ATLAS

Optimally graduated sizes in a modular system, compact dimensions, fast and economical, ready to install, with a load capacity up to 40,000kg. All components and interfaces are perfectly coordinated.

#### WE INVENTED IT

For our customers, for crane engineering, for industry and plant engineering. The first modern, easy-to-maintain and modular wheel block. Featuring universal design and mounting surfaces machined on all sides for maximum precision.

As a German family business with a history going back almost 100 years, we have always been a communicative, reliable and customer-oriented partner. At our impressive production facilities, we work with our experienced and qualified employees to design and manufacture products "Made in Germany".

We know our customers well, we listen to them carefully and we are more than happy to help them find the "Best Solution".

#### WE GUARANTEE NO COMPROMISES

We rely on solid material (EN-GJS-400-15)! That's why our wheel block housings are made of dynamically highly stressable spheroidal graphite iron. In addition, we have made a conscious decision not to use grooved ball bearings or tapered roller bearings in our wheel blocks.

All wheel block sizes are equipped with rugged, above-average long-life and lifetime-lubricated, branded self-aligning roller bearings for maximum wheel loads in the temperature range from -30 °C to +90 °C.

Relubrication is, of course, provided as standard. The standard grease nipple makes it possible to carry out relubrication or connect to a central lubrication system if required or necessary (dust, heat, humidity, etc.).

Adapted versions of wheel blocks are available for an extended temperature range from -30 °C to +200 °C.





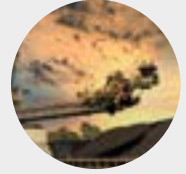
**AUTOMOTIVE**  
Automotive engineering, autonomous driving and subcontracting



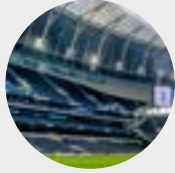
**ENERGY SECTOR**  
Wind power, solar power, hydropower, geothermal power and biomass



**PLANT ENGINEERING**  
Process engineering, power engineering, supply engineering and production engineering, etc.



**MINING**  
Exploration, extraction and movement of mineral resources



**ENTERTAINMENT**  
Commercial roofs, stage technology, stadium turf etc.



**CONVEYOR SYSTEMS**  
Upstream/downstream, onshore/offshore production, LNG/H<sup>2</sup> transport



**SMELTING WORKS**  
Steel production, metal production and processing



**CRANE ENGINEERING**  
Industrial cranes, process cranes, container handling

## AT A GLANCE



-30 °C TO  
+200 °C



UP TO 40  
TONS



HIGH  
AVAILABILITY



SIMPLE  
INSTALLATION



FLEXIBLE DRIVE  
SELECTION

### FREE CHOICE OF DRIVE SYSTEM

We always offer you flexibility. For the driven wheel block used as a single or central drive unit, offset and angular geared motors are available from the toolkits of all manufacturers. Here, you define your drive system and are free to choose the drive manufacturer. Our drive shafts are designed for all brands of slip-on gearboxes.

The low-maintenance direct drive and the conical connection between wheel and drive shaft is the technically purposeful solution we have opted for to give you that crucial "extra" in terms of service life and flexibility.

In this case, an additional drive motor suspension mounting is not necessary. The proven torque force transfer from drive shaft to crane wheel via conus with tension rod remains wear-free over the long term.

### SERVICE IS OUR TOP PRIORITY

At Karl Georg, we will be there to assist you every step of the way as needed, from project planning through to commissioning. We offer high availability, stock of all standard components, short waiting times, simple selection, availability of any colour, and the crane wheel wear part can be replaced quickly and inexpensively using commercially available tools.

### YOU CAN COUNT ON US

All standard connections on the wheel block are feasible and available. Existing bore hole fittings for connection options such as head, flank or bolted connections. All outside dimensions and connecting holes are compatible with comparable brands.

We stock all necessary parts for your central drive unit solution, with couplings and connecting shaft, for driving 2 wheel blocks with a slip-on gear mechanism.



**ATLAS RB 500 WHEEL BLOCKS IN ACTION**

A turntable (FDT Series) by DANGO & DIENENTHAL Maschinenbau GmbH, with a load capacity of 60,000 kg, supported by a total of six RB 500 wheel blocks.

# WHEEL BLOCK SYSTEM ATLAS

from 160 mm – 500 mm; up to 40t

Wheel block type	Crane wheel material, max. wheel load in kg				Wheel block housing GJS 400	Lubricated for standard service life		Connection variant **			Weight kg
	EN-GJS-700-2	42CrMo4-QT	PA 12G*	Polyurethane, Vulkollan		Self-aligning roller bearing	Relubrication	Head	Bolted	Flank	
<b>160</b>	6800	6800	2900	1400	X	X	X	X	X	X	22
<b>200</b>	10000	10000	4300	2200	X	X	X	X	X	X	36
<b>250</b>	12800	12800	5500	2700	X	X	X	X	X	X	52
<b>250-V</b>	16000	16000	5500	2700	X	X	X	X	X	X	57
<b>315</b>	22000	22000	8000	4000	X	X	X	X	X	X	100
<b>400</b>	30000	30000	12000	6200	X	X	X	X	X	X	175
<b>500</b>	40000	40000	-	-	X	X	X	X	X	X	310

\* wheel diameters deviating from nominal size \*\* see page 5



## CRANE WHEEL MATERIAL:

Spheroid ductile iron  
(EN-GJS-700-2)

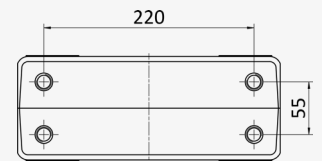
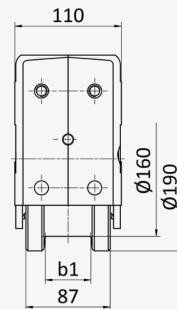
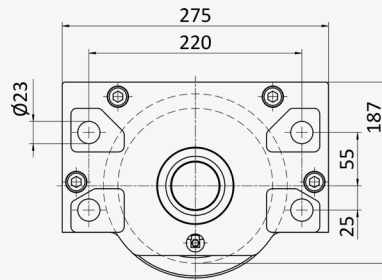
## ALTERNATIVELY:

- Solid material or binding
- 42CrMo4 / 34CrNiMo6
  - Stainless Steel
  - CuAl-xx (Bronze)
  - Polyamide PA 12
  - Vulkollan

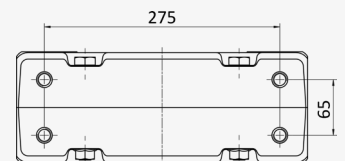
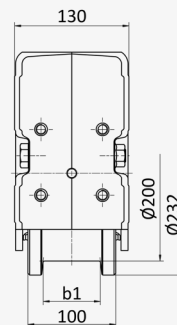
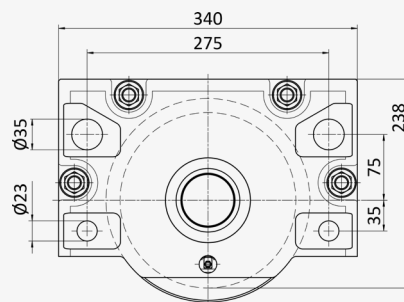
More information and technical details can be found in our wheel block catalogue at [www.karl-georg.de](http://www.karl-georg.de):



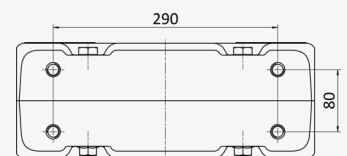
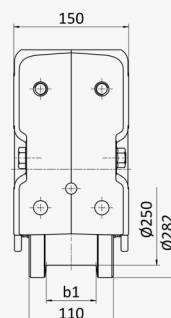
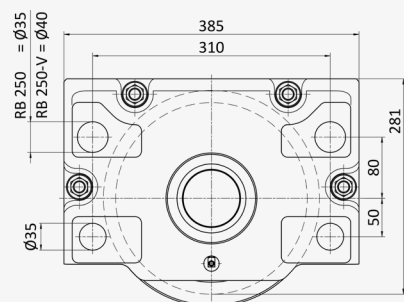
## SIZES AND DIMENSIONS



**RB 160**



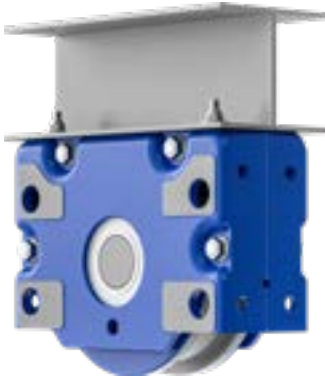
**RB 200**



**RB 250**

# CONNECTION VARIANTS

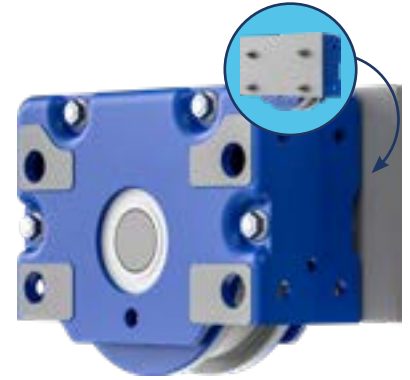
The **ATLAS** System offers a wide variety of connection options\*



HEAD CONNECTION



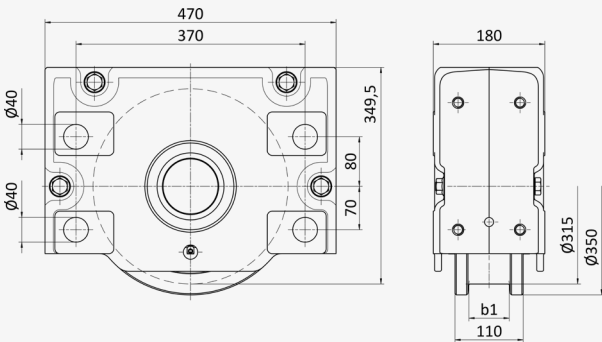
BOLTED CONNECTION



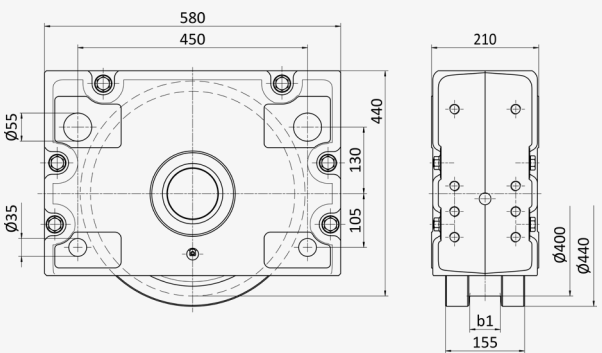
SIDE CONNECTION

\*Other connection variants possible

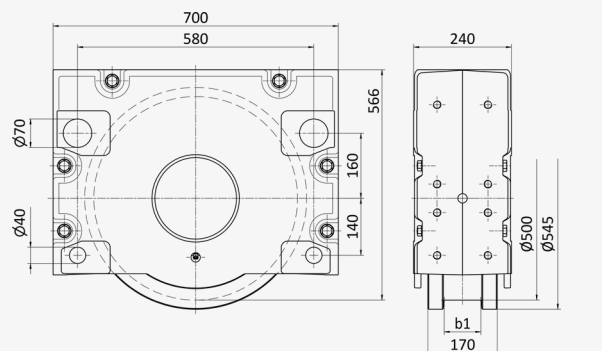
## SIZES AND DIMENSIONS



RB 315



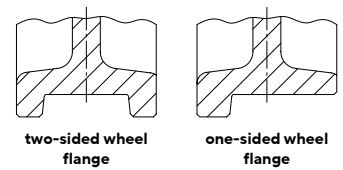
RB 400



RB 500

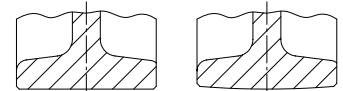
## RUNNING SURFACES AND GROOVES

Running surface geometry as required, any crane wheel geometry and groove possible, therefore design suitable for curves is also feasible.



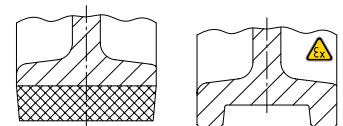
two-sided wheel flange

one-sided wheel flange



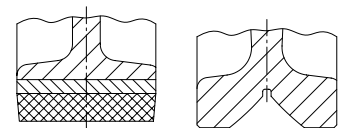
no wheel flanges with cylindrical running surface

no wheel flanges with spherical running surface



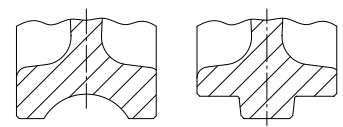
with coating of Vulkollan or PA 12 G

Explosion protection due to solid material or binding made of CuAl, bronze



with binding of Vulkollan with steel ring

with prismatic guide



with concave groove

with middle wheel flange

# WE ARE HAPPY TO OBLIGE!

## A PERFECT FIT!

Our “number one choice” for transmitting torque from the drive shaft to the crane wheel is a permanently wear-free tapered connection.

We manufacture the drive shafts for single or central drive units from high-quality 42CrMo4-QT. Completely tailored to customer requirements, with splined-shaft profile as per DIN 5480, with keyway as per DIN 6885-1 or for a shrink disc attachment. Manufactured and supplied to fit all offset and angular geared motors with hollow shafts from the toolkits of all drive manufacturers.

## WE SAY “YES”!

With our drive alternatives, we offer maximum flexibility. We equip our wheel blocks with a drive shaft as standard. For options that require an alternative torque transmission, we would be happy to add an internal spline tooth profile as per DIN 5480 or a feather key hub connection to your wheel block.

Precisely tailored and suitable for drive variants with (solid) gearbox output shafts or custom solutions.

We will gladly provide you with advice and support, and offer our wheel

blocks in exchange for competitor products. We would be happy to recommend the best solution for you, in terms of both cost-effectiveness and technology.

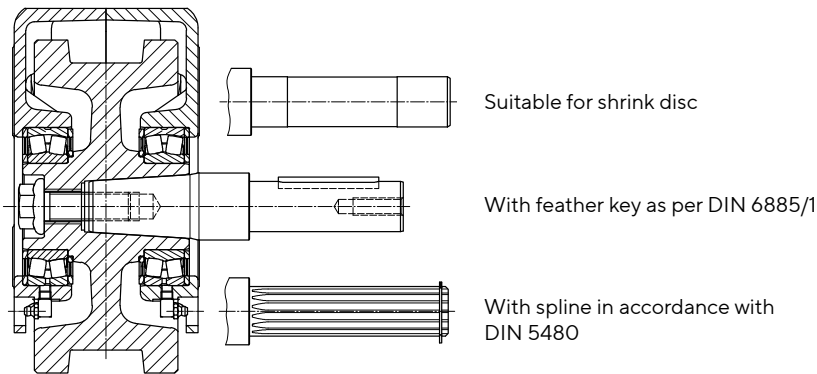
**DRIVE SHAFTS SUITABLE FOR THE FOLLOWING TRANSMISSION MANUFACTURERS:**

DEMAG · SEW · NORD · STEPHAN · ABB  
SIEMENS · ABM GREIFFENBERGER  
BONFIGLIOLI · KONESCO · FLENDER  
KONECRANES · STAHL CRANESYSTEMS

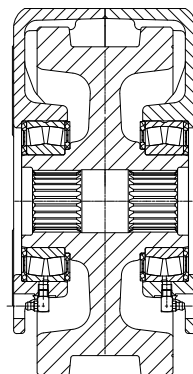
DRIVE SHAFTS SUITABLE FOR SLIP-ON GEAR MECHANISMS FROM OTHER MANUFACTURERS ON REQUEST.

## SINGEL DRIVE UNIT

### SHAFT VARIANTS

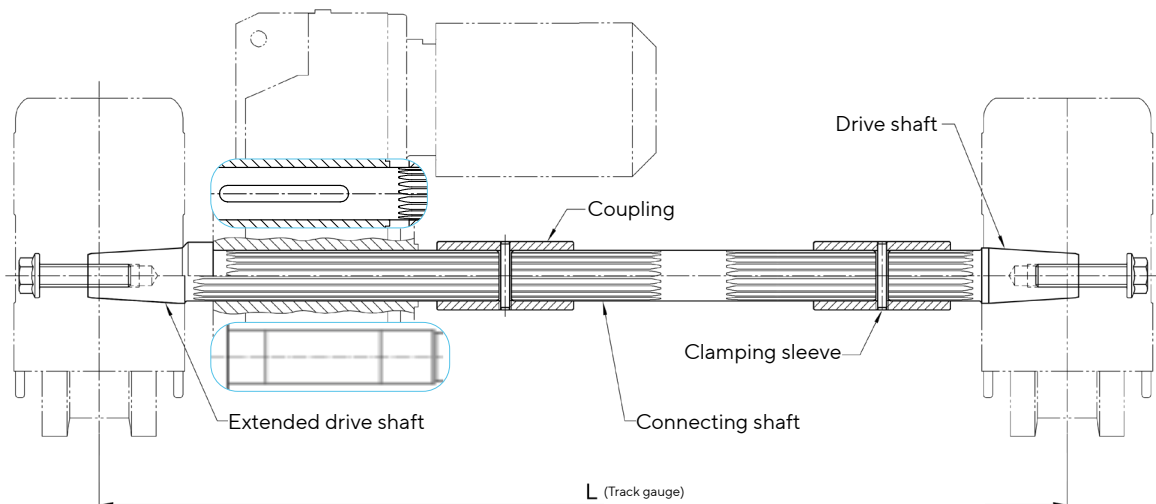


### INTERNAL SPLINE PROFILE



Wheel block size	Internal spline profile DIN 5480 to
160	- N35
200	- N40
250	- N50
250-V	- N50
315	- N65
400	- N65
500	- N90

## CENTRAL DRIVE UNIT



# XTREM WE PUSH BOUNDRIES

Thanks to its decades of experience, Karl Georg can offer you a wide range of specific product solutions for particular applications, conditions and interfaces.

Thanks to flexible manufacturing concepts and a high level of vertical integration, we are able to offer customised solutions from a minimum order quantity of just 1 item

We would be happy to assist you with your project specifications.

- Steel, stainless steel, plastics
- Forged crane wheels
- Special contours and interfaces
- Running surface hardness up to 54HRC, 20 mm deep
- Explosion-proof
- Temperature down to -30 °C
- Temperature up to +200 °C
- Indoor, outdoor, offshore
- Corrosion protection C1 – C5M



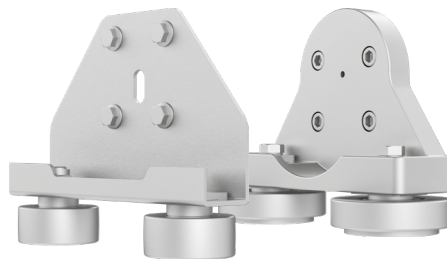
ALL STANDARD CRANE WHEEL MATERIALS, SOLID MATERIALS AND COMPOSITE SOLUTIONS.

## PERFECTLY TAILORED ATTACHMENTS AND ACCESSORIES



### CELLULAR PLASTIC BUFFER FOR WHEEL BLOCK RB 160 – 500

Our buffers, made of cellular plastic or rubber, are perfectly tailored to the wheel block and the environmental conditions. They reduce impact loads, safely convert the active energies and can therefore protect your system and components.



### HORIZONTAL ROLLER GUIDE

From our toolkit. "Heavy-duty" roller guide, modular and optimally tailored to the wheel block, for the safe absorption and transfer of horizontal forces



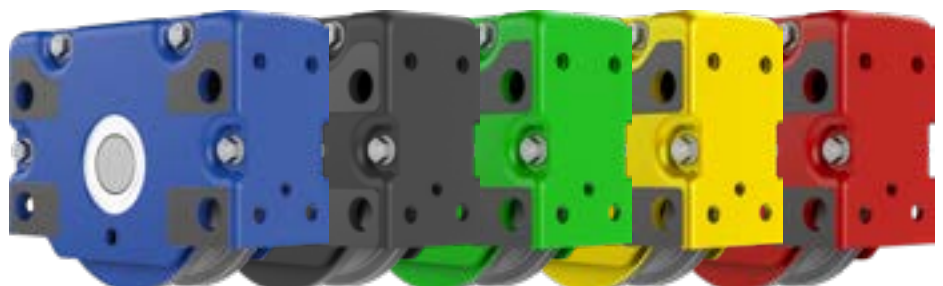
### RAIL CLEANING SYSTEM AND RAIL SWEEPER

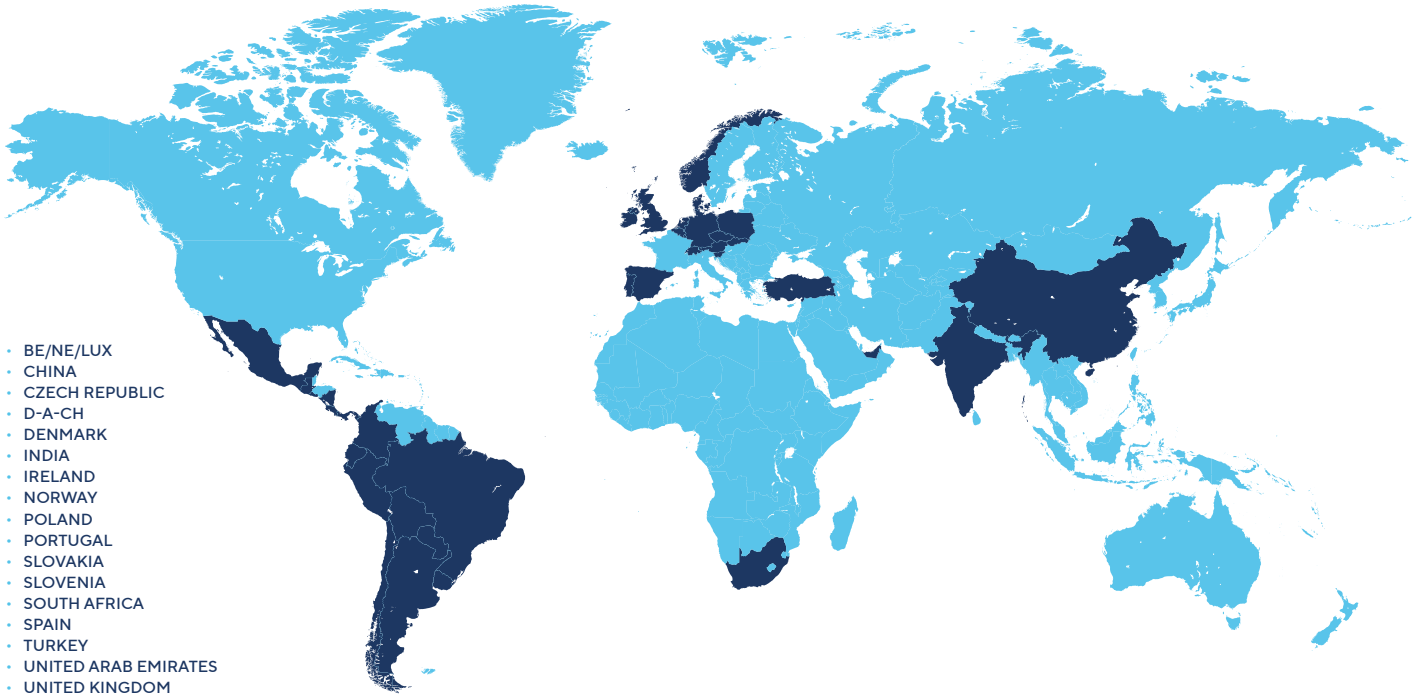
We clear the way! Thanks to custom-fit systems from our modular kit for track optimisation, we have the perfect "neat" solution to suit any requirement for a crane wheel / rail system.

## TAILORED ACCENTS AND CORROSION PROTECTION AS NEEDED

### CONTACT US!

Flexibility and creativity are the key features of our products. Innovation is our driving force. No matter what you are planning, we can supply you with the right product.





- BE/NE/LUX
- CHINA
- CZECH REPUBLIC
- D-A-CH
- DENMARK
- INDIA
- IRELAND
- NORWAY
- POLAND
- PORTUGAL
- SLOVAKIA
- SLOVENIA
- SOUTH AFRICA
- SPAIN
- TURKEY
- UNITED ARAB EMIRATES
- UNITED KINGDOM

## MORE INFORMATION



FOR MORE  
INFORMATION, PLEASE  
VISIT OUR WEBSITE AT  
[KARL-GEORG.DE](http://KARL-GEORG.DE)



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www.karl-georg.de

WE ARE CERTIFIED  
TO DIN ISO 9001  
AND ISO 14001.



COVER PHOTO:  
Heavy-load robot (SLR series)  
by DANGO & DIENENTHAL  
Maschinenbau GmbH

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