



## Power generation

rossi.com





# Power generation

Green transition requires products with manufacturing improved efficiency, proper of Rossi skillness and attitude. Lubrication patented design helical gearmotors for ACC and or bevel helical gear units both with monolithic casing, CTI compliant, provides a full range of drives for Cooling Tower and ACC applications.

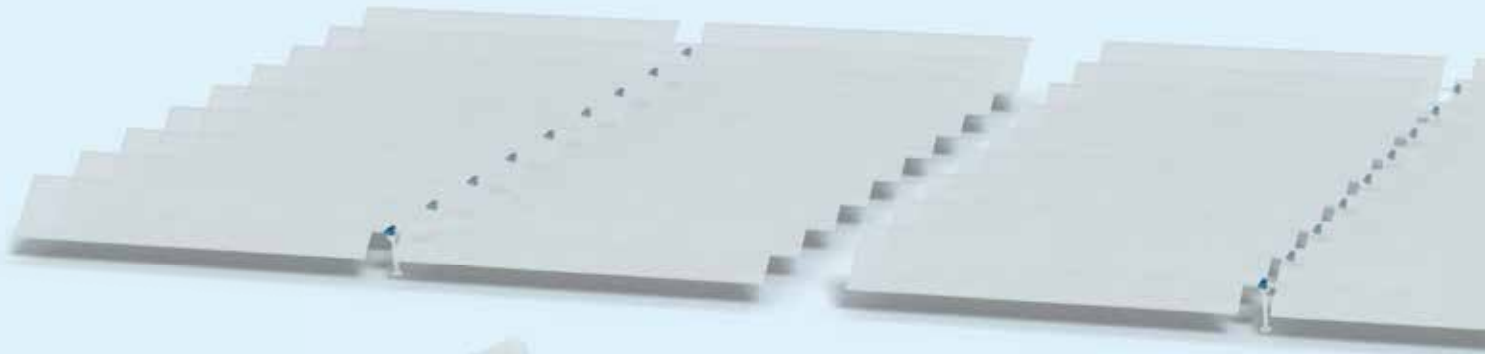
Following sector requirement, the 3 years standard warranty on the entire range of gear units can be provided with an extension option when needed. Low noise level as well as low running temperature are certified by the running test on load performed at the end of the assembly line with the gear unit installed in the application correct mounting position.



Power generation



# Power generation



Air Cooled Condensers ACC

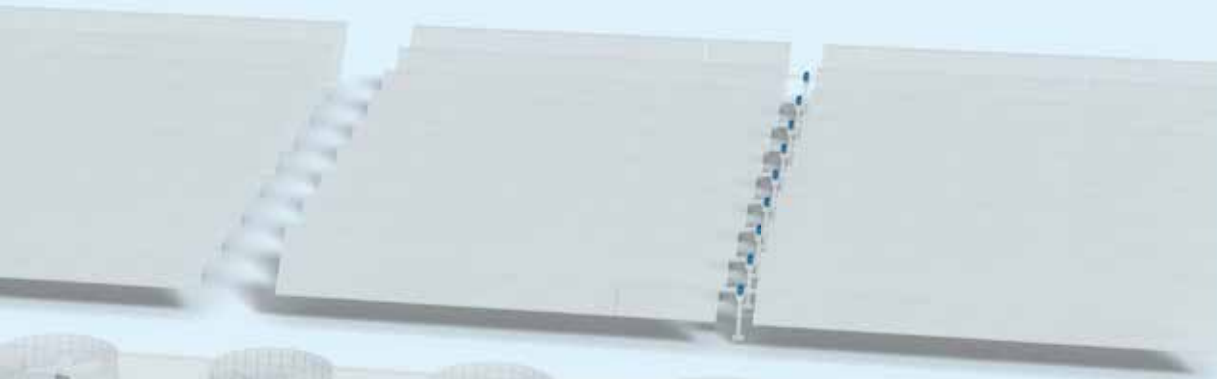


Biogas digesters

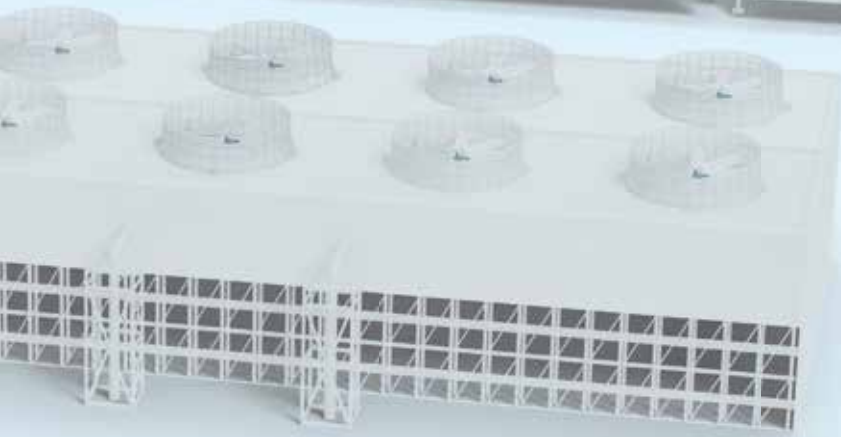


Hydrodynamic screw

**Photovoltaic plant**

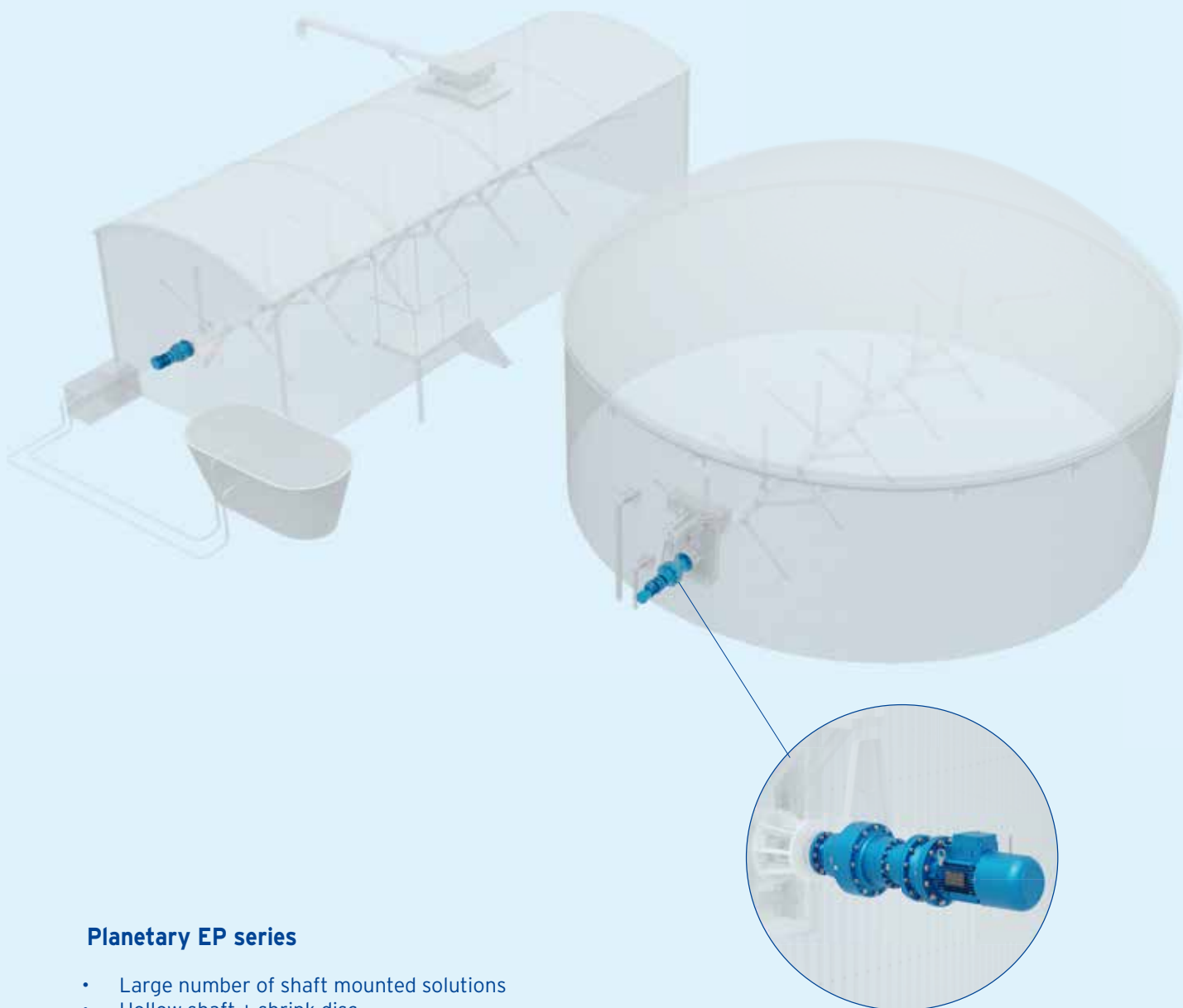


**Air Cooled Condensers ACC**



**Cooling towers**

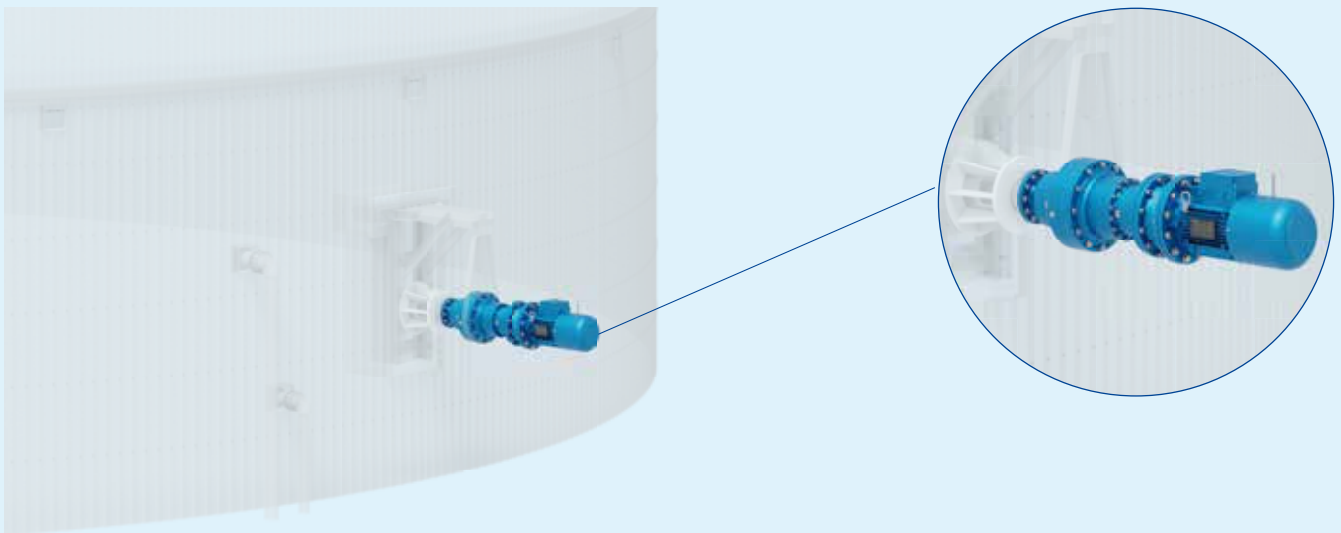
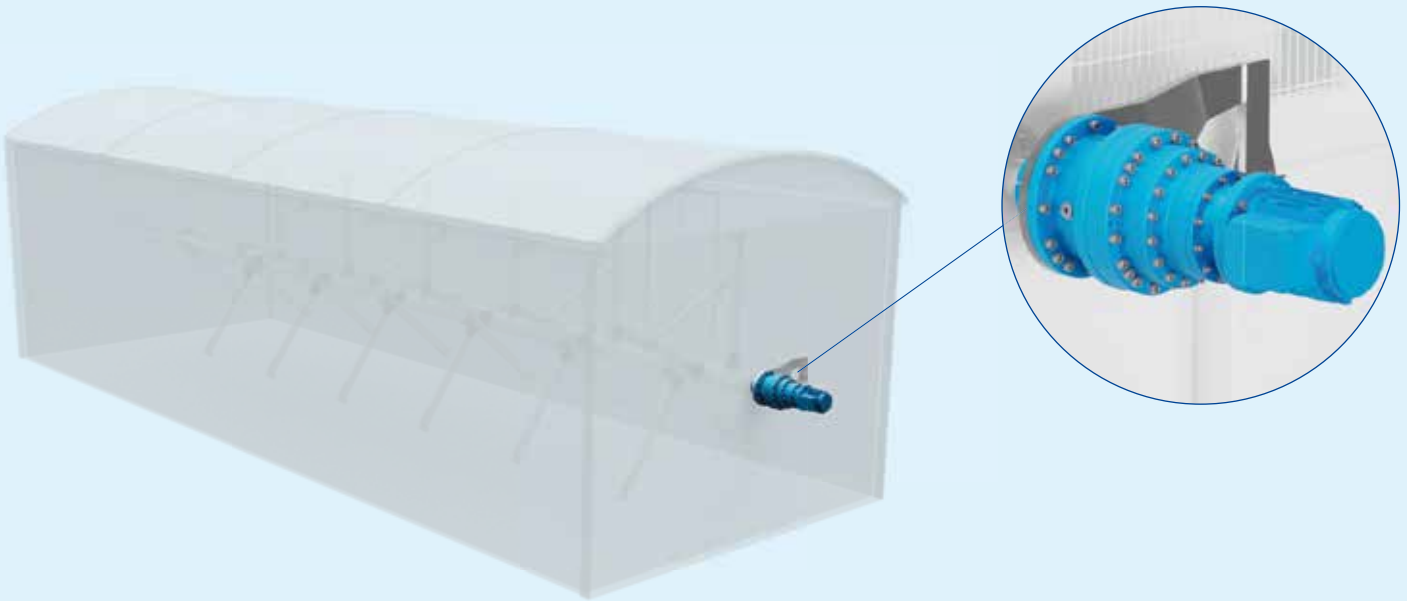
# Biogas digesters



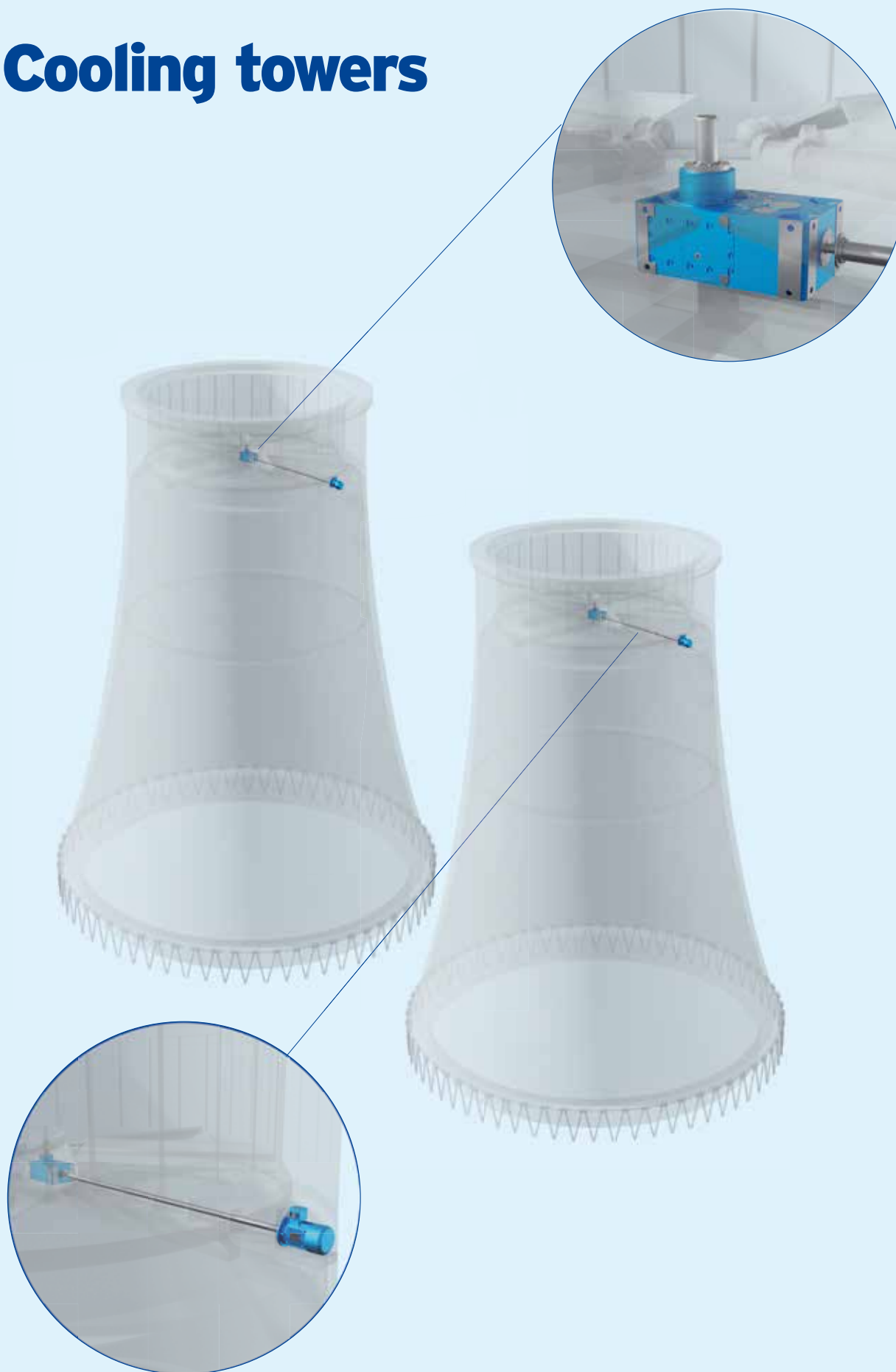
## Planetary EP series

- Large number of shaft mounted solutions
- Hollow shaft + shrink disc
- Hollow shaft with keyway for easy mounting
- Integrated or loose wheel flange for easy maintenance and space saving
- Torque arm (cantilever)



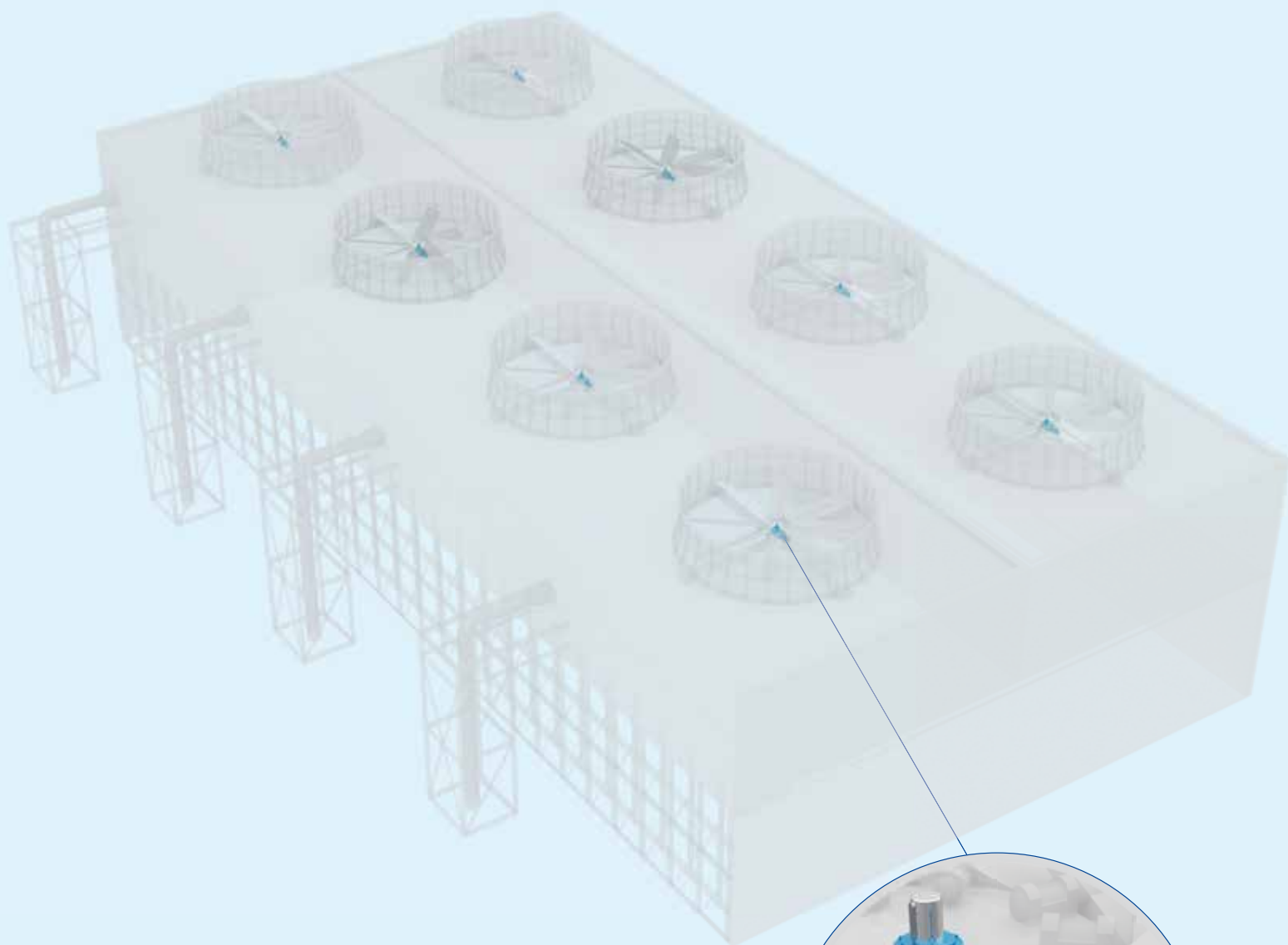


# Cooling towers



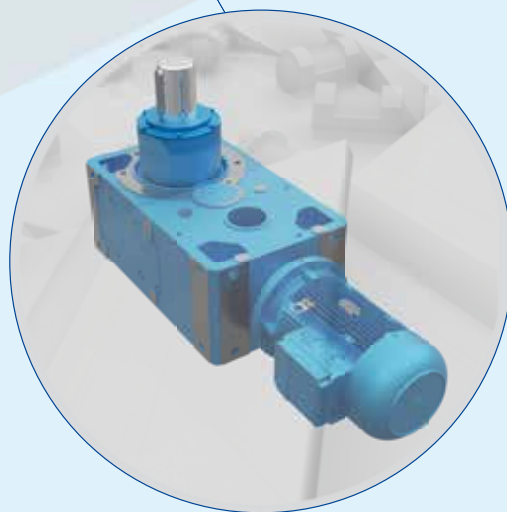


# Air Cooled Condensers ACC

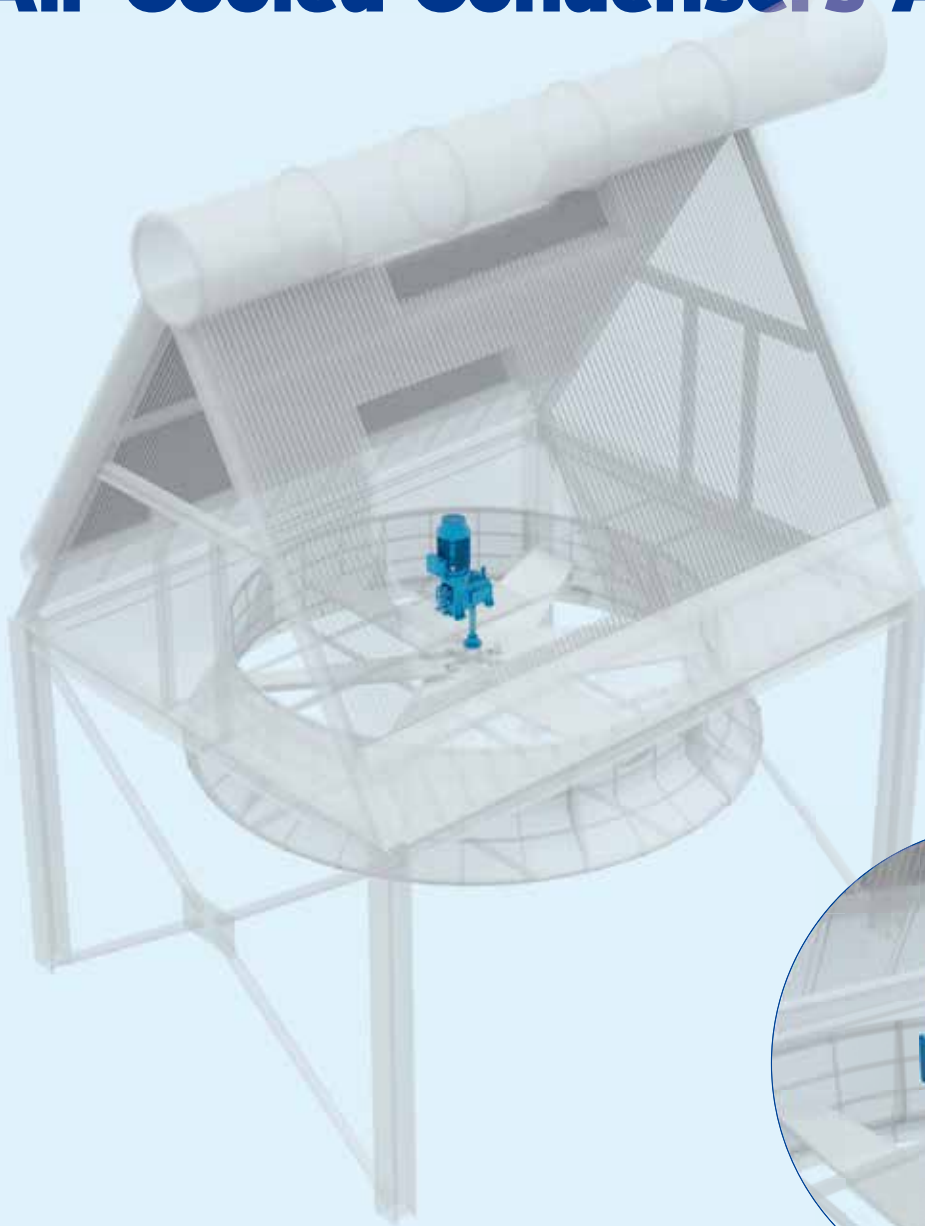


## Helical & Bevel helical G series

- C4 and C5 class surface protection according to UNI EN 12944-2 available
- Customized solutions available on request
- Suitable for foot mounting



# Air Cooled Condensers ACC



## Helical G series with PP5A design

- Helical gearboxes in vertical mounting position
- High reliability, AGMA service factor  $> 2$  according to CTI 167
- Long life, bearings calculated life time  $> 100,000$  h according to CTI 167
- (Patented) oil bath lubrication system
- Electric motor bell housing with axial fan and heat exchanger for gearbox cooling
- Integrated foot mounted housing
- Patented lubrication circuit: no pressure, with slave pump, reduced oil quantity, and all oil bathed bearings
- Possibility of bidirectional oil slave pump
- Increased gearbox thermal capacity
- Possibility of cold starting from to  $-15$  °C and oil temperature pre-heating
- Lower output shaft bearing protected with dry well solutions

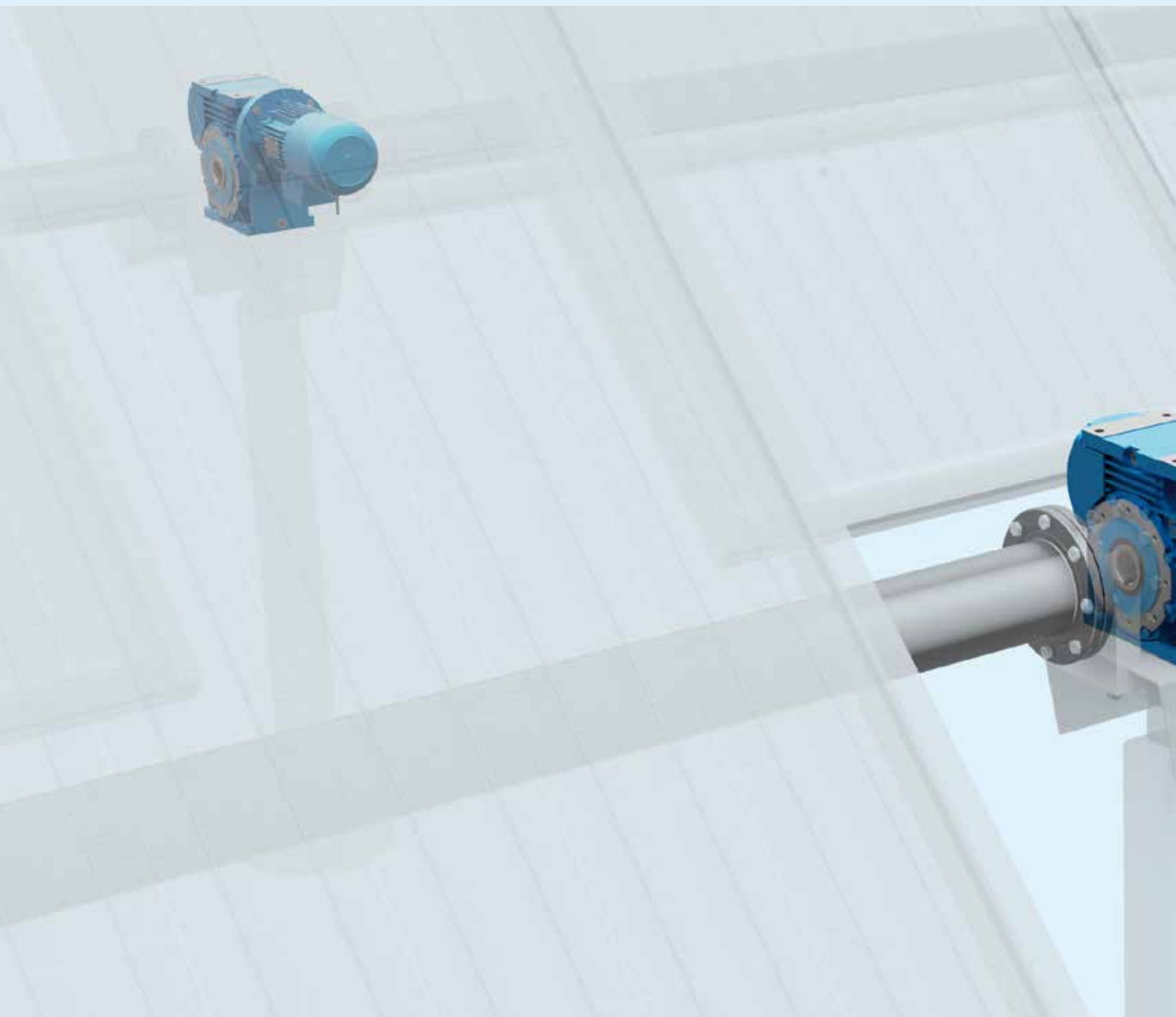
# Hydrodynamic screw

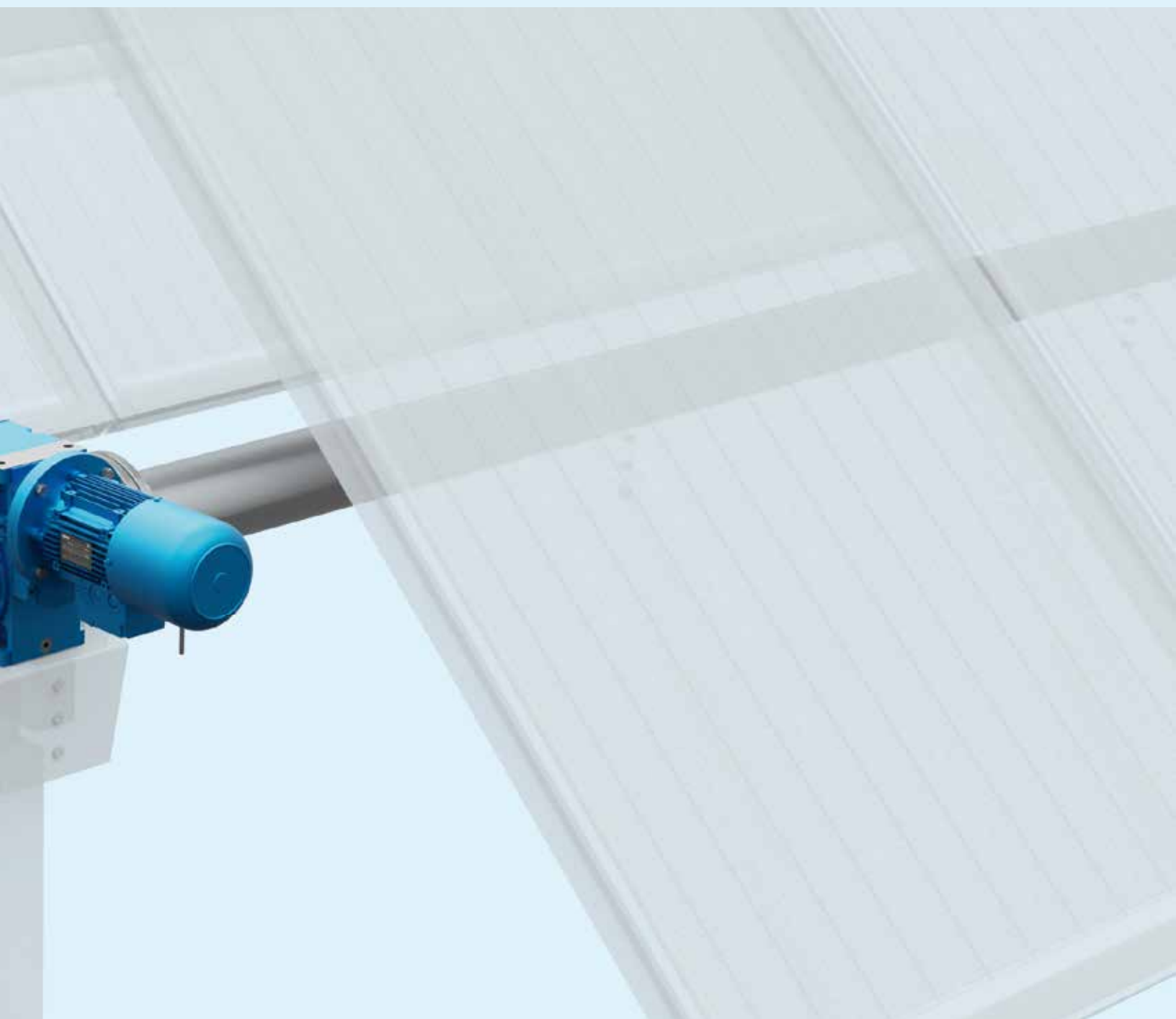


## Helical & Bevel helical G and H series

- C4 and C5 class surface protection according to UNI EN 12944-2 available
- Customized solutions available on request
- Suitable for foot mounting

# Solar tracker





### **Worm A series**

- Universal mounting with integral feet
- Rigid and precise cast iron single piece housing

### EP Series

#### Planetary gear reducers & gearmotors

24 sizes 001 ... 3,000

Nominal torque ( $T_{N2}$ ) up to 26,550,000 lb in

Transmission ratio ( $i_N$ ) 3.55 ... to unlimited

##### Features

- Multiple input stages in inline or right angle configurations
- Modular design
- Suitable with NEMA, IEC motors or hydraulic input
- Final stage gear set case carburized & ground with nitriding on internal sun gears
- GLEASON spiral bevel gear pairs with ground profile
- Very compact size
- Wide range of accessories and non-standard designs
- Low backlash, enhanced stiffness and heavy duty bearings as a standard
- Wide range of hydraulic brakes
- Optional synthetic oil for food industry

##### Benefits

- Easy and functional flange, foot, or shaft-mounting design
- High torque transmitted
- Extended range of transmission ratios



### EP Slewing Series

#### Planetary Slewing drives

10 sizes 007 ... 250

Nominal torque ( $M_{N2}$ ) up to 3,540,000 lb in

Transmission ratio ( $i_N$ ) 12.5 ... 2,800

Excellent specific series from the standard EP series

##### Additional features

- 10 modular sizes
- 3 different output supports: Dual pilot flange (R), Dual compact pilot design (S), single pilot flange (H)
- Loose or integral slewing pinions available
- Wide range of hydraulic brakes

##### Additional benefits

- Wide range of drives allows for very high performance while being cost-efficient



## G Series

### Helical & bevel helical gear reducers & gearmotors

20 sizes 40 ... 401

Nominal torque ( $T_{N2}$ ) up to 900,000 lb in

Transmission ratio ( $i_N$ ) 2 ... 160

#### Features

- Single piece cast or ductile iron housings available. Machine face on all 4 sides
- Wide range of sizes & ratios available
- Suitable for NEMA or IEC motor inputs
- Extended housing design for large center to center distance requirements
- Case carburized gear sets
- Helical gear pairs with ground profile
- Ground GLEASON spiral bevel gear set
- Bell housing for IEC and NEMA motors available

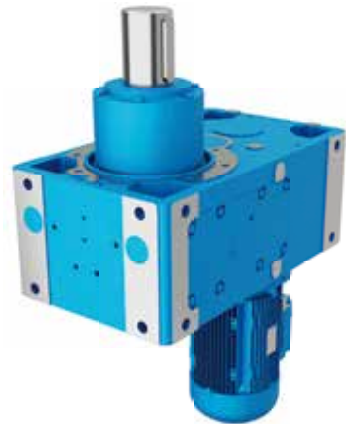
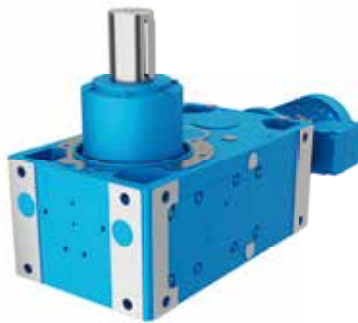
#### Benefits

- Modular design allows for flexibility in mounting positions
- Minimum maintenance requirements
- High performance and reliability
- Strength and reliability for heavy duty applications



## G Series

### Agitator output design for Cooling towers and ACC



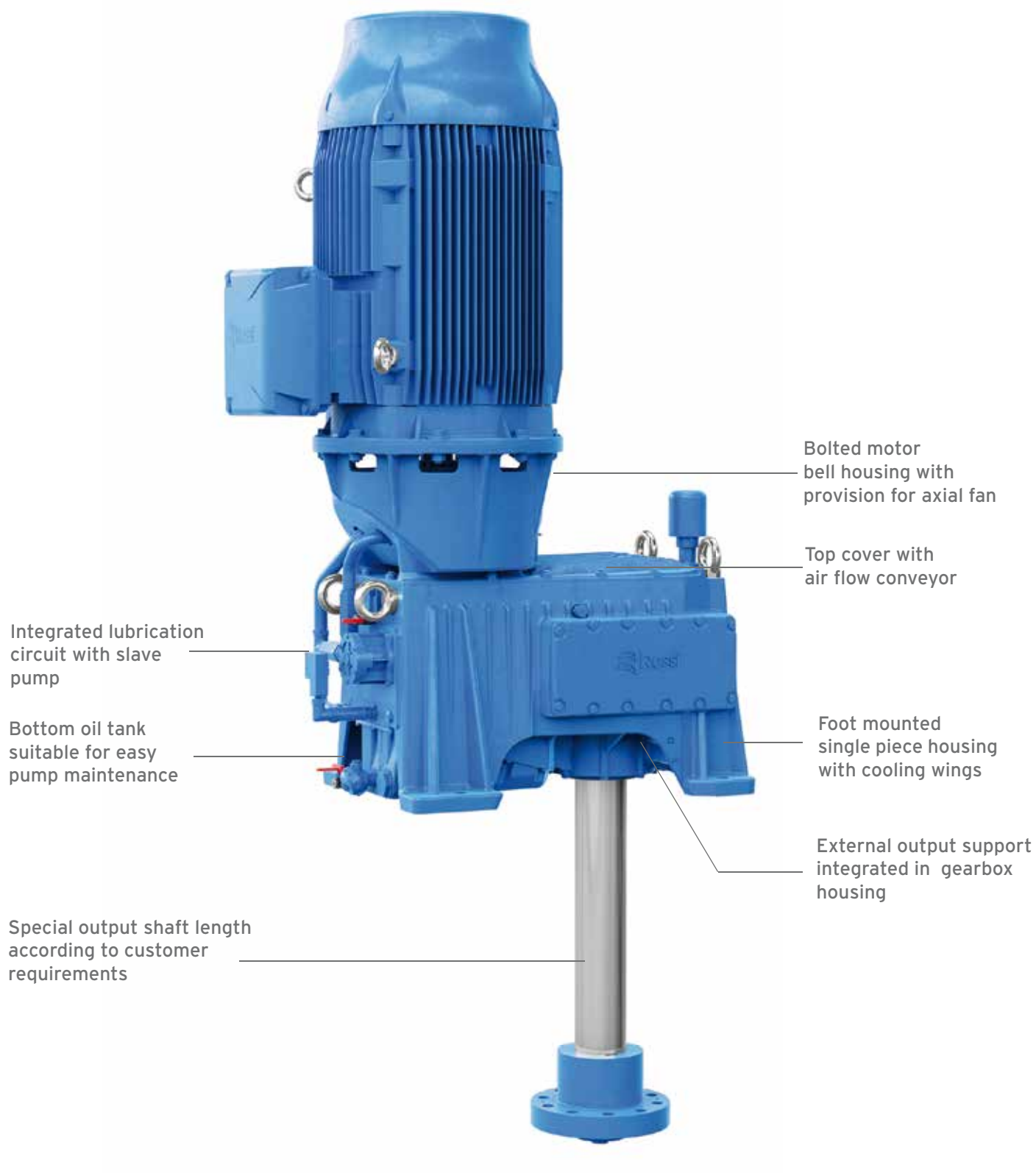


### PP5A design for ACC

4 sizes 250, 280, 320 and 360

Nominal torque ( $M_{N2}$ ) up to 663,800 lb in

Transmission ratio ( $i_N$ ) 10 ... 25



## A Series

### Worm gear reducers & gearmotors

14 sizes 32 ... 250

Nominal torque ( $T_{N2}$ ) up to 71,000 lb in

Transmission ratio ( $i_N$ ) 7 ... 16,000

#### Features

- Universal mounting with integral feet on the housing and B14 flanges
- Rigid and precise cast iron single piece housing
- Forced ventilation for high thermal power dissipation (size > 100)
- Worm wheels made of nickel bronze with high performance capability. High load capacity and wear resistance
- Wide range of accessories and non-standard designs
- Optional synthetic oil for food industry

#### Benefits

- Universal mounting positions
- High performance and reliability
- Smooth and precise running, reduced and constant backlash
- Extremely quiet and constant performance even in the hardest applications



## E Series

### Coaxial gear reducers & gearmotors

16 sizes 32 ... 180

Nominal torque ( $T_{N2}$ ) up to 90,000 lb in

Transmission ratio ( $i_N$ ) 4 ... 6,300

#### Features

- Universal mounting with lower/upper feet and B5 flange integral to the housing
- Rigid and precise cast iron single piece housing with high structural stiffness
- Helical tooth design with ground & carburized gearing
- Wide range of sizes
- Standard IEC motor input adapter
- Optional synthetic oil for food industry

#### Benefits

- Long life
- Minimum maintenance requirements
- High performance and great reliability
- Strength and reliability for heavy duty applications



### TX Series

Premium line electric asynchronous three-phase motors and brake motors

Sizes - IEC frames 63 to 315

Horsepower capacity 1/8 to 150HP

4, 6 Pole motors available

#### Features

- IEC standard motors
- Protection: IP 55 standard, up to IP 66 on request
- IE3 Energy efficiency
- Standard and safety brake (AC, DC)
- Optional complex executions available (encoders, axial cooling, increased protection, etc.)

#### Benefits

- Compactness and flexibility
- Suitable for running with inverter
- Reduced environmental impact and energy saving



### dDrive Inverter Series

Decentralized Drive

dDrive Inverter Series

Sizes A, B, C

3/4HP to 10HP available

Supply Voltage 3x200V AC...480V AC

280V DC...680V DC

Rated current 1.7A...16.5A



# dDrive

#### Features

- Decentralized Frequency Inverter
- Designed for Rossi IE2, IE3 electric motors
- Aluminum Housing IP 65
- Sensorless Vector Control
- Safe Torque Off (STO)
- Configurable I/O's board and internal PLC
- A large number of field buses available
- Bluetooth Interface

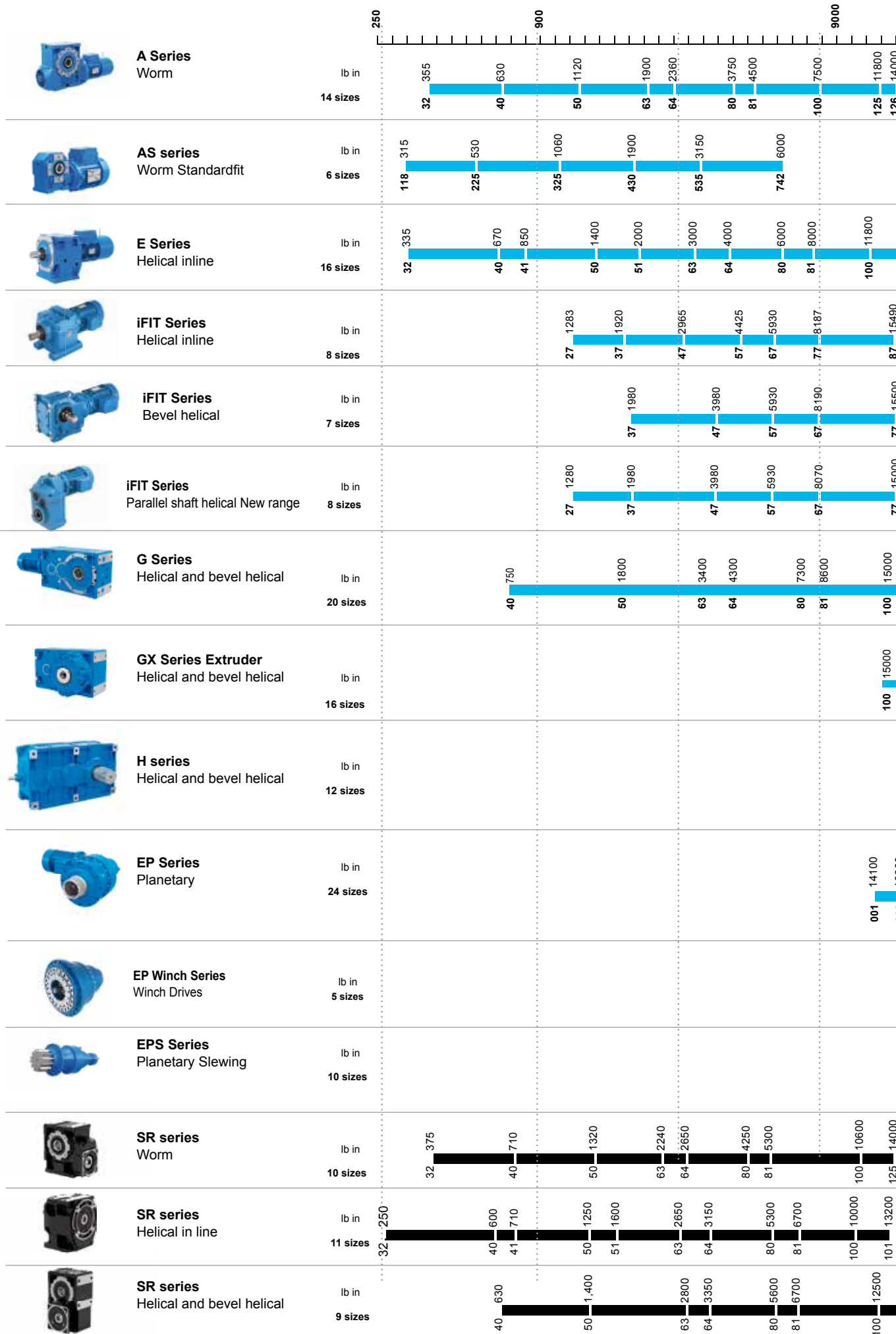
#### Benefits

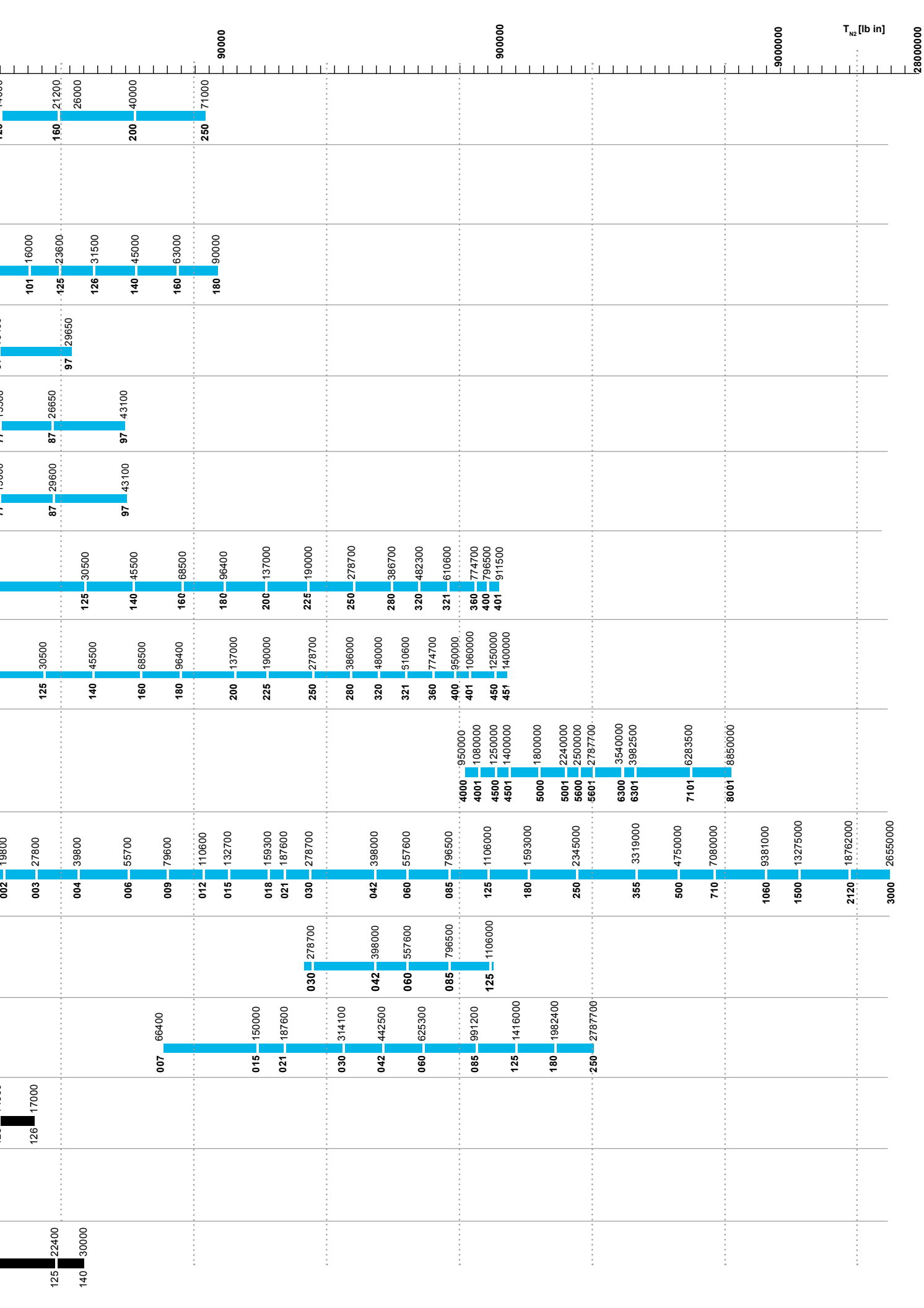
- Reduced electric cabinet dimension and cooling systems
- Compact solution of inverter, motor, and gearbox
- Suitable for hard environmental operating conditions
- No need of motor encoder for speed control
- High Safety Performance Level (up to PL E)
- To develop your own dedicated control functions
- Ease integration with existing automation controllers
- Fast and smart inverter parametrization access





# Gear reducers and gearmotors









ACC  
G SERIES PP5A DESIGN



ACC  
G SERIES

**We deliver  
reliable  
solutions  
worldwide**



BIOMASS MIXERS  
EP SERIES







**COOLING TOWERS  
G SERIES**



**PHOTOVOLTAIC PLANT  
EP AND A SERIES**



**DIGESTER  
EP SERIES**



**ACC  
G SERIES PP5A DESIGN**



**ACC  
G SERIES PP5A DESIGN**



# Solutions for an evolving industry

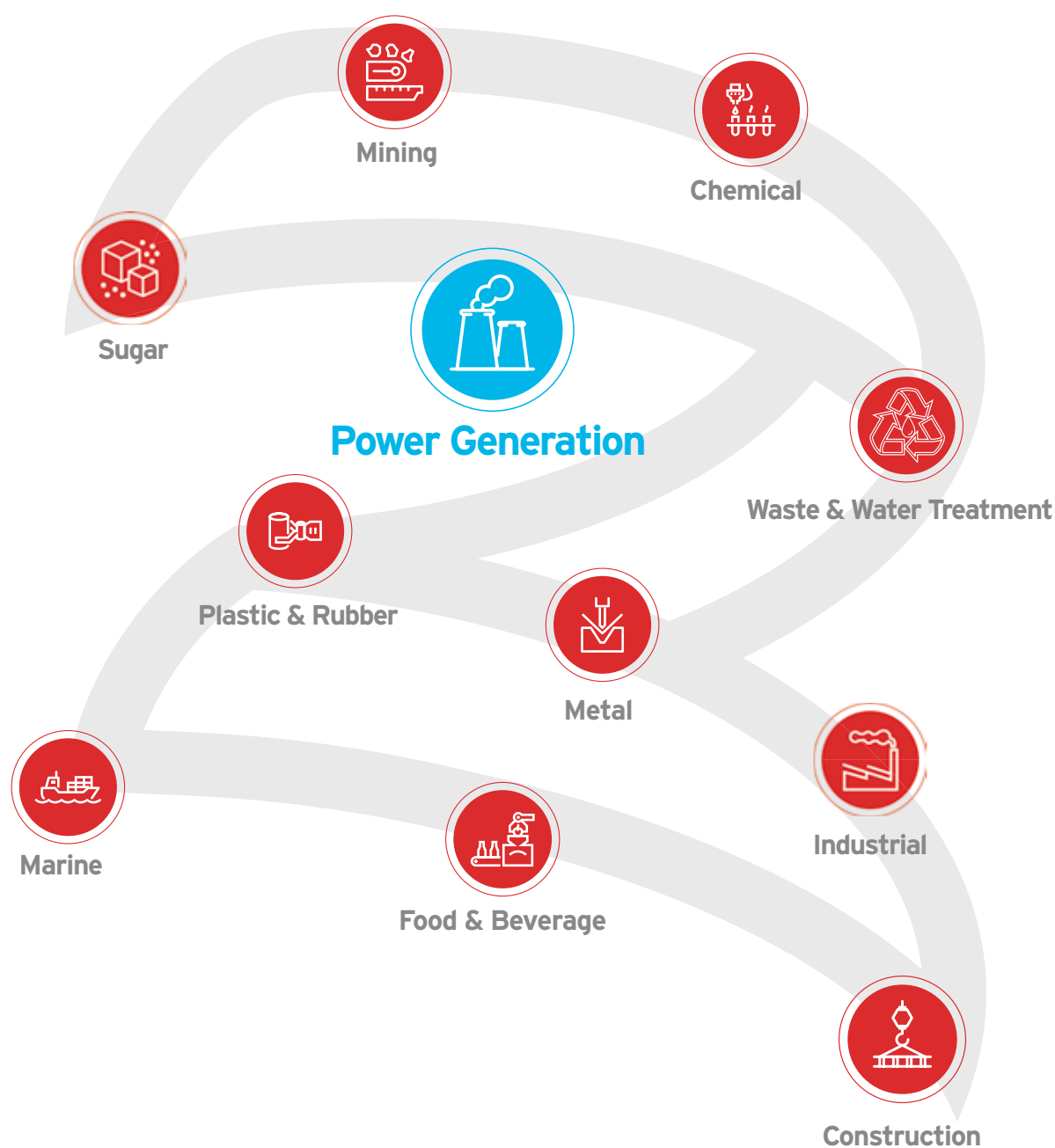
In the global marketplace, our customers, investors, partners value our products and services for two reasons: excellence and reliability. At Rossi, we utilize change as a strategic lever for our growth. "Solutions for an evolving industry" fully expresses our corporate philosophy: We are a flexible and

dynamic reality, able to satisfy all requirements of a continuously evolving industrial world, thanks to our innovative solutions.

- Cutting-edge manufacturing
- Specialized housing machining
- Extensive systematic controls
- Experience and know-how
- Excellence and innovation
- Reliable customer support.



# We have a solution for every segment



# Global presence local service



## Local support

Sales, customer service,  
technical support, spare parts



## 18 branches\*



## Worldwide distribution network\*



\*All contacts available on [www.rossi.com](http://www.rossi.com)



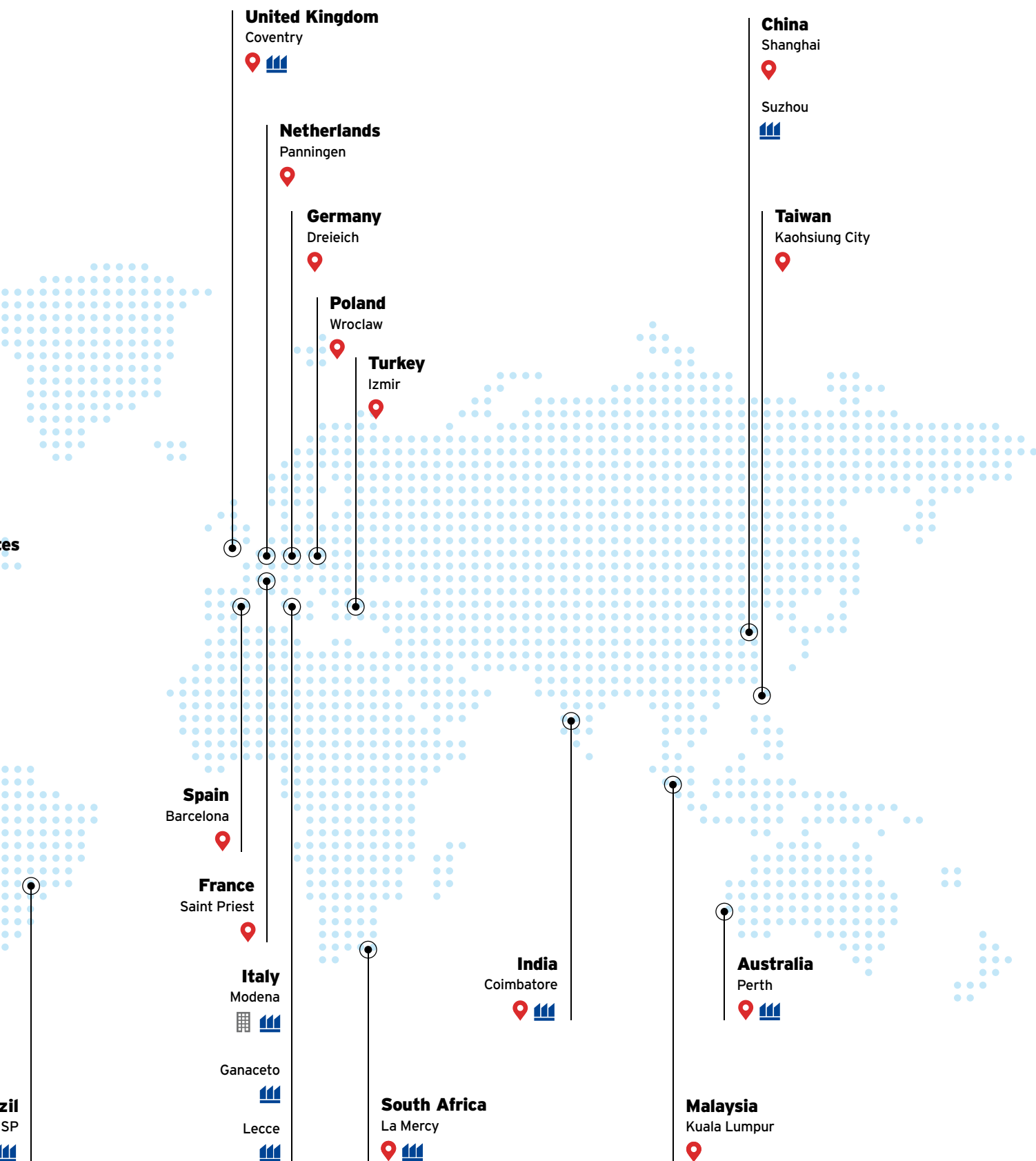
Main offices



Affiliated companies



Production facilities/Assembly plants



# Key figures



over

1,000

people around  
the world



5,000

customers  
worldwide



70

years of  
experience



50

million euros investments  
in new technologies and methodologies  
to improve manufacturing efficiency



18

affiliated  
companies



5

production  
facilities



8

assembly  
plants

## After-sale service



Highly trained mechanics and support teams can ensure a fast and efficient after-sale service providing support worldwide.



Our new space is your gateway to a world of information, assistance, and seamless access to the solutions you need. Whether you're an end user, distributor, or OEM partner you will find a personalized area to explore and manage all things related to your Rossi products.

Visit us at  
[www.rossi.com](http://www.rossi.com)

# Quality

## 3 years warranty\*



Our drive is to innovate and boost operations by manufacturing performing, precise, reliable and high-quality products all over the world. We are always one step forward in offering and developing solutions that can satisfy an unlimited number of application needs, even in the most demanding conditions.

\* As per our warranty terms.

## System certifications

ISO  
9001:2015

ISO  
14001:2015

ISO  
45001:2023

## Product certifications



## Product compliance











Solutions for  
an evolving  
industry

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