



# Crane Gearboxes and Drives



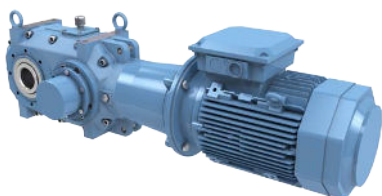
**Innovative Solutions  
Creating Efficiency**

# Comprehensive Gearbox Programs for Crane Applications

**KUMERA manufactures gearboxes and power transmission components with more than 70 years of experience. The gearbox portfolio for crane applications has been divided into three main gearbox categories, which are listed below.**

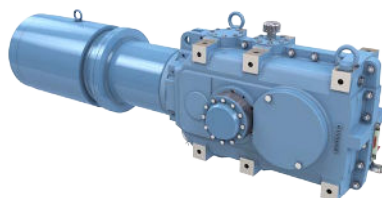
## CRANE GEARBOX FACTS

Feature	Benefits & Values
Wide range of different gearbox sizes	Gives an opportunity to choose the most cost effective solution
Wide range of different gearbox ratios	Possible to meet the requirements of different rotation speeds in process
Long lasting product series with proven technology	Increases reliability and decreases lead times from inquiry to delivery
Optimized thermal power	Optimizing the gearbox by thermal power makes the standard gearbox more suitable to various applications
Optimized tooth profiles using latest calculation tools	Better load distribution and lower dynamic forces reduce stresses and increase gear life
Customizable surface treatment	Various color shades and painting systems ensure customizability and maximum surface resistance to demanding surroundings



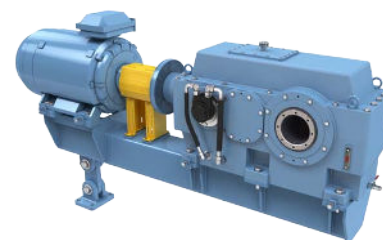
### CUMPACK™ F gearboxes

- Shaft distance 80 mm – 200 mm
- Output torque 0,53 kNm – 12,2 kNm
- Gearbox ratios 5,6:1 – 1600:1
- Nominal power up to 195 kW
- Helical and helical-bevel gear configurations
- Equipped with lip seals



### CUMPACK™ G gearboxes

- Shaft distance 225 mm – 400 mm
- Output torque 17,5 kNm – 100 kNm
- Gearbox ratios 5,6:1 – 3550:1
- Nominal power up to 2850 kW
- Helical and helical-bevel configurations available
- Can be equipped with standard lip seals or Taconite- type seals



### CUMERA D gearboxes

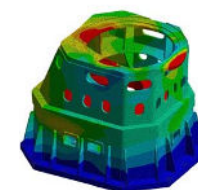
- Shaft distance 450 mm – 710 mm
- Output torque 155 kNm – 610 kNm
- Gearbox ratios 5,6:1 – 630:1
- Nominal power up to 11 MW
- Helical and helical-bevel gear configurations
- Can be equipped with standard lip seals or Taconite- type seals

### CRANE DRIVE REFERENCES

BM Titan, Figeo, Imenosa, Kalmar/Nelcon, Konecranes, Nieuwe Boomse, NKM, Samsung Heavy Industries, Ulstein Verft

### Calculation and sizing standards

- Gearbox selection and design meets requirements for crane applications
- The dimensioning of gearboxes complies with requirements of heavy lifting and handling equipment guidance FEM 1.001
- The gearboxes conform to the requirements of standard series EN 13001
- The gear teeth calculations are based on ISO standards. Calculation based on other standards such as DIN and AGMA are available on request.
- Optimum dimensions for the housing are determined using finite element analysis (FEA)
- Certifications of classification societies are available





# Gearbox Health Monitoring

## Guard Gear 4.0

Guard Gear 4.0 is the 4th generation of Kumera Health Monitoring services for essential process applications.

By choosing Guard Gear 4.0 together with Kumera gearboxes, it is possible to predict possible failures in critical processes. This is an additional advantage in safety and long-lasting operations of Kumera Gearboxes.

### HEALTH MONITORING

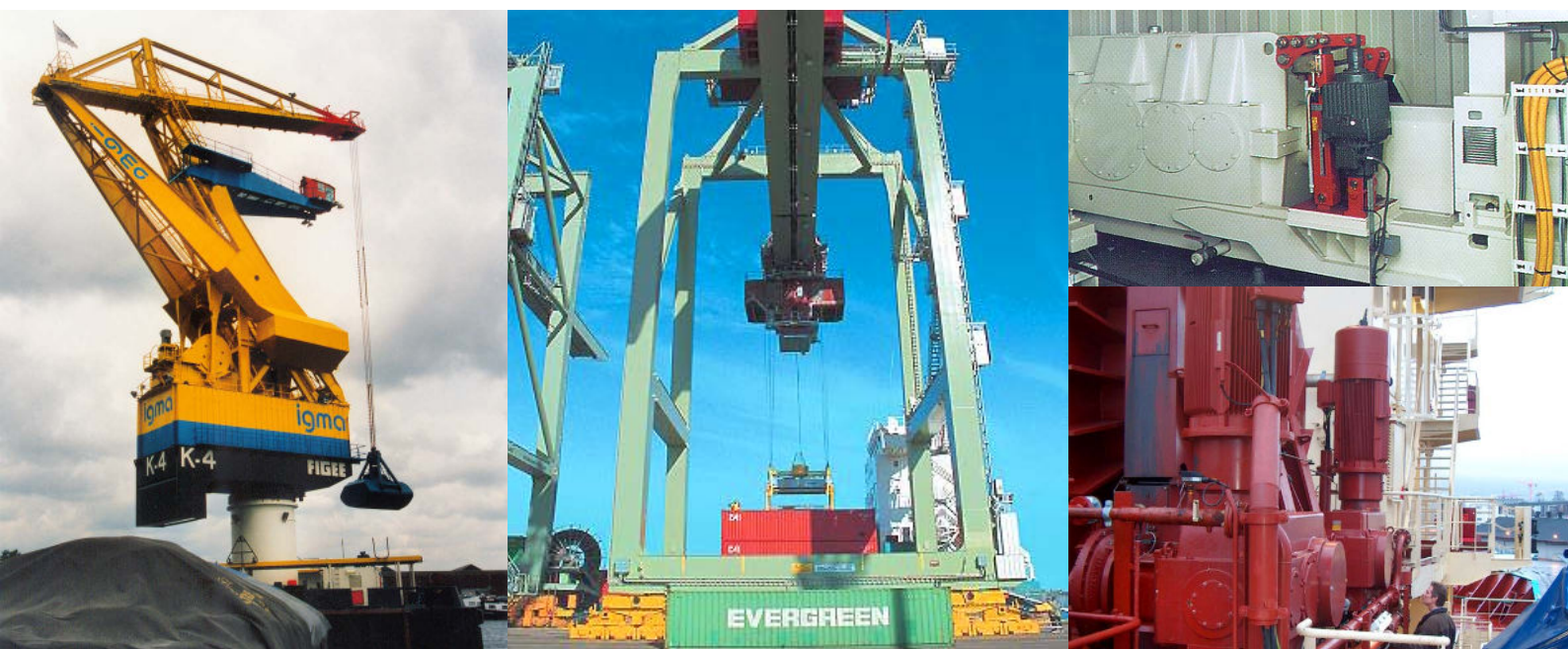


## Guard Gear 4.0

- Guards Your Gear 24/7 -

### REAL TIME MONITORING

- Early-stage detection of upcoming failure or changes in oil condition
- Easy access via your personal computer or mobile device regardless of gearbox's physical location
- Data is transferred automatically in real time to a cloud service via mobile data



# POWER-PLAZA.COM

Kumera Power-Plaza is a portal for our customers to make gearbox selections by informing the requirements for application. The 2D and 3D drawings on selected gearboxes are available as well as possibility to make purchases. Spare parts ordering through Power-Plaza is easy. Bill of Materials (BOM) and Assembly drawing is available for every gearbox delivered by Kumera.

**KUMERA** provides a comprehensive range of products for a wide variety of applications in all the major process industries. Kumera has more than 70 years of experience as manufacturer of mechanical power transmissions for industrial and marine applications. There are more than 200.000 Kumera gear units in operation in about 40 countries.



HELICAL GEAR UNITS,  
CUMPACT F-RANGE



HELICAL GEAR UNITS,  
CUMPACT G-RANGE



ONE STAGE HELICAL  
GEAR UNITS  
KUMERA LX-RANGE



HEAVY DUTY HELICAL  
GEAR UNITS,  
CUMERA D-RANGE



BEVEL GEAR UNITS,  
CUMPACT F-RANGE



BEVEL GEAR UNITS,  
CUMPACT G-RANGE



HEAVY DUTY BEVEL  
GEAR UNITS,  
CUMERA D-RANGE



AGITATOR GEAR UNITS,  
SG-RANGE



HEAVY DUTY AGITATOR  
GEAR UNITS,  
E-RANGE



WORM GEAR UNITS,  
COVERA RANGE



COMBINATION HELICAL  
AND WORM GEAR UNITS,  
COVERA RANGE



HEAVY DUTY AGITATOR  
GEAR UNIT WITH  
FILTERING UNIT, E-RANGE



WIND UP AND UNWIND  
GEAR UNITS,  
LP-RANGE



ONE STAGE HELICAL  
GEAR UNITS,  
CUMERA LH-RANGE



YANKEE CYLINDER  
GEAR UNITS



SPECIAL GEAR UNITS



BEVEL GEAR UNITS,  
KA-RANGE



FRONT END GEAR UNITS,  
NORGEAR-RANGE



INTEGRATED ROLL  
GEAR UNITS,  
TP-RANGE



PLANETARY  
GEAR UNITS,  
P-RANGE

## KUMERA POWER TRANSMISSION GROUP

[www.kumera.com](http://www.kumera.com)



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# Kumera Corporation

Kumera Corporation is a worldwide manufacturer of industrial machinery and engineering services. The corporation consists of four major operating divisions:

**Power Transmission Group** provides a comprehensive range of industrial and marine gearboxes for all major process industries. Kumera has more than 50 years of experience as manufacturer of mechanical power transmissions. There are more than 200.000 Kumera gear units in operation world-wide.

**Technology Division** specializes in state-of-the-art engineering and heavy process equipment for metallurgical and environmental industries. Kumera has successfully performed several modernization projects for metals industry and is a leading manufacturer of industrial steam dryers for copper and nickel smelters and lignite.

**Foundry Division** with **Peiron Oy** as the leading company produces all types of steel and iron castings, forming a link in the vertical refining chain of Kumera Corporation.

**Marine Division** produces propulsion gearboxes and propellers including control systems for any seafaring vessels.

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## Sales

Please feel free to send your offer request to:  
**sales@kumera.com**  
Your message will be answered within the next business day.

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## Emergency Repair Service & Maintenance 24/7

**- All major brands and manufacturers**

### EMERGENCY REPAIR SERVICE FOR INDUSTRIAL GEARBOXES

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E-mail: service.graz@kumera.com

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E-mail: service@kumera.com

#### GERMANY

Phone: +49 2241 988 - 0  
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### EMERGENCY REPAIR SERVICE FOR MARINE GEARBOXES AND PROPELLERS

#### NORWAY

**Marine Gearbox Service**  
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#### Marine Propeller Service

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