



product overview



Components cutting-edge manufacturing
process meets human touch.

INDEX

1 Solutions for an evolving industry	5
2 Industrial applications	6
3 Product range performances	8
4 Product range	10
Gear reducers and gearmotors	12
Electric motors	18
Other products	19
Motion control	20
Customized solutions	22
5 Total quality	24
6 Complete customer care	26

A detailed close-up photograph of industrial machinery, featuring large, metallic gears and shafts. The gears are made of polished metal, showing their teeth and the precision of their manufacturing. The background is slightly blurred, emphasizing the mechanical components in the foreground.

Solutions for an evolving industry

In the global marketplace, our customers and partners choose our products and services for two reasons: excellence and reliability. Rossi, a company of the Habasit Group, and has made a strategic change for the future growth of the company.

"Solutions for an evolving industry" fully expresses our corporate philosophy to satisfy all requirements of a continuously evolving industrial world thanks to our innovative solutions.

Cutting-edge manufacturing

Rossi provide high-performance, ground precision gear manufacturing, cutting-edge technology and experience. In Rossi we have all and for this reason we take pride in our work.

High quality products

Over 60 years of experience and know-how have led Rossi to become a reference supplier for the high-quality products we manufacture, in combination with specific turnkey solutions mainly used in heavy-duty industry applications.

Specialized housing machining

We dedicate special attention to machining all components, including housings for big sizes gearboxes and gearmotors. High quality standard requirements are reached only using cutting-edge technology.

Test controls

Systematic and extensive controls on every stage of the process (from materials to final controls under load using computerized brakes at the end of the assembly line) allow quality to be produced, and permit the monitoring and improvement of the process itself. Our solutions have been fully tested and run in our testing rooms to be operationally certified before on site commissioning.

The power of knowledge

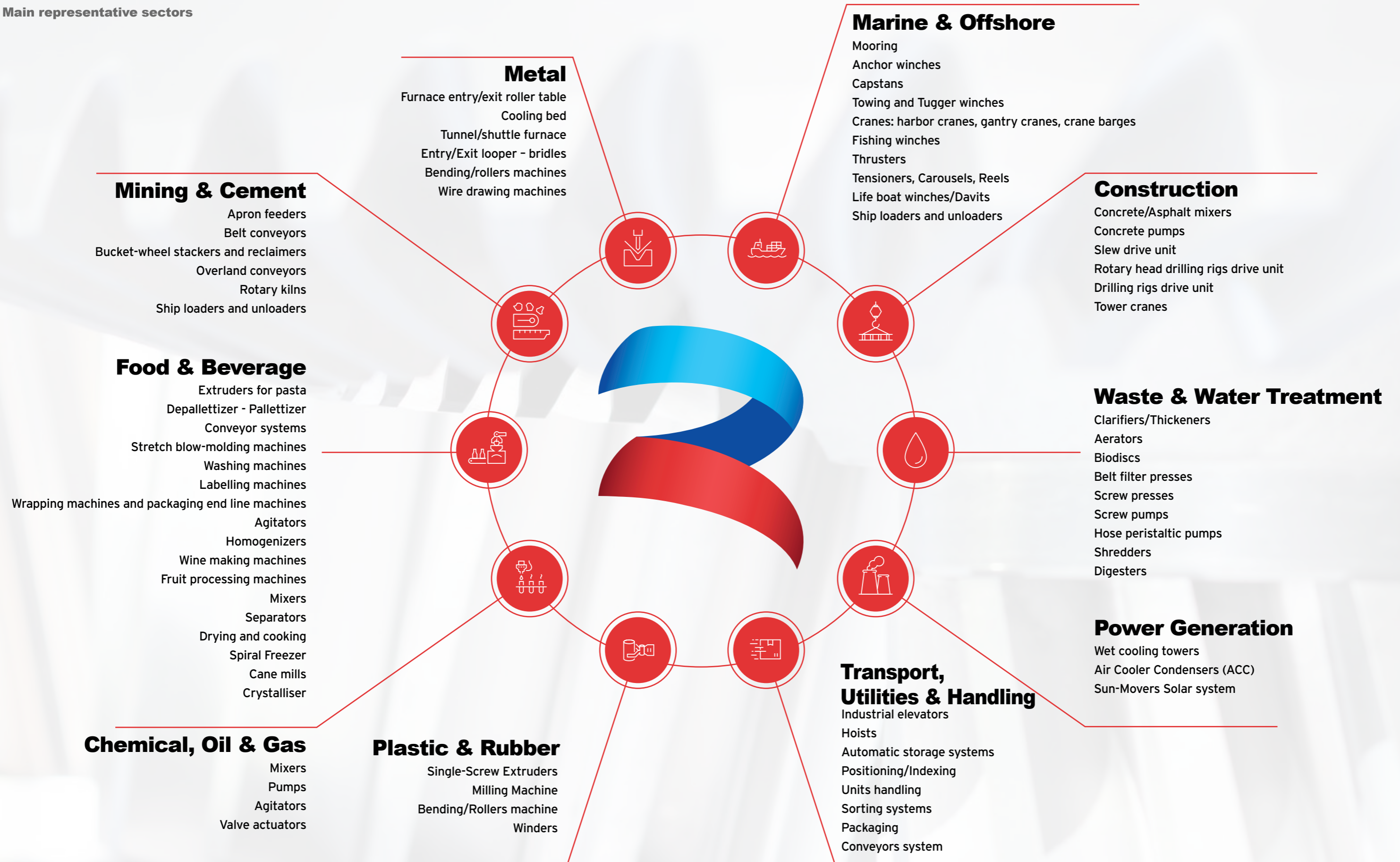
Experience and knowledge also mean how to support customers during all design and planning phases. We continue to develop our experience and share our knowledge to align ourselves with machine builders around the world. The information that we make available includes:

- expected bearing life calculation;
- finite element analysis;
- torque calculation;
- shared design capabilities with customers;
- complete testing of gear reducers & gearmotors.

In Rossi we share our know-how to support every kind of application and exigence.

Industrial applications

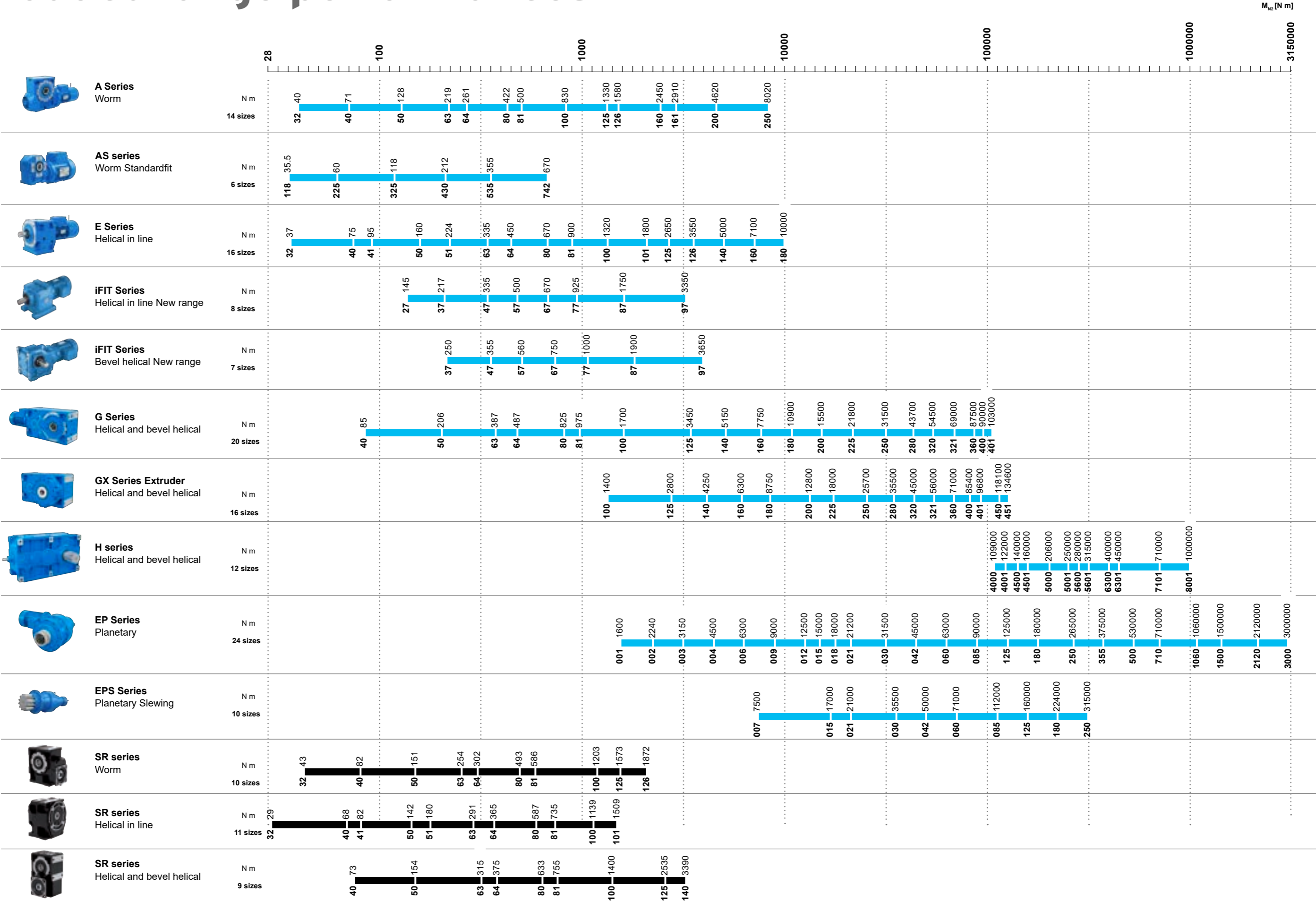
Main representative sectors



Product range performances

Gear reducers and gearmotors

Motion control

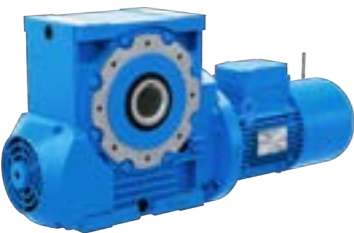


Product range



I - Gear reducers & gearmotors

Worm gear reducers & gearmotors



A Series

Worm gear reducers & gearmotors

Features

- Universal mounting with lower feet integral on the housing and B14 flanges
- Rigid and precise cast iron monobloc housing
- Forced ventilation for an easy thermal power dissipation (size ≥ 100)
- Worm wheels made of nickel bronze with controlled phosphor content to achieve improved performance, a higher load capacity, greater reliability and wear resistance
- Higher worm efficiency
- Wide range of accessories and non-standard designs

Benefits

- Longer life and lower power consumption
- Easy and functional shaft mounting
- High performance and greater reliability
- Smooth and precise running, reduced and constant backlash
- Constant performance in heavy duty applications



AS standardfit Series

Worm gearmotors

Features

- Mounting with lower integral feet and B14 flanges on 2 faces integral on the housing
- Rigid and precise cast iron monobloc housing
- Worm wheels made of nickel bronze with controlled phosphor content to achieve improved performance, a higher load capacity, greater reliability and wear resistance
- Generous internal space between train of gears and housing
- Tapered roller bearings on worm shaft
- Motor mounting flange integral to the housing
- Higher worm efficiency

Benefits

- Longer life and lower power consumption
- Interchangeability with major manufacturers
- High performance and greater reliability
- Smooth and quiet running

14 sizes 32 ... 250

Nominal torque (M_{N2}) up to 8,020 N m

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

Size	Torque (N m)
A 32	40
A 40	71
A 50	128
A 63	219
A 64	261
A 80	422
A 81	500
A 100	830
A 125	1,330
A 126	1,580
A 160	2,450
A 161	2,910
A 200	4,620
A 250	8,020

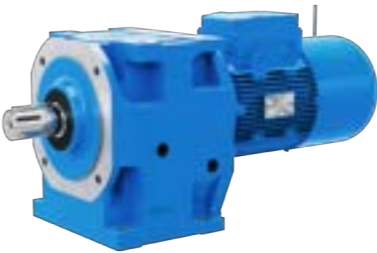
6 sizes 118 ... 742

Nominal torque (M_{N2}) up to 670 N m

Transmission ratio (i_N) 6 ... 75

Size	Torque (N m)
AS 118	35.5
AS 225	60
AS 325	118
AS 430	212
AS 535	355
AS 742	670

Coaxial gear reducers & gearmotors



E Series

Coaxial gear reducers & gearmotors

Features

- Universal mounting with lower/upper feet and B5 flange integral to the housing
- Rigid and precise cast iron monobloc housing
- Helical toothed gear pairs with ground profile
- Wide range of sizes
- Final stage pinion with 3 bearings for increased torque cacpacity

Benefits

- Longer life
- Minimum maintenance requirements
- High performance and greater reliability
- Strength and reliability for heavy duty applications

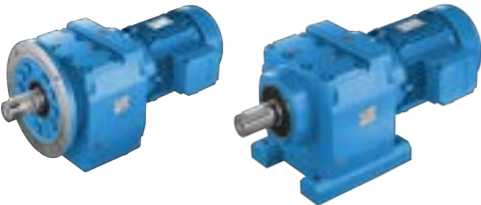
16 sizes 32 ... 180

Nominal torque (M_{N2}) up to 10,000 N m

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

Size	Torque (N m)
E 32	37
E 40	75
E 41	95
E 50	160
E 51	224
E 63	335
E 64	450
E 80	670
E 81	900
E 100	1,320
E 101	1,800
E 125	2,650
E 126	3,550
E 140	5,000
E 160	7,100
E 180	10,000

Helical in line & bevel helical gearmotors



iFIT Series
Helical in line gearmotors

- Features**
- Fully interchangeable with market standards
 - Made in Europe
 - Full range with robust cast iron housing
 - Gear precision as per DIN/ISO 6 or better
 - New IE2, IE3 compact electric motors
 - High quality sealing solutions
 - Round shaped, smooth housing surface
 - Higher torque
- Benefits**
- “Plug & Play” with no re-engineering costs
 - Superior quality, minimum maintenance
 - High performance and reliability: minimum deformation, no gearing misalignment, no vibration, and low noise level
 - Energy saving, low noise level, reduced backlash
 - Premium efficiency, long lifetime and no oil leakage
 - Wash down capability. Better hygiene
 - Up to 12% torque higher than market standard

8 sizes iC 27 ... iC 97
Nominal torque (M_{N2}) up to 3,350 N m
Transmission ratio (i_N) 3.4 ... 290

Size	Torque (N m)
iC 27	145
iC 37	224
iC 47	335
iC 57	500
iC 67	670
iC 77	925
iC 87	1,750
iC 97	3,350



iFIT Series
Bevel helical gearmotors

- Features**
- Fully interchangeable with market standards
 - Made in Europe
 - Full range with robust cast iron housing
 - Gear precision as per DIN/ISO 6 or better
 - New IE2, IE3 compact electric motors
 - High quality sealing solutions
 - Round shaped, smooth housing surface
 - Higher torque
- Benefits**
- “Plug & Play” with no re-engineering costs
 - Superior quality, minimum maintenance
 - High performance and reliability: minimum deformation, no gearing misalignment, no vibration, and low noise level
 - Energy saving, low noise level, reduced backlash
 - Premium efficiency, long lifetime and no oil leakage
 - Wash down capability. Better hygiene
 - Up to 12% torque higher than market standard

7 sizes iO 37 ... iO 97
Nominal torque (M_{N2}) up to 3,650 N m
Transmission ratio (i_N) 5.4 ... 197

Size	Torque (N m)
iO 37	250
iO 47	355
iO 57	560
iO 67	750
iO 77	1000
iO 87	1,900
iO 97	3,650

Helical & bevel helical gear reducers & gearmotors



G Series
Helical & bevel helical gear reducers & gearmotors

- Features**
- Universal symmetrical cast iron housing suited for horizontal and vertical mounting having integral feet with housing on 4 faces and 2 faces B14
 - Single piece housing for high structural stiffness
 - Wide range of sizes, train of gears solutions and non-standard designs
 - Suitable to be equipped with large NEMA & IEC motors
 - Extended input-output center distance housing for U-layout
 - Case hardened and hardened gear pairs
 - Helical gear pairs with ground profile
 - GLEASON spiral bevel gear pairs with ground profile
- Benefits**
- Easy and functional shaft-mounting design
 - Minimum maintenance requirements
 - High performance and greater reliability
 - Strength and reliability for heavy duty applications



GX Series
Helical & bevel helical extruders design

Excellent specific series for extruders with the same Features and Benefits of G series

- Additional Features**
- Extruder support conceived for normal and heavy applications
 - Optional extended input-output center distance housing for U-layout

20 sizes 40 ... 401
Nominal torque (M_{N2}) up to 103,000 N m
Transmission ratio (i_N) 2 ... 160

Size	Torque (N m)
G 40	85
G 50	206
G 63	387
G 64	487
G 80	825
G 81	975
G 100	1,700
G 125	3,450
G 140	5,150
G 160	7,750
G 180	10,900
G 200	15,500
G 225	21,800
G 250	31,500
G 280	43,700
G 320	54,500
G 321	69,000
G 360	87,500
G 400	90,000
G 401	103,000

16 sizes 100 ... 451
Nominal torque (M_{N2}) up to 134,600 N m
Transmission ratio (i_N) 6.3 ... 28

Size	Torque (N m)
GX 100	1,400
GX 125	2,800
GX 140	4,250
GX 160	6,300
GX 180	8,750
GX 200	12,800
GX 225	18,000
GX 250	25,700
GX 280	35,500
GX 320	45,000
GX 321	56,000
GX 360	71,000
GX 400	85,400
GX 401	96,800
GX 450	118,100
GX 451	134,600

Helical & bevel helical gear reducers & gearmotors



H Series

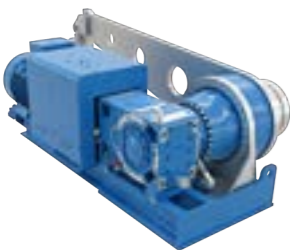
Helical & bevel helical gear reducers

Features

- Universal spheroidal cast iron housing suited for horizontal and vertical mounting having integral feet
- Two-piece housing with stiffening ribs for high structural stiffness and high oil capacity
- 12 sizes, train of gears solutions and non-standard designs
- Helical gear units with 2 and 3 gear stages
- Bevel helical gear units with 1, 2 and 3 gear stages
- Case hardened and hardened gear pairs
- Helical gear pairs with ground profile
- GLEASON spiral bevel gear pairs with ground profile

Benefits

- One of the widest torque range from a single supplier
- Customized solutions on request starting from a standard modular design
- Short delivery times
- Optimized design for heavy industry applications



G & H Series

Drive units on swing base

Features

- Customized and innovative solutions for every specific application in order to maximize cost efficiency
- Swing base structures are made of hollow profiles or beams appropriately combined, treated and machined
- Wide range of gearboxes and possible combinations with a wide range of accessories and available options
- Customer support and assistance during the design stage, fabrication and commissioning taking advantage of Rossi's long experience
- Assembly and alignment by experienced and skilled manpower
- Global qualified suppliers of components for swing base and special design assemblies

Benefits

- Supply of turn-key complete drive units
- Simplified installation at job site
- Maximum efficiency and cost effectiveness

12 sizes 4,000 ... 8,001
Nominal torque (M_{N2}) up to 1,000,000 N m
Transmission ratio (i_N) 8 ... 315

Size	Torque (N m)
H 4,000	109,000
H 4,001	122,000
H 4,500	140,000
H 4,501	160,000
H 5,000	206,000
H 5,001	250,000
H 5,600	280,000
H 5,601	315,000
H 6,300	400,000
H 6,301	450,000
H 7,101	710,000
H 8,001	1,000,000

Power (P_N)
Nominal torque (M_{N2})
Transmission ratio (i_N) } according to Customer's requirements

Planetary gear reducers & gearmotors



EP Series

Planetary gear reducers & gearmotors

Features

- 2, 3, 4 or 5 and 6 reduction stages for both coaxial and right angle units
- Modular design, with multi-optional executions
- Suitable to be equipped with NEMA, hydraulic & IEC motors
- External gear pair made of casehardened and hardened steel; internal gear made from nitride steel
- Cylindrical spur gear with ground profile and flank modification
- GLEASON spiral bevel gear pairs with ground profile
- Very compact size and reduced mass of gearbox
- Wide range of accessories and non-standard designs
- Lower backlash, enhanced stiffness and heavy duty bearing
- Improved lubrication system
- Wide range of hydraulic brakes

Benefits

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



EPSlewing series

Planetary Slewing drives

Excellent specific series for slewing drives with the same Features and Benefits of EP series.

Additional features

- 10 modular slew drive gear size reducers with 3 output reinforced support configurations: dual pilot flanged (R), dual pilot compact (S) and single pilot front flanged (H)

Additional benefits

- Wide choice of the drives allows always the highest performance of cost-efficient solutions
- Enable to benefit of the wider range of options of the EP industrial catalog

24 sizes 001 ... 3,000
Nominal torque (M_{N2}) up to 3,000,000 N m
Transmission ratio (i_N) 3.55 ... 3,550

Size	Torque (N m)
EP 001	1,600
EP 002	2,240
EP 003	3,150
EP 004	4,500
EP 006	6,300
EP 009	9,000
EP 012	12,500
EP 015	15,000
EP 018	18,000
EP 021	21,200
EP 030	31,500
EP 042	45,000
EP 060	63,000
EP 085	90,000
EP 125	125,000
EP 180	180,000
EP 250	265,000
EP 355	375,000
EP 500	530,000
EP 710	710,000
EP 1,060	1,060,000
EP 1,500	1,500,000
EP 2,120	2,120,000
EP 3,000	3,000,000

10 sizes 007 ... 250
Nominal torque (M_{N2}) up to 315,000 N m
Transmission ratio (i_N) 12.5 ... 2,800

Size	Torque (N m)
EPS 007	7,500
EPS 015	17,000
EPS 021	21,200
EPS 030	35,500
EPS 042	50,000
EPS 060	71,000
EPS 085	112,000
EPS 125	160,000
EPS 180	224,000
EPS 250	315,000

Combined planetary gear reducers & gearmotors



EP Combined Units Series

Combined planetary gear reducers & gearmotors

- Features
- Planetary drives combined with other Rossi products to optimize performances on a broad spectrum of application needs
 - Possible combinations with standard Rossi series using the planetary drives with worms, coaxial, helical and helical bevel drives and gearmotors

- Benefits
- Easy customization to meet customer needs
 - Flexibility and adaptability to specific application needs
 - Interchangeability

24 sizes 001 ... 3,000	
Nominal torque (M _{N2}) up to 3,000,000 N m	
Transmission ratio (i _N) according to Customer's requirements	
Size	Torque (N m)
EP 001	1,600
EP 002	2,240
EP 003	3,150
EP 004	4,500
EP 006	6,300
EP 009	9,000
EP 012	12,500
EP 015	15,000
EP 018	18,000
EP 021	21,200
EP 030	31,500
EP 042	45,000
EP 060	63,000
EP 085	90,000
EP 125	125,000
EP 180	180,000
EP 250	265,000
EP 355	375,000
EP 500	530,000
EP 710	710,000
EP 1,060	1,060,000
EP 1,500	1,500,000
EP 2,120	2,120,000
EP 3,000	3,000,000

Servo gear reducers



SR Series

Worm servo gear reducers

MR type
7 sizes 32 ... 81
Nominal Torque up to 586 N m
Accelerating torque up to 747 N m
Transmission ratio (i_N) 7 ... 239

R type
9 sizes 40 ... 126
Nominal Torque up to 1,872 N m
Accelerating torque up to 2,387 N m
Transmission ratio (i_N) 7 ... 125

Size	Torque (N m)
SR 32	43
SR 40	82
SR 50	151
SR 63	254
SR 64	302
SR 80	493
SR 81	586
SR 100	1,203
SR 125	1,573
SR 126	1,872



SR Series

Helical & bevel helical servo gear reducers

- MR type features
- Wide range of Servo gearboxes, designed to fit almost all servo motors found on the market
 - Designed for the highest torsional stiffness and the lowest angular backlash, for the maximum torque and overhung loads
 - Bush with slots and hub clamp for servomotor coupling
- MR type benefits
- Enhanced dimensional compactness due to direct servomotor coupling
 - The correct technical solution thanks to a comprehensive range of sizes, gear stages, transmission ratios, designs, and non-standard designs
 - Widest range of possible servomotor coupling dimensions

MR type
8 sizes 40 ... 125
Nominal Torque up to 2,535 N m
Accelerating torque up to 3,000 N m
Transmission ratio (i_N) 6.16 ... 139

R type
8 sizes 50 ... 140
Nominal Torque up to 3,390 N m
Accelerating torque up to 4,475 N m
Transmission ratio (i_N) 6.42 ... 127

Size	Torque (N m)
SR 40	73
SR 50	154
SR 63	315
SR 64	375
SR 80	633
SR 81	755
SR 100	1,400
SR 125	2,535
SR 140	3,390



SR Series
Coaxial servo gear reducers

MR type	
11 sizes 32 ... 101	
Nominal Torque up to 1,509 N m	
Accelerating torque up to 2,000 N m	
Transmission ratio (i _N) 4 ... 154	
R type	
-	
Size	Torque (N m)
SR 32	29
SR 40	68
SR 41	82
SR 50	142
SR 51	180
SR 63	291
SR 64	365
SR 80	587
SR 81	735
SR 100	1,139
SR 101	1,509

II - Other Products



L Series
Right angle shaft gear reducers

- Features**
- Right angle units with multiple options of executions
 - Compact size
 - Rigid and durable housing of cast iron
 - Several output solutions, with solid or hollow shaft
- Benefits**
- Low ratios available
 - Capability for multiple drives synchronization
 - Easy adjustment to specific applications
 - High performance and reliability

7 sizes 80 ... 320
Nominal torque (M_{N2}) up to 5,600 N m
Transmission ratio (i_N) 1 ... 6.25

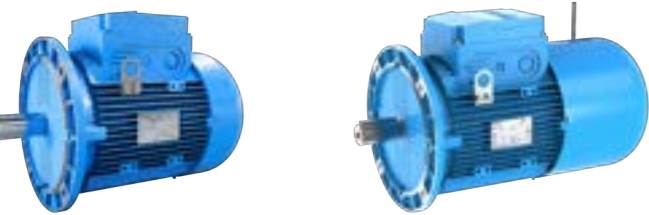


P Series
Shaft mounted gear reducers

- Features**
- Split housing reducers
 - Simplified design, with narrow housing execution
- Benefits**
- Very easy maintenace, with minimal requirements
 - Easy and functional shaft mounting
 - Durable solution dedicated for conveyors

7 sizes 80 ... 250
Nominal torque (M_{N2}) up to 11,200 N m
Transmission ratio (i_N) 10 ... 25

III - Electric Motors



TX Series

Premium line electric asynchronous three-phase motors and brake motors

- Features
- IEC standard motors
 - Protection: IP 55 standard, IP 66 *
 - 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

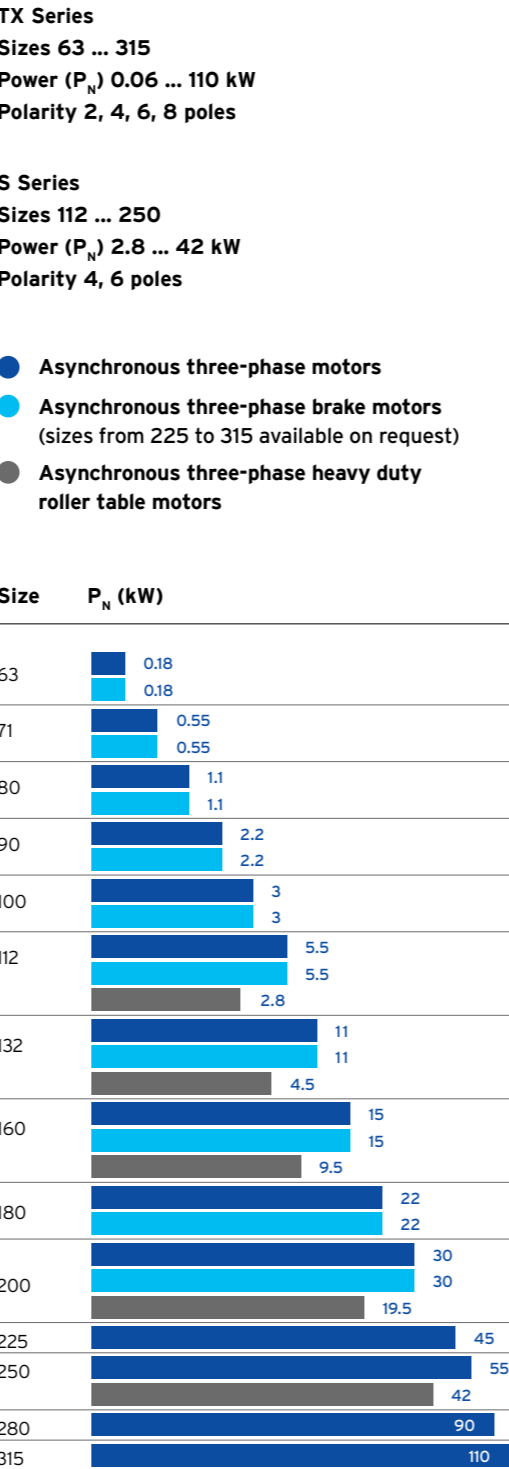


S Series

Heavy duty roller table motors

- Features
- IEC asynchronous three-phase 4 and 6 poles motors with cage rotor. totally enclosed. without fan
 - Motor cooling by natural convection over a large radiating surface area and obtained by ring fins
 - Protection: IP 55 standard. IP 65 * and IP 66 *
- Benefits
- Specifically designed for heavy industry. in particular roller tables and conveyor roller tables

* optional



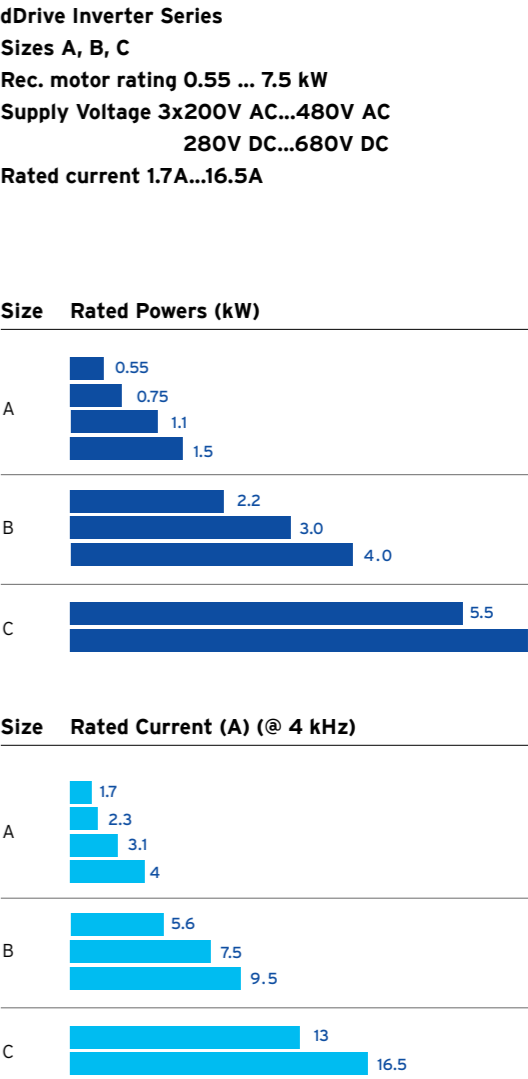
IV - Motion Control



dDrive Inverter Series

Decentralized Drive

- 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
 - 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)
 - Customizable to fit all different application features
 - To develop your own dedicated control functions
 - Ease integration with existing automation controllers
 - Fast and smart inverter parametrization access



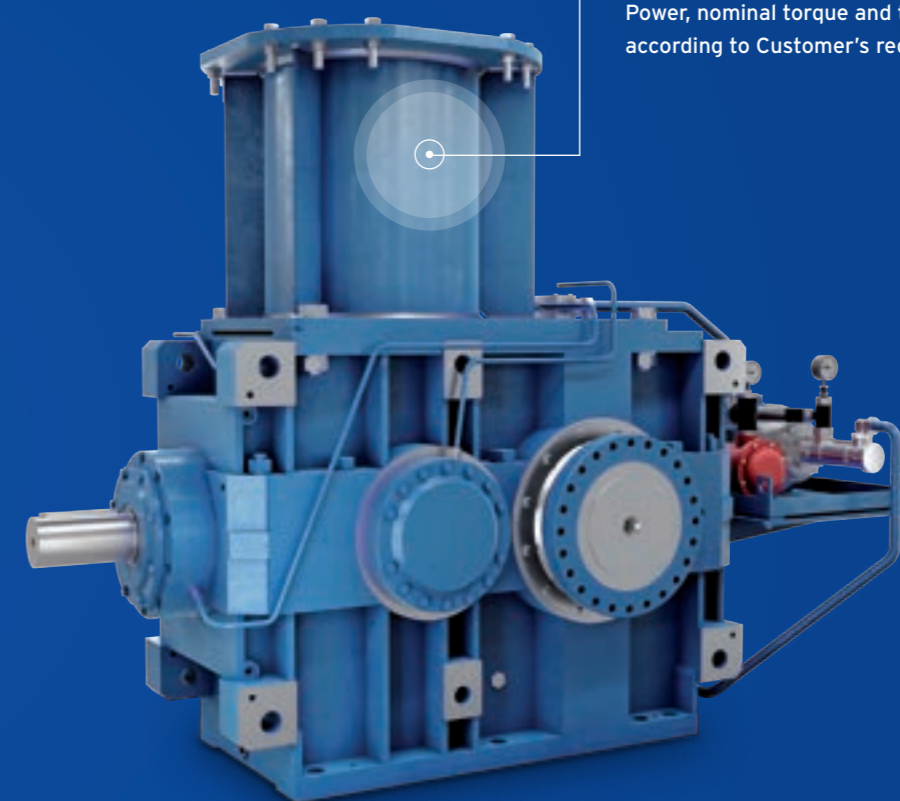
Customized solutions

Ask us whatever you need



Ship unloader drive

- ↳ Flexibility
- ↳ Reliability
- ↳ Special design
- ↳ Heavy duty



Test room drive

Features

- ↳ Project management
- ↳ Accurate selection and sizing of the components
- ↳ Precise certified alignment of the complete drive

Benefits

- ↳ Heavy customized and innovative solution to match customer requirements
- ↳ Feasibility study to find optimal solution
- ↳ Turn key drive units design
- ↳ Easy and quick installation on site

Power, nominal torque and transmission ratio according to Customer's requirements.

Modularity can be considered the foundation of the Rossi product line. Modular products and processes allow us to engineer a solution for most industrial applications requiring a gearmotor or gear reducer. To us, modularity means flexibility, wide range of options, faster delivery, and most important of all, competitiveness. Even more it allows to assemble in any assembly facility with almost limitless configurations allowing us to deliver solutions, regardless if it comes to supply a standard unit or an engineered one, in a cost effective manner.

This capability is made possible through our ability to understand the customer's requirements and translate the needs of that customer into a commercially and technically acceptable solution.

Of course our modular approach doesn't stop at the delivery of a product or solution. For us this is just the start, with strong online support systems our customers have access to leading interactive product and service care.

Our project management

Once the order is assigned, a dedicated team with skilled technicians will provide application support offering assistance and innovative solutions during the design phase.

Customer order management

We ensure that all processes within the IT platform are designed with rapid transfer of data needed for internal processes as well as for the management of the order by the customers themselves.

We have chosen to operate with Oracle's JD Edwards EnterpriseOne. This facilitates order management on one platform for both the customer and our staff anywhere in the world. Through a standard operating platform we are able to configure customers unique forecasting, shipping standards, transportation sequence and reporting processes in coordination with commercial contracts and associated quality control documentation - all integrated to one ERP system.

Research & Development

We have our geographical and philosophical origins rooted in the town of Modena, the renowned Italian capital of precision mechanics. From here stems the unique pool of skills and the high professionalism of our technicians, who are always ready to design products and anticipate innovative solutions to satisfy the needs of a continually evolving market. Our research and development activities are stimulated by the desire to develop ever more complex electromechanical drive systems for our customers. We are committed to developing processes

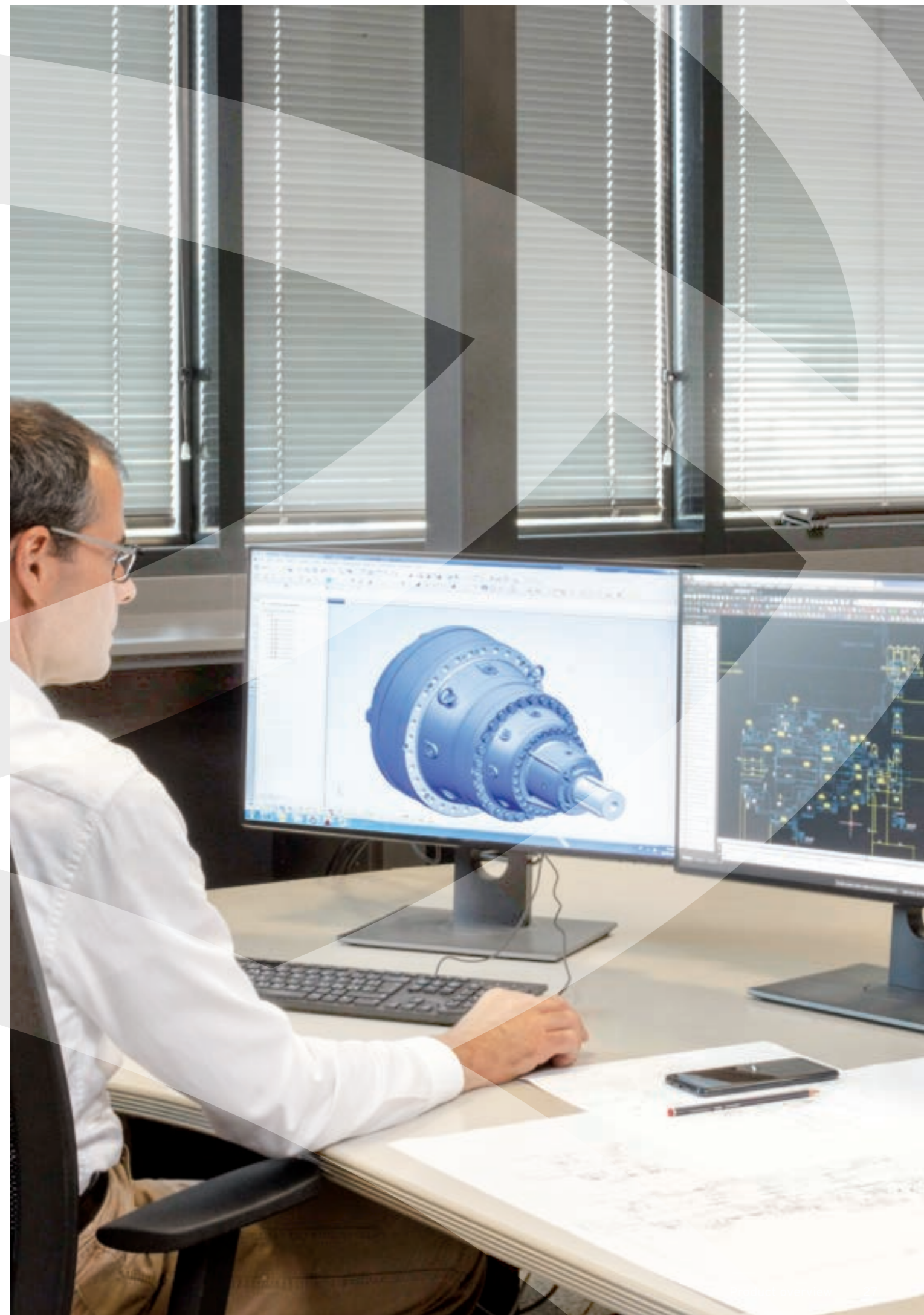
and products able to meet the growing demands of the modern digital age. Small incremental improvements in elements such as gear quality, housing rigidity and sealing arrangements can have a significant impact on the Total Life Cycle of the product. Our geared products have a strong market reputation, traditionally built around product innovation, outstanding quality and high operational safety.

Investments in the three-year period 2021-2023



45 Million Euros

Investments in new technologies and methodologies to improve manufacturing efficiency



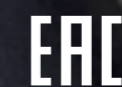
Total quality

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Product certifications



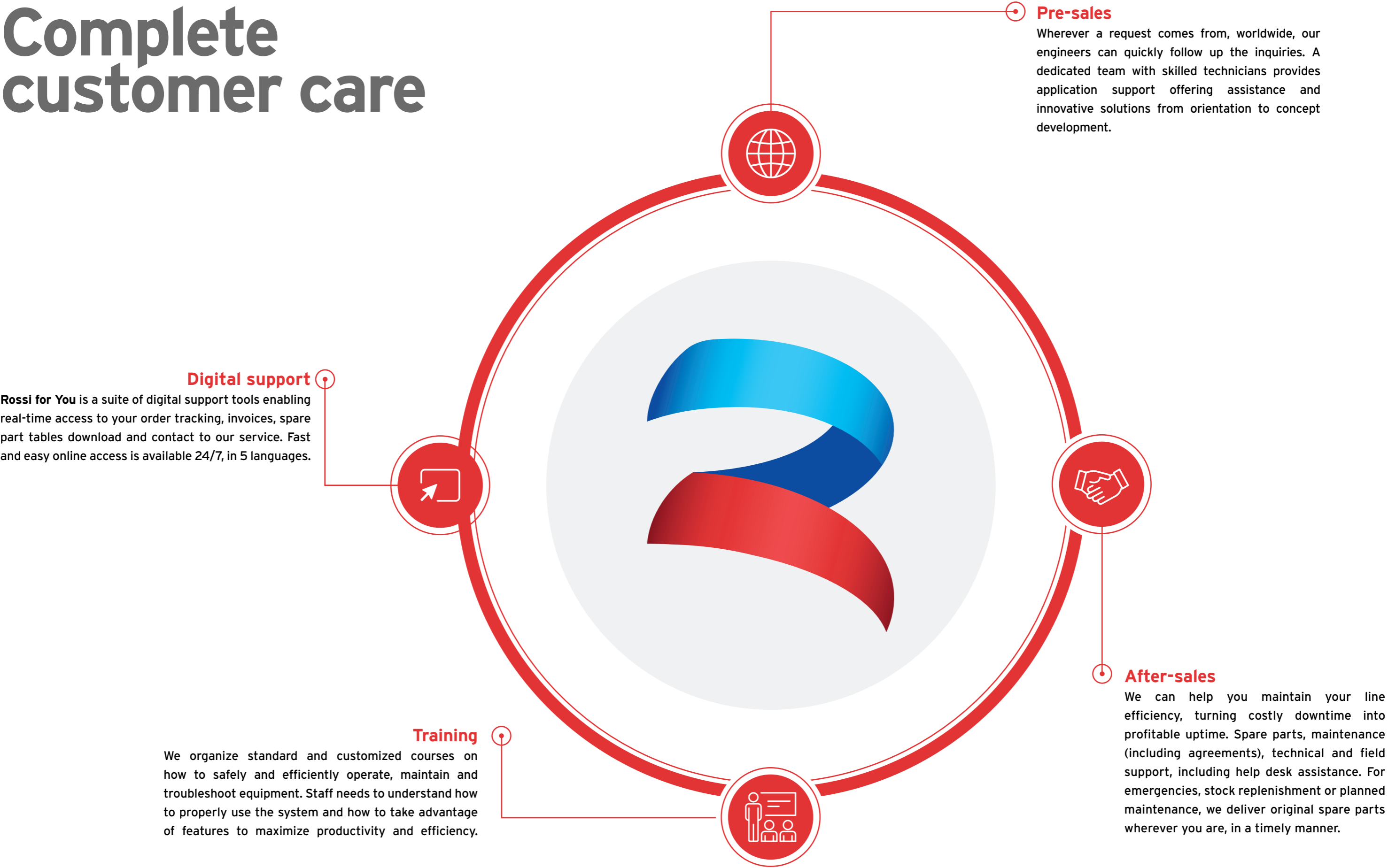
RoHS

**BUREAU
VERITAS**
Marine & Offshore

DNV·GL



Complete customer care





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