

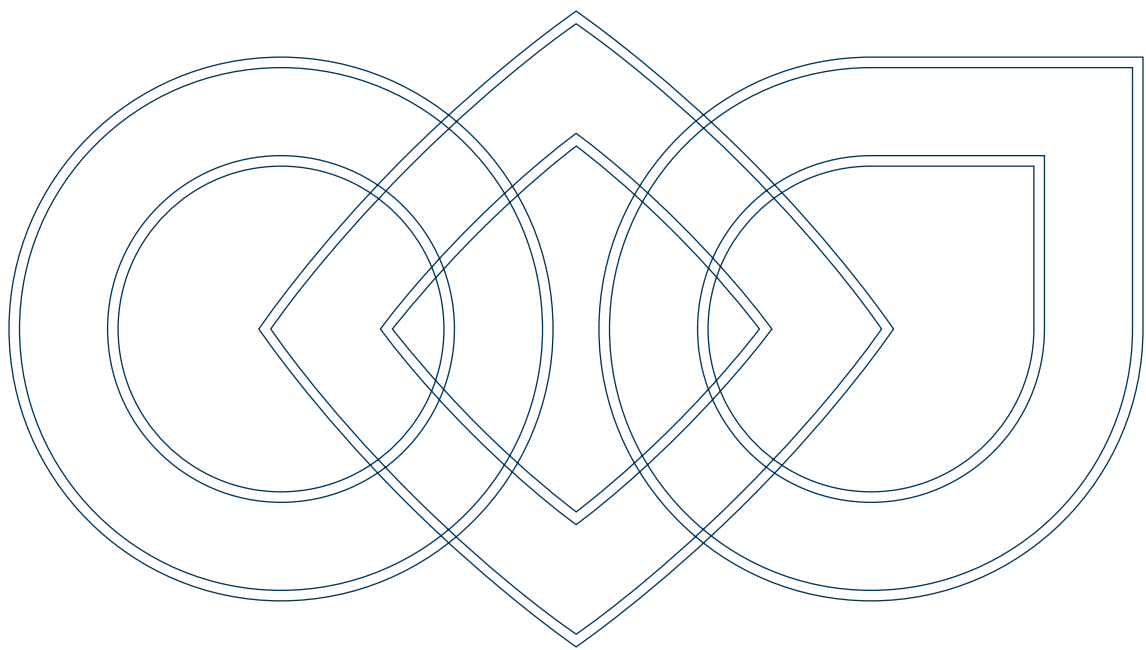
# **Bonfiglioli** *Forever Forward*

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## Solutions for **Crane Applications**



APPLICATION



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## Solutions for **Crane Applications**

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With more than 60 years of experience in integrated power transmission solutions, Bonfiglioli offers a complete range of gearboxes and gearmotors for cranes and lifting equipment.

High productivity, reliable power transmission under all conditions are a prerequisite for crane applications. The undisputed reliability and durability of Bonfiglioli's "Heavy Duty" series permit continuous duty over an extended lifetime.

The availability of high protection ratings for gearboxes and motors make Bonfiglioli solutions ideal for indoor and outdoor installations, even in marine environments.

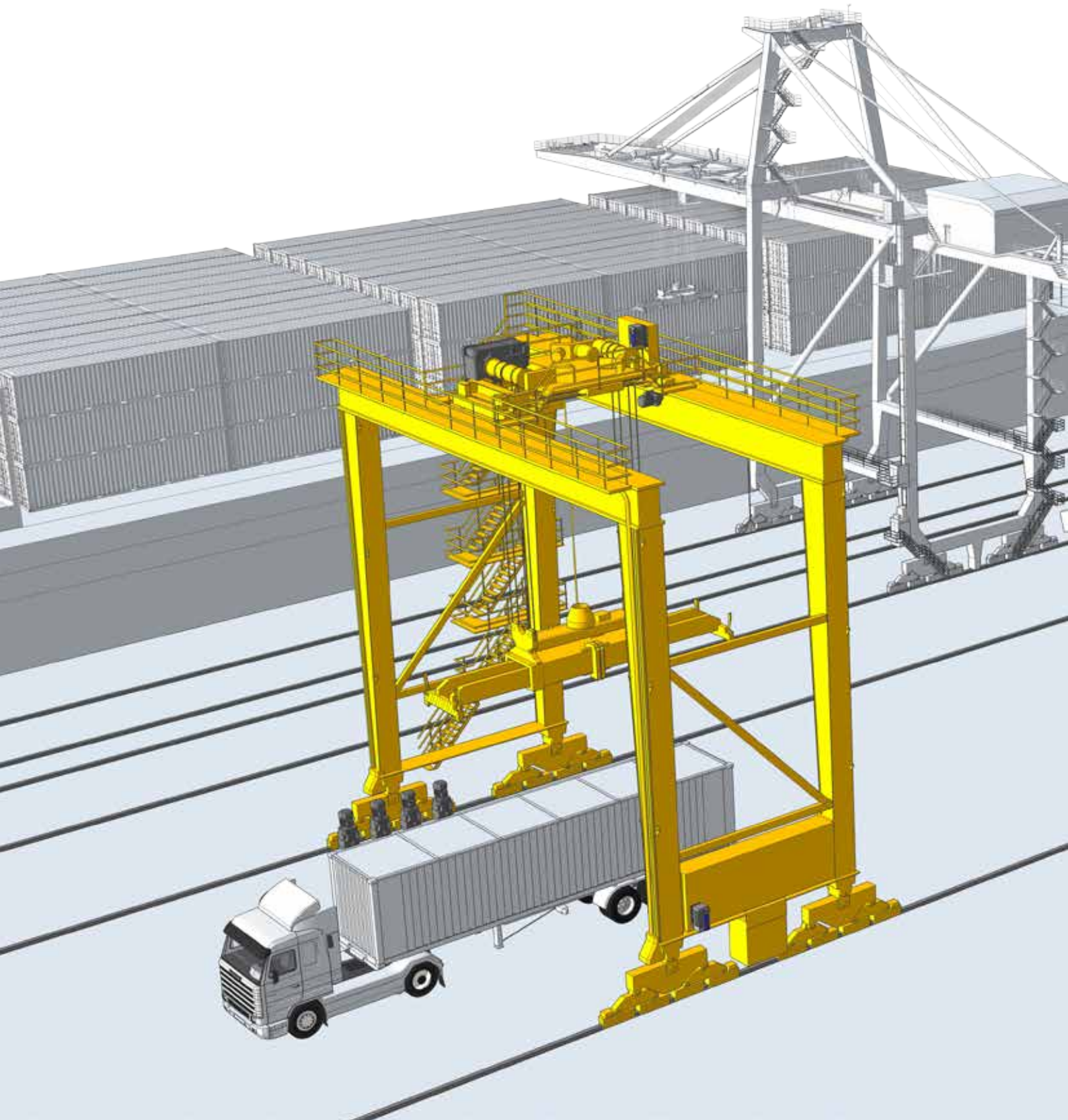
Modular gearbox design and special solutions for fast, easy maintenance of the entire power train help end users minimizing scheduled maintenance downtime.

Bonfiglioli's wide range of inverters allows special "complete drive solutions" for hoist, trolley and travel drives. Our closed loop inverters feature special functions like "brake release control" and "field weakening motor speed control" improve safety and increase productivity in hoisting operations. Our open loop inverters feature an innovative "stand-by" function to maximise the efficiency of trolley and travel drives under no-load conditions.

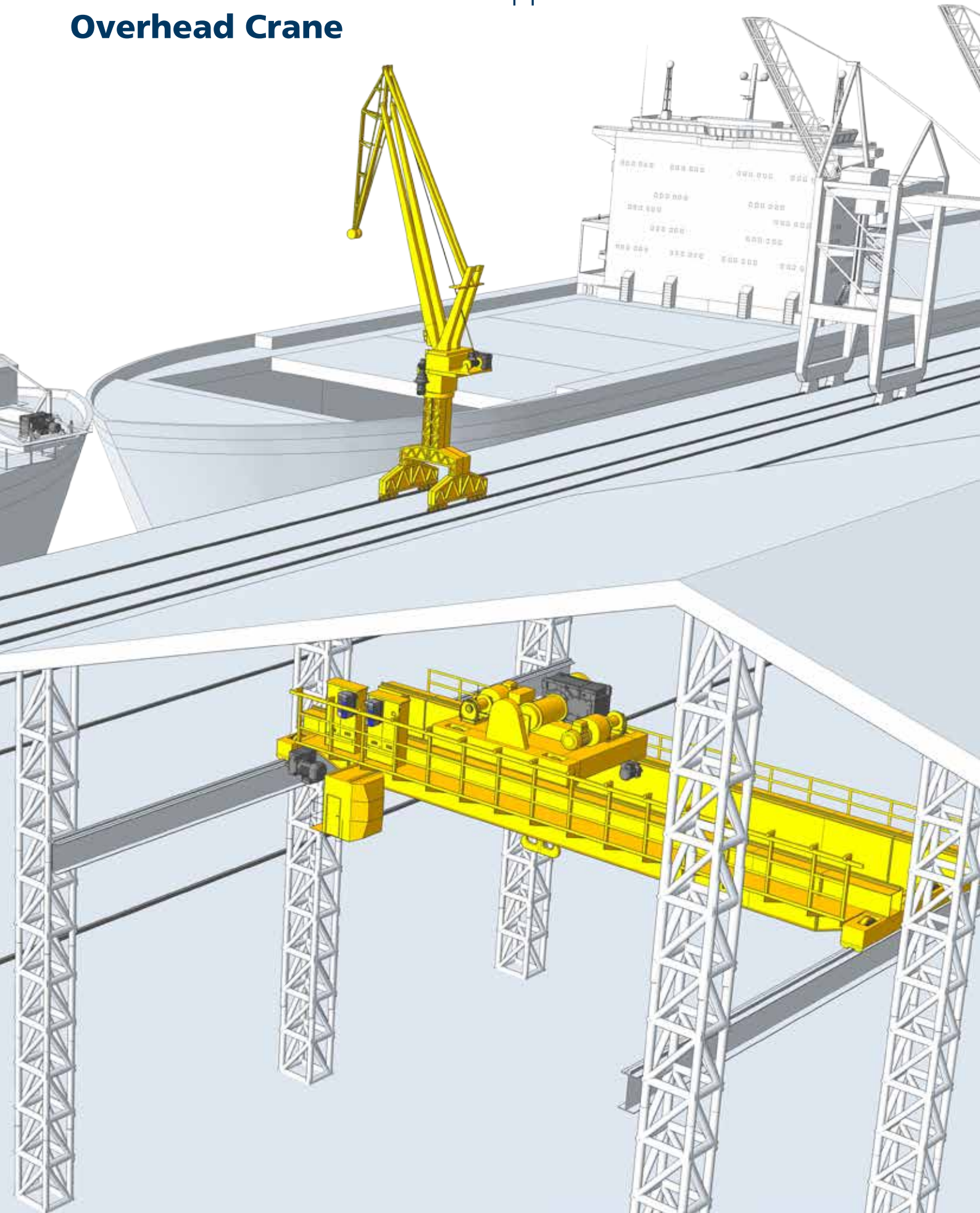
Bonfiglioli's vast expertise, acquired through long term partnerships with some of the world's leading manufacturers of lifting equipment, is at disposal of crane and hoist constructors around the world. Our widespread sales and service network ensures the availability of spare parts and technical support, anytime and anywhere.

# Solutions for terminal and harbour outdoor applications

## **Gantry Crane**



Solutions for industrial indoor applications  
**Overhead Crane**

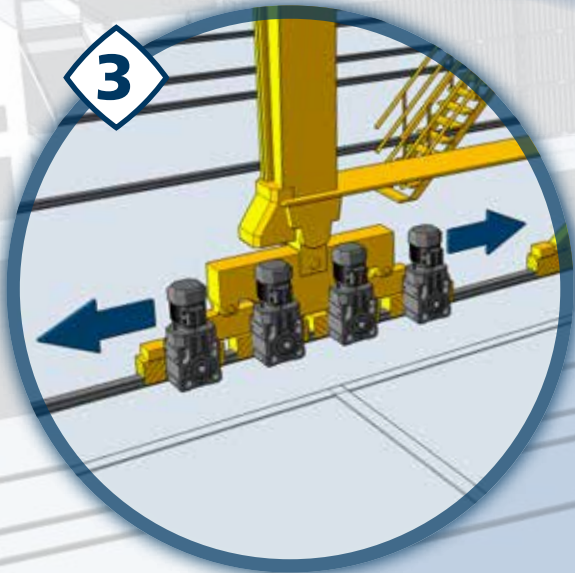
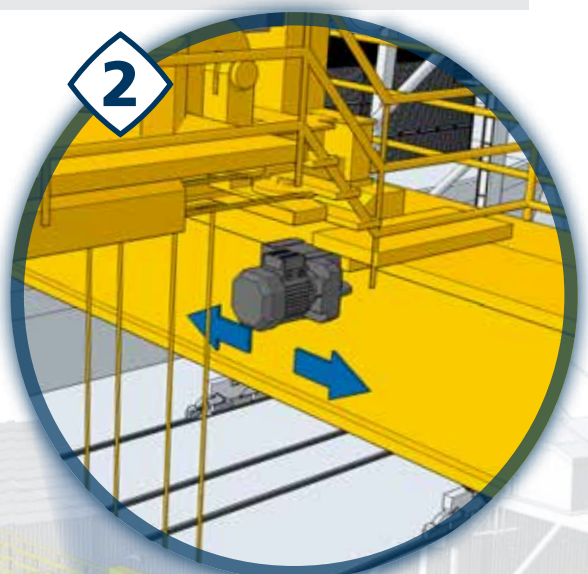
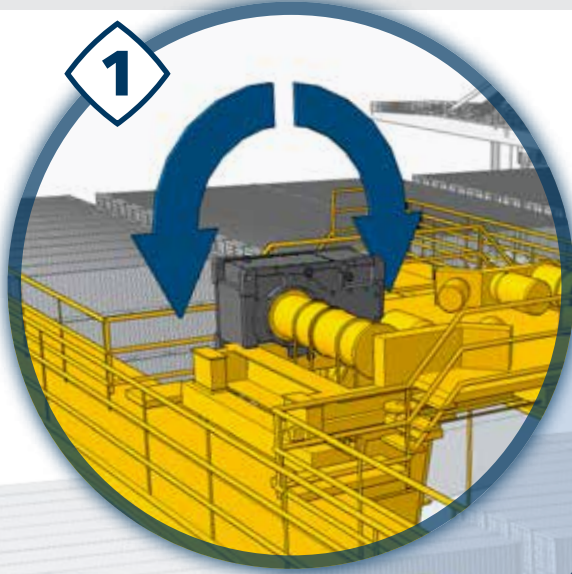


# Solutions for terminal and harbour outdoor applications

## Gantry Crane

### Customized solutions, service and support

- Pre-Sales support and co-engineering (FEM standard analysis, gears and bearings lifetime calculation according to required standards, load verifications etc.)
- Technical features as per Customer needs (special output shaft design and auxiliar devices like brakes, couplings etc.)
- Severe environment condition solutions (painting, seals etc.)
- Accessories for motion control and safety (inverters, motors, encoders, brakes etc.)
- Shaft mounted solutions with torque arm or solutions with baseplate



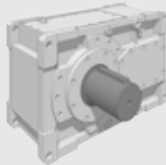
## Solutions for **Hoist of Gantry Crane**



### **HDP series**

**Torque range**  
5000 ... 210000 Nm

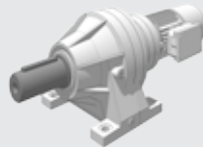
**Gear ratios**  
7.1 ... 500



### **300 series**

**Torque range**  
1250 ... 1286000 Nm

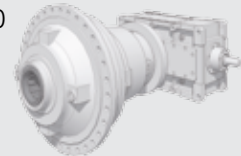
**Gear ratios**  
3.4 ... 5234



### **3/H series**

**Torque range**  
98000 ... 1200000 Nm

**Gear ratios**  
100 ... 1000



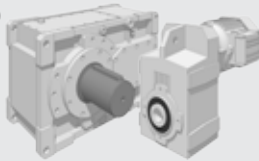
## Solutions for **Trolley of Gantry Crane**



### **F series / HDP series**

**Torque range**  
140 ... 210000 Nm

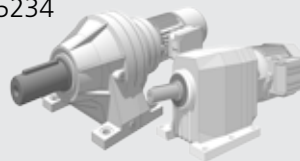
**Gear ratios**  
6.4 ... 2099



### **300 series / C series**

**Torque range**  
45 ... 1286000 Nm

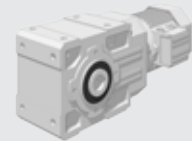
**Gear ratios**  
2.6 ... 5234



### **A series**

**Torque range**  
100 ... 14000 Nm

**Gear ratios**  
5.4 ... 1715



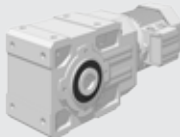
## Solutions for **Travel of Gantry Crane**



### **A series**

**Torque range**  
100 ... 14000 Nm

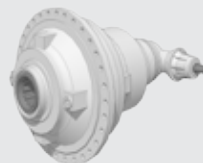
**Gear ratios**  
5.4 ... 1715



### **300R series**

**Torque range**  
1000 ... 500000 Nm

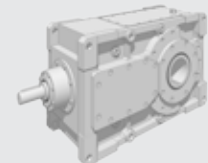
**Gear ratios**  
7.13 ... 953



### **HDO series**

**Torque range**  
28200 ... 210000 Nm

**Gear ratios**  
5.6 ... 400

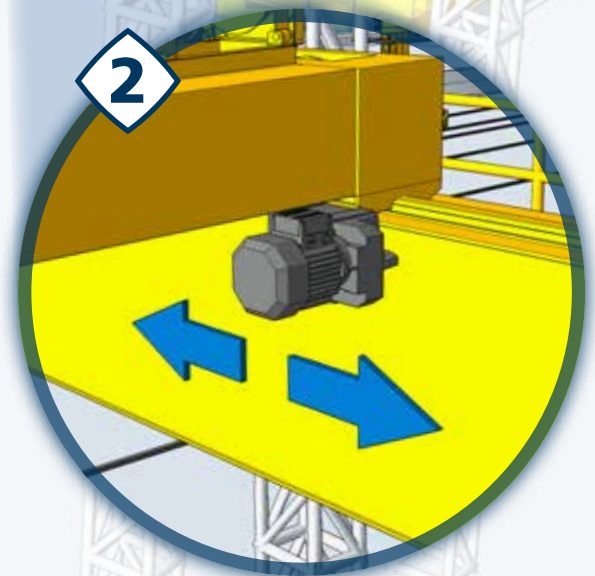
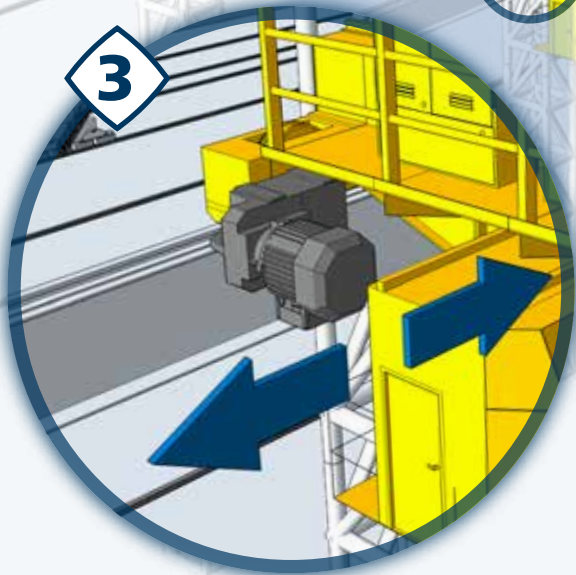
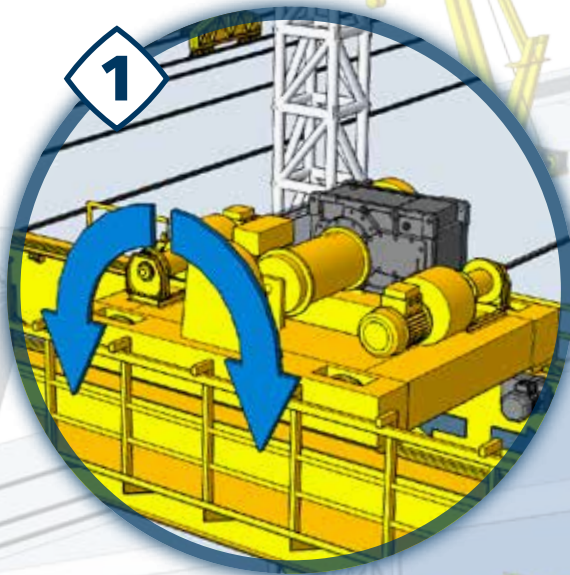


# Solutions for industrial indoor applications

## Overhead Crane

### Benefits for the customer

- Productivity, reliability and robustness
- Extensive, modular product range
- Tailored service and warranty plans
- Long term experience in crane drive control
- Lower thermal losses
- Selectable sine or square wave feedback current
- Load-dependent hoisting speed
- Extended brake control
- Built-in "Safe torque off" function





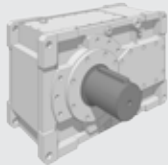
## Solutions for **Hoist of Overhead Crane**



### **HDP series**

**Torque range**  
5000 ... 210000 Nm

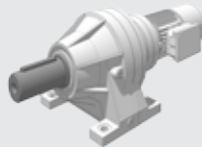
**Gear ratios**  
7.1 ... 500



### **300 series**

**Torque range**  
1250 ... 1286000 Nm

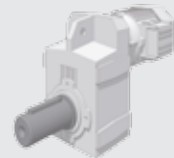
**Gear ratios**  
3.4 ... 5234



### **F series**

**Torque range**  
140 ... 14000 Nm

**Gear ratios**  
6.4 ... 2099



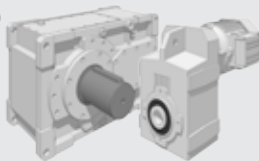
## Solutions for **Trolley of Overhead Crane**



### **F series / HDP series**

**Torque range**  
140 ... 210000 Nm

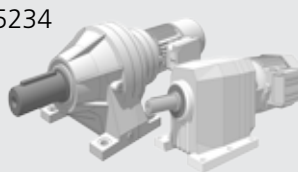
**Gear ratios**  
6.4 ... 2099



### **300 series / C series**

**Torque range**  
45 ... 1286000 Nm

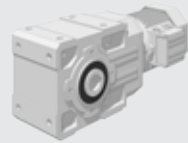
**Gear ratios**  
2.6 ... 5234



### **A series**

**Torque range**  
100 ... 14000 Nm

**Gear ratios**  
5.4 ... 1715



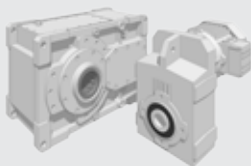
## Solutions for **Travel of Overhead Crane**



### **F series / HDP series**

**Torque range**  
140 ... 210000 Nm

**Gear ratios**  
6.4 ... 2099



### **300 series / A series**

**Torque range**  
100 ... 1286000 Nm

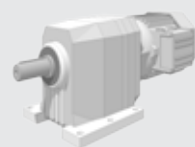
**Gear ratios**  
3.4 ... 5234



### **C series**

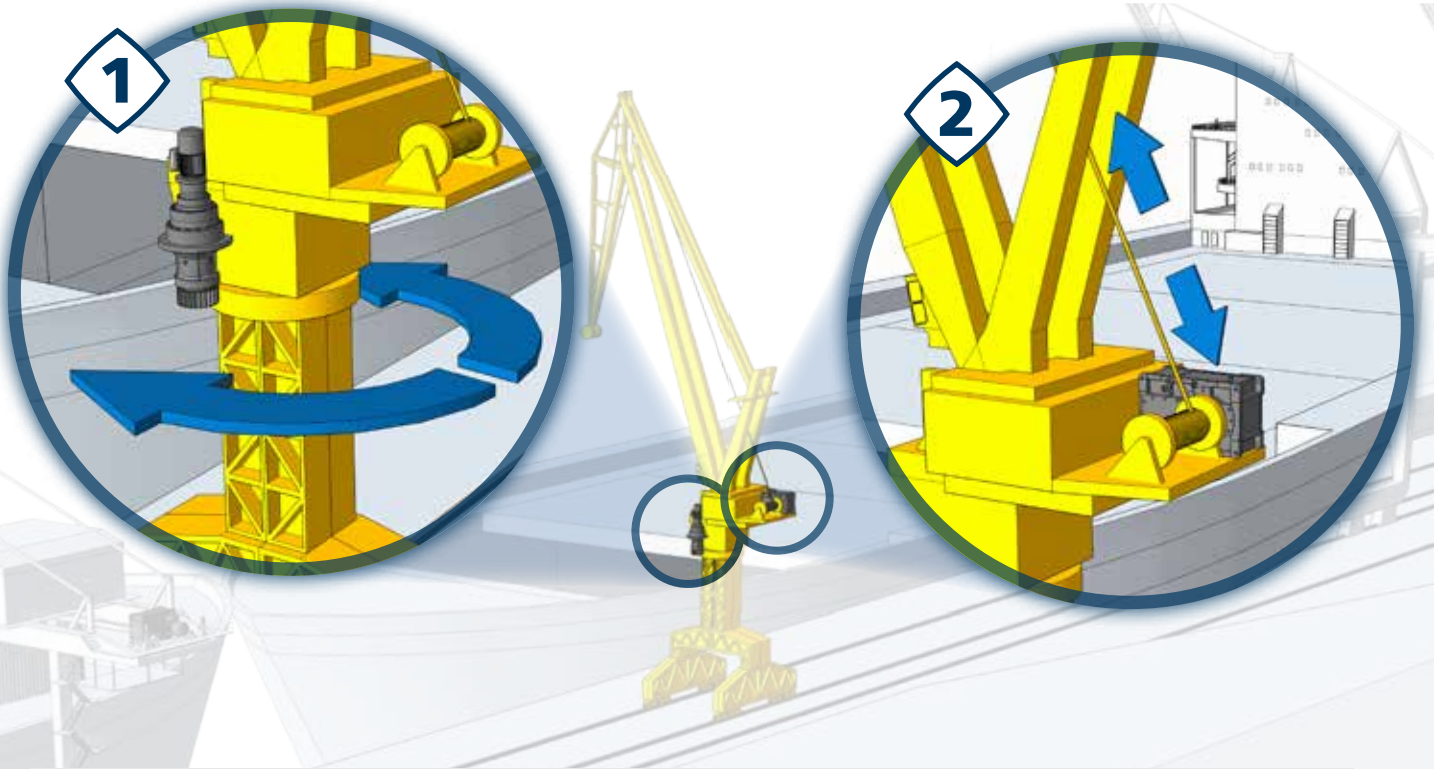
**Torque range**  
45 ... 12000 Nm

**Gear ratios**  
2.6 ... 1481



# Solutions for terminal and harbour outdoor applications

## **Boom Shipyard** single and double



### **1** Solutions for **Slewing Drive of S/D Boom Shipyard**

#### **300 series SCN/SCF-SEN/SEF**

**Torque range**  
2000 ... 65000 Nm

**Note**  
Calculation Ref. **FEM T5 L2 M5**  
Output speed  $n_2 = 15$  rpm

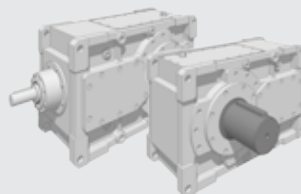


### **2** Solutions for **Hoist of S/D Boom Shipyard**

#### **HDO series / HDP series**

**Torque range**  
5000 ... 210000 Nm

**Gear ratios**  
7.1 ... 500



# Motion and Control Solutions



## Regenerative & Servo Drive

### Active Cube series

#### Power range

ACU401: 0.25 ... 400 kW\*

ACU201: 0.25 ... 9.2 kW

(\*1200 kW in parallel connection)



#### Additional benefits

- Highest power density in the market
- "Safe Torque Off" function
- PLC as integrated functionality
- Open/Closed speed loop control
- Integrated positioning control
- Advanced motor brake control
- Availability of the most used fields bus
- Availability of additional I/O

### Agile series

#### Power range

AGL402: 0.25 ... 11 kW

AGL202: 0.12 ... 7.5 kW



#### Additional benefits

- Highest power density in the market
- "Safe Torque Off" function
- PLC as integrated functionality
- Advanced motor brake control
- Availability of the most used fields bus

### AEC series (Regenerative unit)

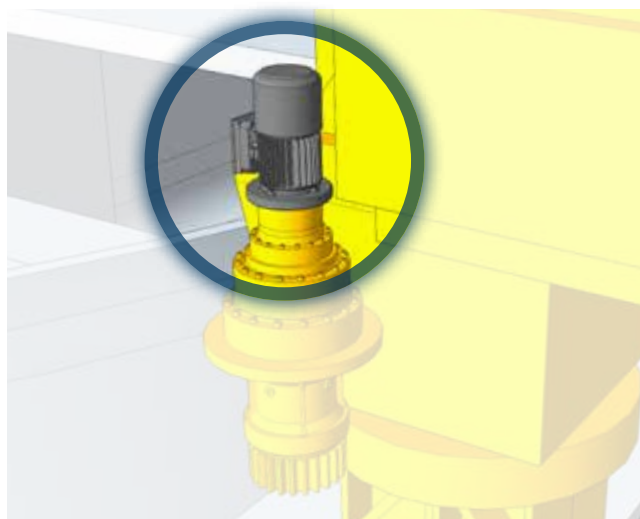
#### Power range

9.7 ... 173.2 kVA



#### Additional benefits

- Highest power density in the market
- Active brake unit to recover the braking energy
- Availability of the most used fields bus
- Availability of additional I/O



## AC Motors

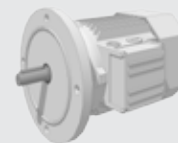
### M/BN series (Brake motor)

#### kW rating (4 pole)

0.06 ... 30 kW

#### Pole numbers

2, 4, 6, 8, 2/4, 2/6, 2/8, 2/12, 4/6, 4/8



#### Main Options

- DC brake [FD]
- Separate brake supply
- Microswitch
- Protection degree up to IP55
- Incremental and absolute Encoder availability
- Thermal protection (Bi-metallic or Ptc)
- Heater and tropicalization
- Anti-condensate drain

### ME/BE - MX/BX series

#### kW rating (4 pole)

0.75 ... 22 kW

#### Pole numbers

2, 4, 6 (MX/BX 4 poles only)



IE2

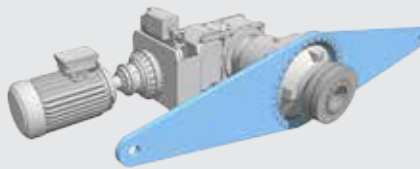
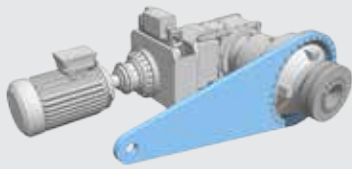
IE3

#### Main Options

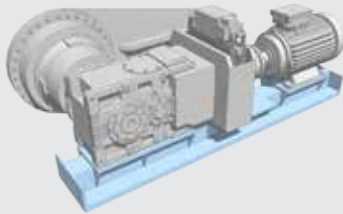
- High efficiency motors
- Protection degree up to IP65
- Incremental and absolute Encoder availability
- Thermal protection (Bi-metallic or Ptc)
- Heater and tropicalization
- Anti-condensate drain

# Accessories

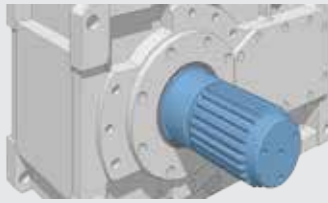
**Torque Arm**



**Baseplate**



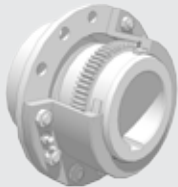
**Splined shaft**



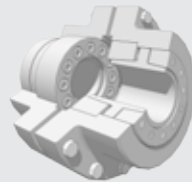
**Splined shaft + Flange coupling**



**Splined Coupling**



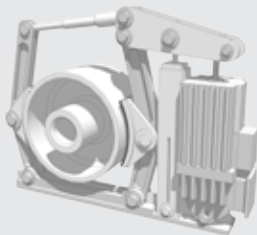
**Flange Coupling**



**Self Aligning Coupling**



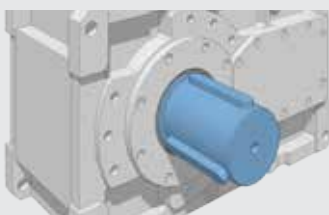
**Shoe Brake**



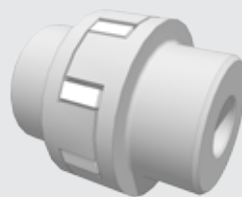
**Disk Brake**



**Double Key way (120°)**

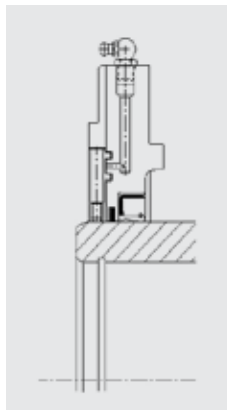


**Special Elastic Coupling**



## Heavy Environment Solutions

- Double seals
- Viton seals
- Taconite seals
- Heaters, Greaser, Sensors (Low temperature, dust environment)
- Special painting (Marine, dust environment)



*Taconite seals*



*Heater wire*

## Customer Support & Certifications

- Application support and product selection
- Gearboxes calculations (FEM analysis, Life time ISO 281, ISO 6336, AGMA)
- Gearboxes test certificates



On request:

- Quality documentations and certifications
- Certifications (DNV, LLOYD, ABS..)

# Bonfiglioli Worldwide Presence

Bonfiglioli is located in regions and countries around the world that enable us to provide faster sales and service to customers. Our network includes more than 35 service centers worldwide, with 12 facilities that manufacture and assemble products that are specific to the mining industry.

**We are around the world, and around the corner.**



★ HEADQUARTERS    B BRANCHES    🏭 PRODUCTION FACILITIES

## LOCAL SUPPORT



SALES, CUSTOMER SERVICE, WARRANTY, TECH SUPPORT, SPARE PARTS

22 BRANCH OFFICES IN 16 COUNTRIES



WORLDWIDE DISTRIBUTION NETWORK



# Bonfiglioli Worldwide Locations

## **Bonfiglioli Australia**

www.bonfiglioli.com.au  
2, Cox Place Glendenning NSW 2761  
Locked Bag 1000 Plumpton NSW 2761  
Tel. (+ 61) 2 8811 8000 - Fax (+ 61) 2 9675 6605

## **Bonfiglioli Brasil**

www.bonfigliolidobrasil.com.br  
Travessa Cláudio Armando 171  
Bloco 3 - CEP 09861-730 - Bairro Assunção  
São Bernardo do Campo - São Paulo  
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**Industrial**  
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**O&K Antriebstechnik**  
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## **Bonfiglioli South Africa**

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## **Bonfiglioli Türkiye**

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Atatürk Organize Sanayi Bölgesi, 35620 Çiğli - İzmir  
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**Mobile, Wind**  
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Warrington - Cheshire WA1 4SF  
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## **Bonfiglioli USA**

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3541 Hargrave Drive Hebron, Kentucky 41048  
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## **Bonfiglioli Vietnam**

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Ben Cat - Binh Duong Province  
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We have a relentless commitment to excellence, innovation and sustainability. Our team creates, distributes and services world-class power transmission and drive solutions to keep the world in motion.



#### **HEADQUARTERS**

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fax: +39 051 647 3126  
bonfiglioli@bonfiglioli.com  
www.bonfiglioli.com