

#### WHEEL SET SYSTEM TITAN

Optimally graduated sizes in a modular system, compact dimensions, crane wheels from Ø160mm to Ø630mm, fast and economical, ready to install, with a load range of up to 60t.

All components and interfaces are perfectly coordinated.

# DISCOVER THE STRONG SOLUTION FOR YOUR BUSINESS:

Our well-proven wheel set system **TITAN** - for crane engineering, industry, mechanical engineering and plant construction. With the modular, easy-to-maintain and robust design that always fits, we ensure safe and durable movements of heavy loads with the simplest assembly and the longest service life.

#### WE GUARANTEE NO COMPROMISES

Our innovative wheel set system offers you the highest flexibility and maximum benefit for your plant. Our dynamically heavy-duty components are available in many installation variants: pre-assembled or in individual parts, with and without flange bearings for installation in hollow sections or box girders. In the "corner bearing" design, installation and removal of the wheel sets is particularly fast and uncomplicated.

All wheel sets are equipped with robust, above-average long-life and lifetime-lubricated brand spherical roller bearings that meet the requirements of the temperature range from -30°C to +200°C. The option of relubrication is already available for all designs and sizes.

# ALLOW YOURSELF FREEDOM AND DECIDE FOR YOURSELF:

For the driven wheelset as an individual or central drive, offset and angular geared motors are available from the kits of all manufacturers. With us, you determine your drive and are free to choose the drive manufacturer. Enjoy maximum flexibility and freedom with our innovative drive solutions.



#### **ALL INDUSTRIES — LOTS OF APPLICATIONS**



**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.



Exploration, extraction and movement of mineral resources



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



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



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



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

#### AT A GLANCE











#### WE HOLD FIRM AND REMAIN FLEXIBLE

All external dimensions and interfaces to the steel structure, including the fastening elements, are compatible with similar competitive designs.

#### WE SAY "YES"!

From project planning to commissioning, we at Karl Georg are at your side as needed. We are happy to advise and support you and also offer our wheelsets in exchange for competitor products. We are happy to recommend the economically and technically "best solution" for you and deliver quickly and reliably.

# **WE MANUFACTURE** WITH SOLAR **ENERGY FROM OUR OWN** PRODUCTION.

With a total output of around 850 kWp, we are not just generating enough energy for our electric vehicle fleet, but also significantly reducing the CO<sup>2</sup> emissions of our production.





#### WHEEL SET SYSTEM TITAN

Installation variants, running surfaces and grooves

| RAE / RNE<br>Nominal size<br>and crane wheel | Maximal<br>wheel<br>load | Wheel<br>width | Wheel<br>tread | Crane<br>wheel<br>Ø | Outer<br>Ø |      |      |       |      |       |       |      |         |         | XY<br>+/- |
|----------------------------------------------|--------------------------|----------------|----------------|---------------------|------------|------|------|-------|------|-------|-------|------|---------|---------|-----------|
| Ø d1                                         | iouu                     | b2             | b1             | d1 h9               | d2         | L5   | L6   | f2    | L12  | L8    | Ø DFI | Ø DS | Ø DB f8 | L7      |           |
| (mm)                                         |                          | (mm)           | (mm)           | (mm)                | (mm)       | (mm) | (mm) | (mm)  | (mm) | (mm)  | (mm)  | (mm) | (mm)    | (mm) *1 | (mm)      |
| 160                                          | 8.800                    | 100            | max. 75        | 160                 | 190        | 170  | 215  | 10-15 | 15   | 148   | 150   | 130  | 110     | 130     | 4,5       |
| 200                                          | 11.200                   | 100            | max. 75        | 200                 | 230        | 170  | 215  | 10-15 | 15   | 148   | 150   | 130  | 110     | 130     | 4,5       |
| 250                                          | 16.000                   | 110            | max. 80        | 250                 | 282        | 220  | 275  | 14-20 | 15   | 181   | 230   | 200  | 170     | 160     | 4,5       |
| 315                                          | 22.000                   | 125            | max. 90        | 315                 | 350        | 250  | 306  | 14-20 | 15   | 211   | 230   | 200  | 170     | 180     | 4,5       |
| 400                                          | 28.000                   | 125            | 60 - 90        | 400                 | 440        | 280  | 362  | 15-32 | 28   | 179   | 280   | 250  | 210     | 210     | 10        |
|                                              |                          | 140            | 85-105         |                     |            |      |      |       |      |       |       |      |         |         |           |
| 500                                          | 40.000                   | 140            | 60-100         | 500                 | 540        | 320  | 402  | 20-32 | 28   | 224,4 | 280   | 250  | 210     | 230     | 10        |
|                                              |                          | 170            | 95-130         |                     |            |      |      |       |      |       |       |      |         |         |           |
| 630                                          | 60.000                   | 170            | 75-130         | 630                 | 680        | 350  | 463  | 24-35 | 36   | 280,6 | 370   | 250  | 268     | 250     | 12        |
|                                              |                          | 210            | 100-160        |                     |            |      |      |       |      |       |       |      |         |         |           |

<sup>\*1 =</sup> L7, other dimensions possible



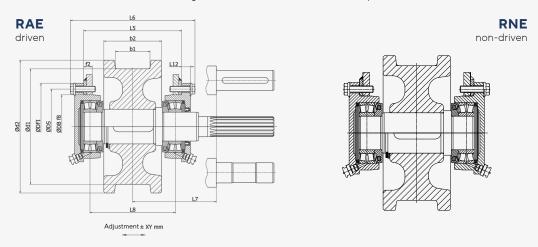




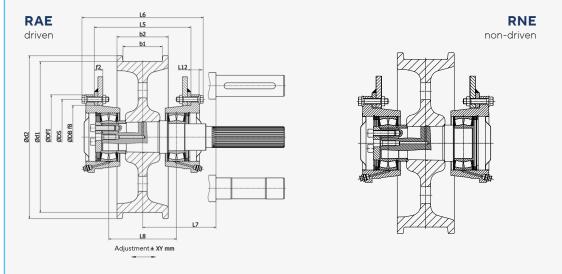
\* all common drives possible

#### **SIZES AND DIMENSIONS**

Wheel set series 160, 200, 250 and 315 for corner bearing installation complete or for box girder installation in individual parts



Wheel set series 400, 500 and 630 for corner bearing installation complete or for box girder in individual parts





#### WHEEL SET SYSTEM TITAN

Crane wheel material and installation sizes

### CRANE WHEEL MATERIAL:

Spheroidal graphite iron (EN-GJS-700-2)

#### **ALTERNATIVELY:**

Solid material or binding

- 42CrMo4+QT 34CrNiMo6+QT
- · Stainless Steel
- CuAl-xx (Bronze)
- · Polyamide PA 12 G
- Vulkollan®



| Installation<br>variant |   |   |   |   | Wheel Set<br>Series | Weight<br>kg *² |     |  |
|-------------------------|---|---|---|---|---------------------|-----------------|-----|--|
| 1                       | 2 | 3 | 4 | 5 |                     | RAE             | RNE |  |
| х                       |   | х |   |   | KG 130              | 21              | 19  |  |
| х                       |   | x |   |   | KG 130              | 26              | 24  |  |
| х                       | х | х | х |   | KG 130              | 54              | 52  |  |
| х                       | х | х | х |   | KG 130              | 74              | 70  |  |
|                         |   |   |   |   | 140.400             | 115             | 110 |  |
| Х                       | х | Х | Х |   | KG 130              | 120             | 115 |  |
|                         |   |   |   |   | 140.400             | 165             | 160 |  |
| Х                       | х | Х | Х | Х | KG 130              | 175             | 170 |  |
|                         |   | x | x | x | 1/0 120             | 350             | 340 |  |
| X )                     | Х |   |   |   | KG 130              | 375             | 365 |  |

\*2 = Gewicht variiert nach Ausführung

#### **MAXIMUM VARIETY WITH 5 INSTALLATION VARIANTS**

#### **VARIANTE 1**

Corner bearing installation Flange centring machined



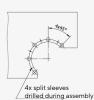




#### **VARIANTE 2**

Corner bearing installation Flange centring flame cut

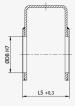






#### **VARIANTE 3**

Closed box girder installation Flange centring machined







#### **VARIANTE 4**

Closed box girder installation Flange centring flame cut



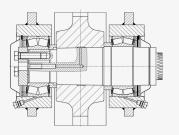






#### **VARIANTE 5**

without flange housing for direct installation in machined steel construction



### 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





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



#### **CERTUS - OUR GENTLE CHOICE**

#### FOR AN "EXTRA" BIT OF SAFETY

"Safety and efficiency" for crane applications: Innovative hydraulic buffers for industrial cranes as the solution for energy absorption.

Industrial buffers "Made in Germany" by Karl Georg offer effective solutions for energy absorption in a variety of applications, such as process cranes, port cranes, in steel plants, mining and much more.

In addition to rubber and cellular buffers, Karl Georg offers a wide range of high performance hydraulic buffers, specially designed to meet the demanding requirements of cranes and capable of absorbing more than 95% of impact energy.

Hydraulic buffers with a max. buffer force of 1,000 kN and a buffer stroke of 50 to 1.600 mm are available.

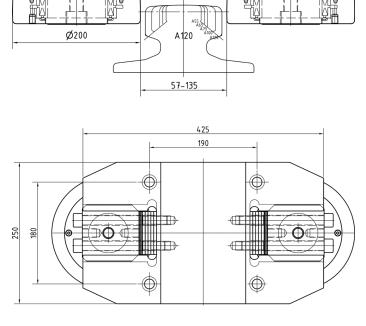
Standard for an ambient temperature -30 to +100 degrees. In slightly modified version up to -50 °C.



HIGH PERFORMANCE OEM GUIDE ROLLERS

For your safe use with parallel rail head sides from stock. Options for inclined rail head sides as well as additional roller securing are a matter of course for us.







# 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.

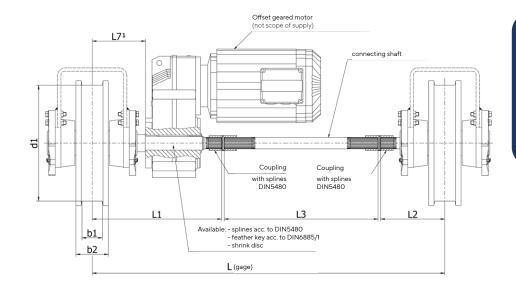
We would be happy to assist you with your project specifications.

- Steel, stainless steel, plastics
- Forged crane wheels
- Special contours and interfaces
- Running surface hardness up to 54 HRc, 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 COORDINATED ATTACHMENTS AND ACCESSORIES



# 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.

# TAILORED ACCENTS AND CORROSION PROTECTION AS NEEDED

#### **TALK TO 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 the right product.



#### THE WORLD OF CRANE COMPONENTS



#### **MORE INFORMATION**

















### (E)

**KARL GEORG** 

KARL GEORG GMBH

Karl-Georg-Straße 3 D-57612 Ingelbach-Bahnhof T: +49 (0)2688 / 9516 - 0

info@karl-georg.de www.karl-georg.de WE ARE CERTIFIED TO DIN ISO 9001 AND ISO 14001.



Subject to changes and errors © 2025 Karl Georg GmbH