

For Absolute
Solutions...



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Polat Group Redüktör

Aydın ASTIM Factory / Turkey

POLAT GROUP REDÜKTÖR (PGR)

Polat Group Redüktör San.ve Tic.A.Ş started its production activities within the scope of Polat Makine Sanayi ve Tic.A.Ş. in 1998 and continued to operate till 2004 as a result of its rapid growth and development. From its foundation till today, PGR has a growth trend, PGR has become a pioneer in domestic sector by making a significant progress in the branding process in the regional market even in the crisis periods and has also taken the position of a company exporting to more than 80 countries in 5 continents, especially in Germany.

Polat's Astim Organize Sanayi facility has an annual production capacity of 500.000 reducers in 15.000 m² as the main production area, 20.000 m² assembly factory in Aydın Umurlu Organize Sanayi region. Totally 300 employees serve in these two premises and sales offices in Ankara and Istanbul in addition to dealers and distributors in Turkey and abroad. Since 2014, PGR GmbH has been operating in Germany with an assembly plant of 5.800 m².

OUR VALUES

Customer Centric: To maximize customer satisfaction, we try to meet our customers' expectations.

Superior Business Ethics: To be honest and open in our commercial and social relations.

Respect for the Environment and Society: To meet all the legal requirements of the environment, our company tries to control, reduce and prevent the factors that may cause environmental pollution.

Resource Management and Productivity: We provide sustainable development by optimizing all kinds of resource usage in all processes, and by emphasizing efficiency.

Participatory Management Approach: We maintain and develop the management understanding based on respect and open communication with our employees, and also on keeping participation in decision-making mechanisms at the top.

Team Work: To ensure employee participation in every stage of our activities and to share information, we work with the consciousness of "We", not "I" and we constantly develop the spirit of teamhood.

OUR MISSION

Our mission is to provide solutions to our customers in the most efficient and qualified way by making use of the latest information technologies.

Our reducer group carries out its work using simultaneous engineering methods to meet the demands of our customers by presenting several different product ranges. Design and planning activities, product development programs, and computer supporting work perform a continuous growing chart. Our competitive and strong quality policy is made to develop our customer spectrum and provide their business sustainability.

OUR VISION

Our vision is to become a global company that meets and surpasses customer satisfaction and which not only follows the development but also creates the development itself.



Polat Group Redüktör Umurlu Assembly and Logistics Center

PGR Umurlu Assembly and Logistics Center

Our age is the age of technology and only the fastest and the strongest can survive. For this to happen, you must have implemented an incredibly flawless system in your facility.

To meet the customer's needs on time and to fully satisfy their expectations, we have improved our services throughout the entire supply chain, starting from production. Due to factors such as increased demand for the product and profitability; we established our assembly plant in a closed area of 20.000 m² in Umurlu Organized Region in 2018 in order to provide you, our stakeholders, a fast service. To increase production in the assembly line, we detected the possible bottleneck stations, arranged the cycle times of each station, determined the optimum number of stations, and reached higher production volume. Using the "know-how" technique, we both obtained high-quality products and increased our production speed. In a nutshell, we made the finishing touch to manufacturing skillfully by combining our experience with technology. We carry out the transportation of the product, which is one of the most important stages of the logistics, to our valuable customers complying with international trade standards. After production stage our gearboxes are packed in safe boxes, tailored to their size, and delivered to their destination in the best way with alternative transportation facilities.

**"Your satisfaction
is our greatest pride"**



Ahlen / Germany

As a company exporting to over 80 countries, we established our company PGR GmbH in Ahlen, Nordrhein-Westfalen Germany in 2014 to keep our finger on the pulse of the sector.

Our company, where each of our employees has experience in his or her field, has a production area of 5,800 m². It delivers our products to you quickly, provides after-sales support at the right time, and creates a firm and sturdy bridge connecting Europe and Turkey.

PGR GmbH

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Tel : +49 (0) 2382 855 70 10
Fax: +49 (0) 2382 855 70 15
info@nrwdrivetechnologies.com
www.nrwdrivetechnologies.com

Exporting to **80 countries** in 5 continents



Distributors

- | | | |
|---------|---------|-----------|
| Germany | Denmark | Tunisia |
| Italy | Latvia | Lithuania |
| Spain | Oman | Iraq |
| Canada | Egypt | Israel |
| Belarus | USA | |
| Poland | | |
| Ukraine | | |
| Iran | | |

Group Companies

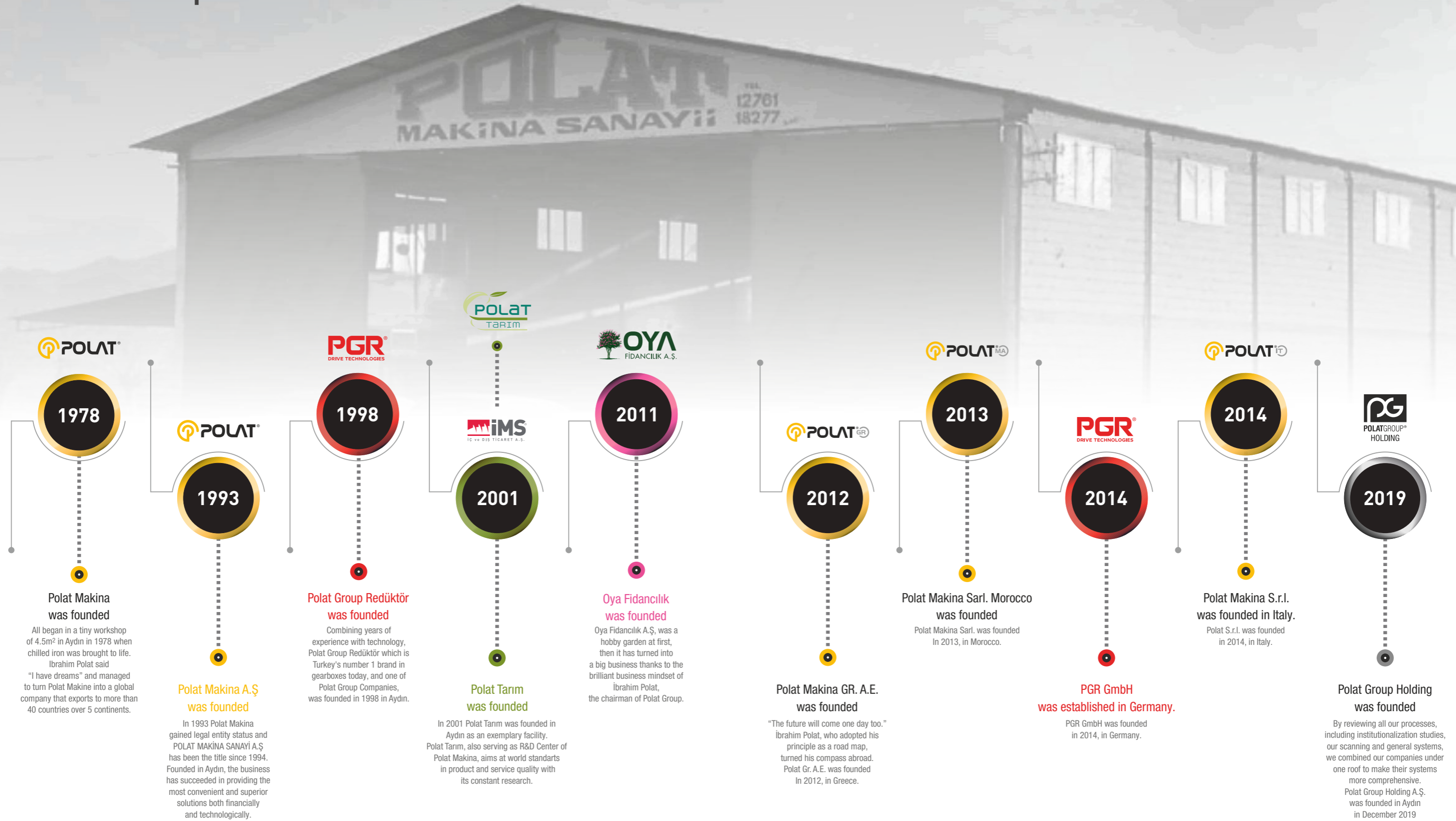
- Germany



Export Countries

- | | | | | | | | |
|-------------------|-----------------|------------------------|------------------|-----------------|----------------|---------------|----------------|
| 1. Germany | 11. Georgia | 21. Macedonia | 31. Slovenia | 41. Vietnam | 51. Slovakia | 61. Belarus | 71. Ireland |
| 2. Egypt | 12. Greece | 22. Morocco | 32. South Africa | 42. Peru | 52. Belgium | 62. Hungary | 72. Taiwan |
| 3. Romania | 13. India | 23. Netherlands | 33. Spain | 43. Philippines | 53. Moldova | 63. Denmark | 73. Argentina |
| 4. Australia | 14. Indonesia | 24. Nigeria | 34. Sudan | 44. Iraq | 54. Bulgaria | 64. Canada | 74. Croatia |
| 5. Algeria | 15. Iran | 25. Poland | 35. Oman | 45. China | 55. Kazakhstan | 65. Singapore | 75. Mauritius |
| 6. Austria | 16. Israel | 26. Portugal | 36. Switzerland | 46. Brazil | 56. Mozambique | 66. France | 76. Uzbekistan |
| 7. Azerbaijan | 17. Italy | 27. Qatar | 37. Thailand | 47. Armenia | 57. Estonia | 67. USA | 77. Sri Lanka |
| 8. Cyprus | 18. Jordan | 28. Russia | 38. Tunisia | 48. Pakistan | 58. Bahrain | 68. Malaysia | 78. Mexico |
| 9. Czech Republic | 19. South Korea | 29. Saudi Arabia | 39. UAE | 49. Lithuania | 59. Lebanon | 69. England | 79. Chile |
| 10. Finland | 20. Libya | 30. Bosnia-Herzegovina | 40. Ukraine | 50. Kuwait | 60. Latvia | 70. Sweden | 80. Serbia |

Polat Group Milestones



The Production Area



Gearbox processing



Profile grinding



Profile grinding



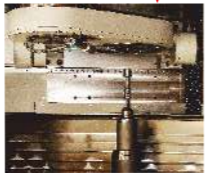
Hobbing



Profile grinding



Worm milling



Worm grinding

Production Processes and CNC Machine Samples

Final Touch on Manufacturing “Assembly”



Transferring the materials along a line automatically or by the help of a workforce and performing the required operations on the part in a row of workstations along a line defines the assembly lines. The products are going through the design phase at PGR in ASTIM main building, are brought together in our Umurlu factory, and their assembly is completed and sent to industrial painting, which is the last step of the production and the first step of sales.



“Warehouse tracking and production management”

It is an automation system based on warehouse tracking and production management, stocking of products, and control of their movements. In our facility, which has a wide product range, different entry and exit processes and different operations are applied for each product.

We use the Warehouse Management System to monitor and control operations such as product acceptance, storage, location tracking, labelling, loading, flexible control mechanism, and customer shipment through a single system.

We have 20.000 back-to-back shelving systems, produced according to European standards in our 10.000 square meter warehouse area.

Our products are stacked properly by special automation tools.

We manage all of our warehouse and production processes digitally by using FIFO (First In First Out) method.

Thanks to ERPs (Enterprise Resource Planning) and other factory automation systems, we ensure perfect stock management and “0” missing stock and save time.

To run the stock and delivery operations organized and with the least workload, our warehouse is managed with an integrated barcoding system.

Thanks to this system, the difficulty of determining and tracking the locations of the goods in the warehouse is eliminated.



Continuous change for the better ...

Kaizen

Kaizen is one of the cornerstones of the lean manufacturing system that helps to increase product and service quality.

With the support of the latest technology, as PGR we have determined the six principles of Kaizen as the core of our quality and progress as below:

1. To ensure customer satisfaction, we ensure being at the frontline of quality, cost, and timely delivery.
2. To ensure the participation of everyone.
3. Spend Less and Earn More.
4. Continuous Improvement with Small Steps
5. Ensuring Information Sharing
6. Sharing Success and Pride



Error Isolation Technique ...

Poka-Yoke

One of the most important quality tools of the Lean production system is

Poka-Yoke which is another philosophy adopted by PGR to detect defections

before happening.

Minor errors and disruptions that may occur on the production lines should not be encountered as "customer dissatisfaction" in the future.

We work with the target of 'zero defect at every step' of our production process.

For Sustainable Development and Sustainable Life;

The sustainability approach of Polat Group Company, as a company that manufactures eco-friendly machines and aims to contribute to sustainability in nature, is focused on the environment and efficiency.

We prioritize developing preventive approaches by identifying risks in advance in addition to evaluating limited resources effectively and wisely in all our work.

Adopting a **Proactive** understanding, as PGR we aim to meet the changing needs of society, making innovation a part of **Corporate** culture and all business processes that are led with **Innovative** understanding.

We as PGR, pay attention to our all long-term projects, support creating sustainable effects in our work, and never forget our responsibility to the planet causing minimum ecological footprint by producing solutions that are oriented in social benefits providing permanent advantages.

“TARGET-ORIENTED SOLUTIONS”



OUR SUSTAINABILITY POLICY

“The right steps take you to the solution”

Pre Sales Support

Working with a focus on customer satisfaction, PGR constantly researches and improves to offer you the best.

With the awareness that pre-sales services are the most important element of sales, we identify and plan for your needs with our expert staff.

Because we believe that the more the first step is taken correctly, the more solid and practical the structure to be built on will be.

As a result of the meetings with the customer, we select the appropriate product based on the targets, determine our flow diagram and determine your needs by giving information and presentations on mounting issues.

We take the right steps and build our projects on a sound basis.

For absolute solutions...

Offering a wide range

of products for the local

and global market

with our high

production technology,

PGR will continue to give you

the best before and

after-sales service

through its expert technical staff.

AFTER-SALE SERVICE

As PGR the sale policy that we apply is based on transparency and honesty in relationships with our customers.

We adopt unconditional customer satisfaction as our customer relation approach.

One of the primary duties of the marketing and sales group is building a strong and recognizable brand and ensuring that our customers know the use and maintenance of the product well.

The best fulfillment of these tasks positively affects our new customer potential for future projects.

Your satisfaction is our pride

Our technical service; with a 24/7 service policy, aims to understand all technical problems and needs of our customers in the best way and then to provide reliable, solution-oriented, and fast support.

You can contact our sales team of PGR Turkey and Germany 7 days 24 hours . You can reach our updated Fair schedule at www.pgr.com.tr and contact us by phone.

PGR Türkiye sales team :
sales@pgr.com.tr
+ 90 256 231 19 12 - 16

PGR GmbH sales team :
sales@pgrgermany.de
+ 49 (0) 2382 855 70 10

24/7

We are at your service
with our regional directorates
and wide dealer network ...

High level of customer satisfaction
with fast and precise solutions...

We are at your service with our regional
directorates, wide dealer network and
our devotedness of

**“Customer satisfaction
until the end,
not just until sale”.**

**“Your satisfaction is the
indication of our success”.**

You can reach our regional directorates
and dealer contact information at
www.pgr.com.tr.

We are always
ready for you...

Logistic

After the production process, PGR,
who exports to more than 80 countries on 5 continents
all over the world, delivers its products to its customers
under international trade standards.

Our gearboxes, each packed safely in boxes tailored
to their size are delivered from the factory,
customs clearance, or alternative ways.



We produce environment friendly solutions!

Everything that is not used properly is doomed to deteriorate over time, become dirty, wear out, and gradually disappear.

It is our duty to leave a green, healthy, more liveable world for future generations.

It is one of our most important principles to comply with the national and international legal regulations and other obligations regarding the environment in the geography we operate, to protect natural resources, and to use them efficiently.

We are working for a greener world.



Research and Development, Product Development and Innovation

The machinery manufacturing industry is in a close relationship with its R&D department.

R&D studies play an important role in the development of this sector and the innovation of its technology.

The machinery sector, as a result of the development in technology and an increase in investments for automation, has been the rising value of the rapidly growing and developing our business partners accordingly.

Our age is the era of the industrial revolution and technology is constantly growing. The way to increase our competitive power is through innovation and research and development (R&D).

Neither of them can break apart, and one is no less important than the other. But even more important is getting knowledge.

With our expert team in R&D and Product Development, we constantly research and produce new solutions to get knowledge.

“We are constantly researching and producing new solutions”

Based on the principle of

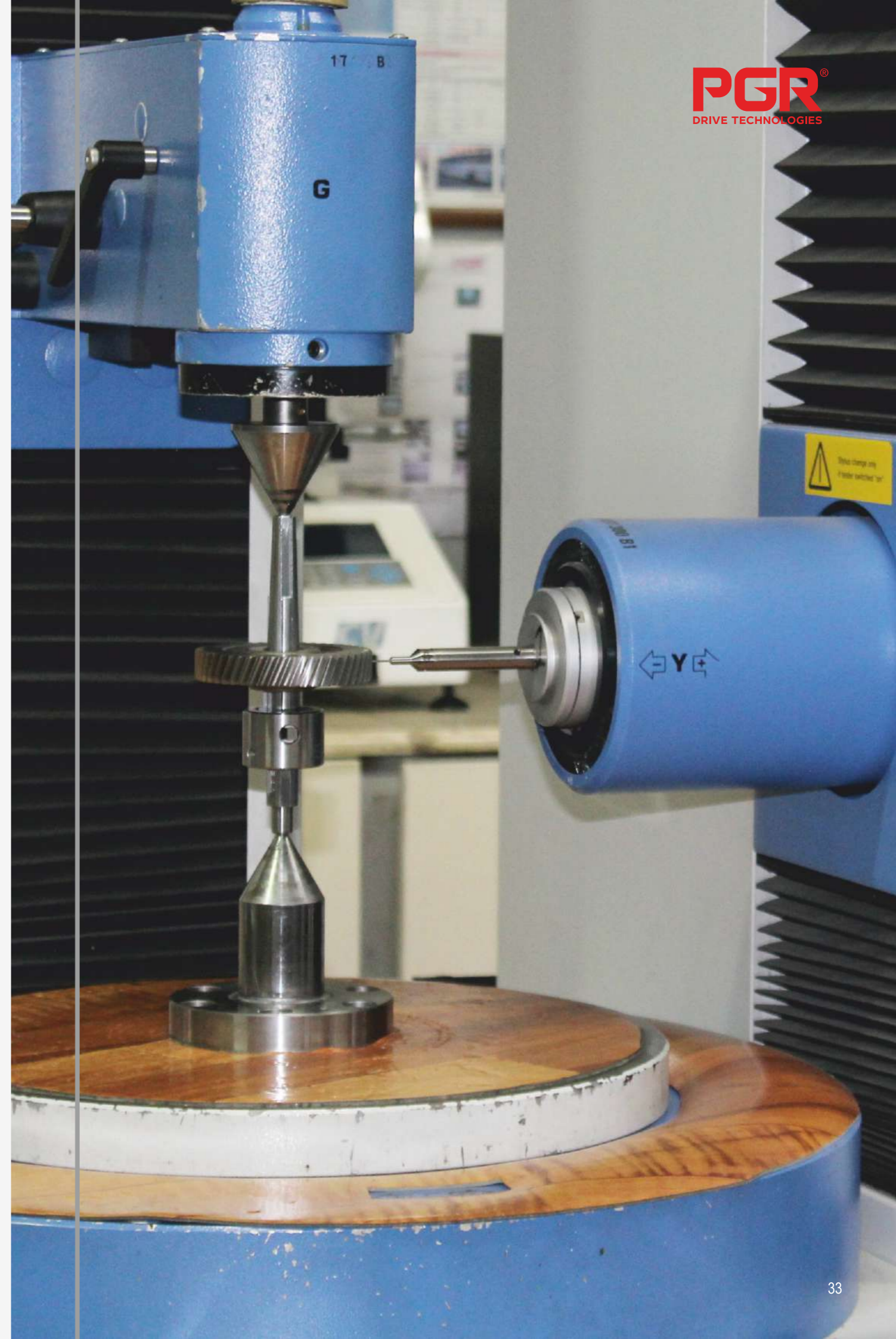
“Quality is never a coincidence”

the basics of our quality policy are documentation, certification continuous improvement. To fulfil the requirements of standards of ISO 9001:2015, our quality management system tries to meet the total quality philosophy and achieves company and unit targets within the team spirit, based on the philosophy of total quality

Quality Control

Our promise for the global market;
Providing service without
compromising quality ...

Dimensional measurements, gear measurement, sampling, polishing, and hardness tests are performed by the high-tech quality control devices in our quality control department. Our staff, who show the same sensitivity in every process of production, supervise all processes of reducer production. The principle of customer satisfaction is guaranteed from the first process to the last one.



“We combine Our Power
with Technology”

SAP S/4HANA

“DIGITAL TRANSFORMATION
JOURNEY CONTINUES IN
POLAT GROUP COMPANIES”

With the latest digital transformation move, SAP S/4HANA:

The New Generation ERP solution has been adapted to the system.

Thanks to SAP S / 4HANA, every data, every activity has a digital trace and is recorded. So with the help of the data and the systems that create value, the efficiency will be increased. In this way, by improving the provided service to the business partners, it aims to add value to the sector and the economy in our area of network.

The new generation ERP solution not only makes the trial of new business models more flexible but also accelerates application development and facilitates collaborations. Thanks to the database of SAP S / 4HANA, it offers real-time analytics to support rapid decision-making processes.



“SAP S/4HANA”

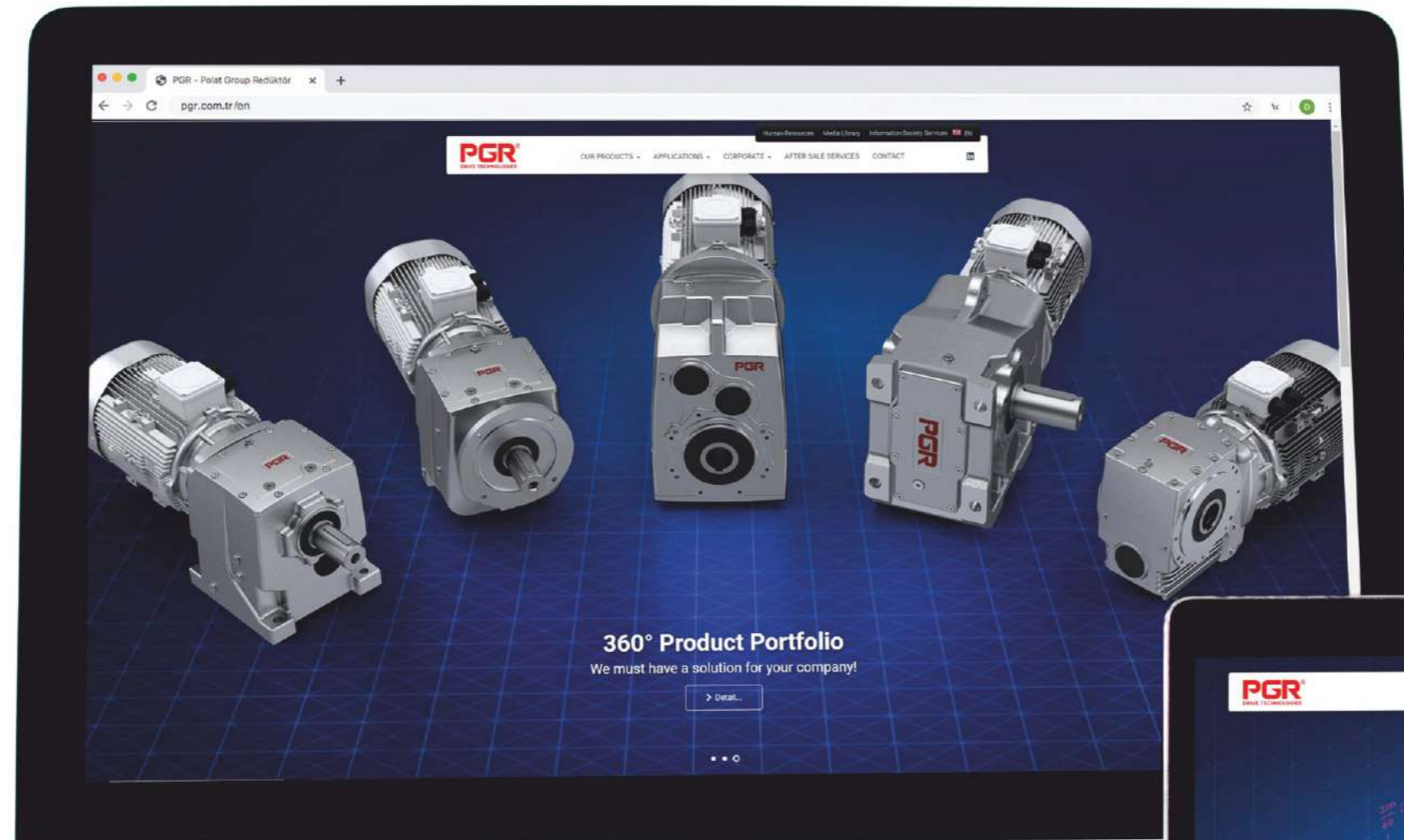
It collects all business processes in one source.

Digital Transformation Continues in PGR Drive Technologies

www.pgr.com.tr



“We invite you to
rediscover us”



2D/3D Drawings

You can easily select the desired gearbox, prepare offers and download 2D/3D drawings from our website with the help of the configurator.

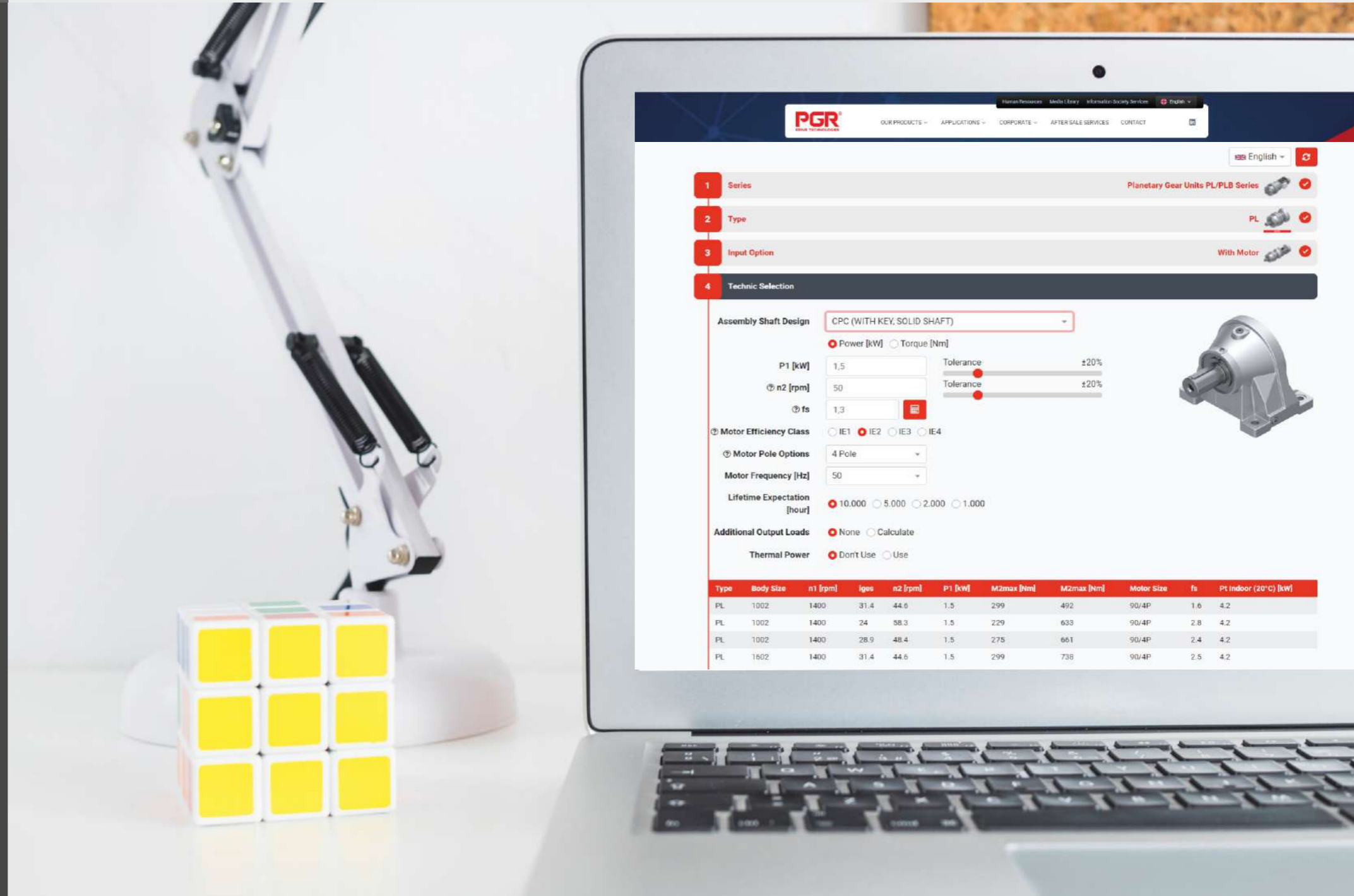
It is also possible to access the Technical Data of the product you have chosen.

With the help of this program, access to PGR products can be made quickly using the internet.

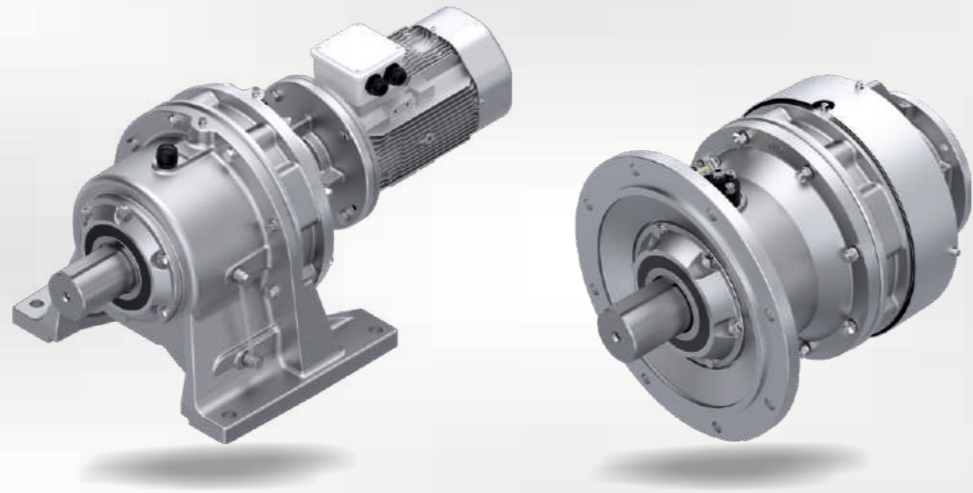


Data Sheets

In the data sheets of the gearbox you have chosen, you can easily find information such as the amount of oil to be added according to the mounting position, the type of oil to be used according to the weather condition, and the frequency of replacement.



Customize as per your needs
Configurator Program



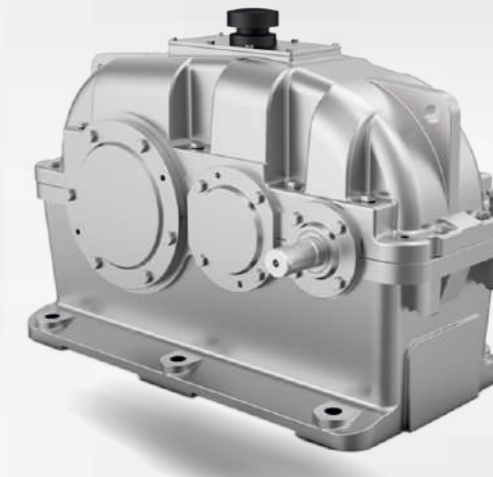
New
Product

PCD Series

Cycloid Series Gear Units

Power	0.12 ... 95 kW
Moment	3 ... 74490 Nm
Ratio	6 ... 7569

- Gearboxes with coaxial input and output.
- Casing with feet, flange options are available.
- A rigid structure in cases and suitable for heat transfer.
- Offered as Solid Shaft.
- System resistance calculations are made in accordance with DIN, ISO, and NIEMANN standards
- Different input options may be provided (Coupled motor, Hollow shaft adapter, W, C-face).
- Discs are made of 100 Cr6, cases produced of GG25 material.
- Both horizontal and vertical mounting positions available.
- For single-stage cases up to 612 lubricated with grease, cases between 613 to 620 with oil bath,
For double stage cases between 607/07 to 618/10 lubricated with grease and cases between 616/11 to 627/19 with an oil bath.
- Special requests of customers may be considered.



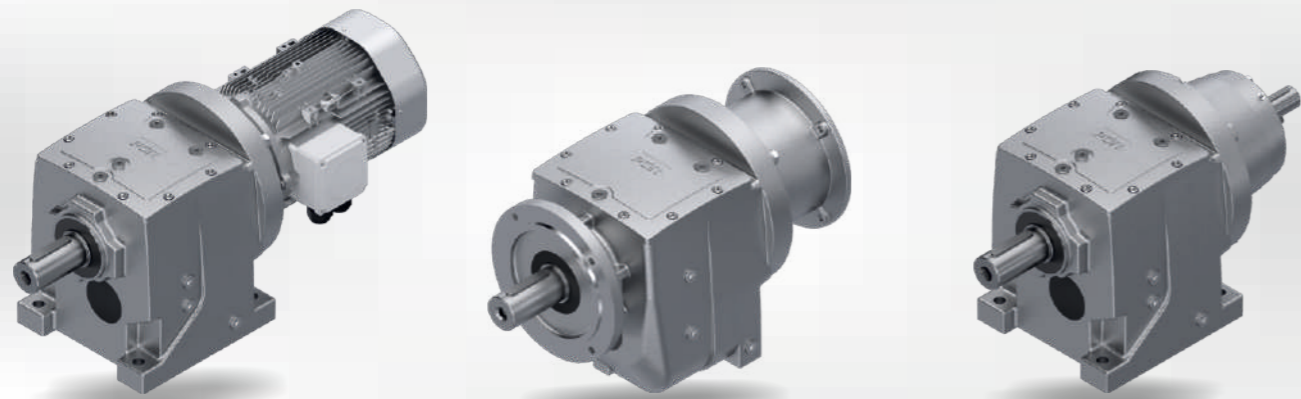
New
Product

PZ Series

Cylindrical Gear Units

Power	4 ... 6666 kW
Output Speed	7.5 ... 1200 rpm
Ratio	1.25 ... 100

- The gear is made of high-strength low carbon alloy steel through carburization and quenching. The hardness of the tooth surface may reach to HRC58-62. All gear adapts NC tooth grinding process, high in accuracy and good in contact performance:
- Highly-transmission efficiency: single-stage, more than 96.5%; double-stage, more than 93%; three-stages, more than 90%.
- Smooth and stable in-run, low noise.
- Compact, light, long life, high bearing capacity.
- Easy to disassemble, inspect and assemble.



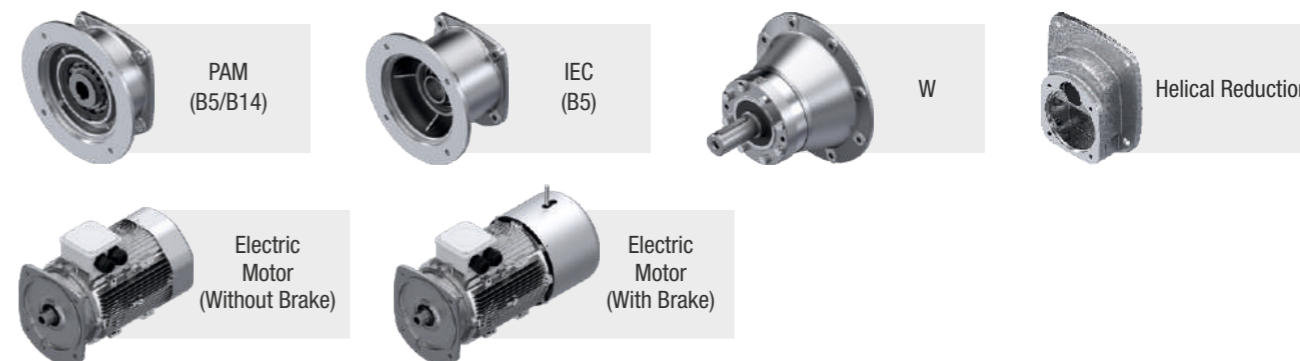
PA/PF Series

Helical Gear Units

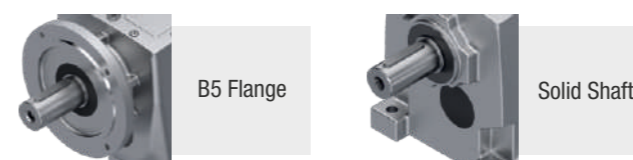
Power	0.12 ... 240 kW
Torque	1 ... 23160 Nm
Output Speed	0.13 ... 1129 rpm
Ratio	1.24 ... 11293.72

- Helical gear units with coaxial input and output.
- Casing with feet, flange F options.
- A rigid structure in cases.
- System resistance calculations are made in accordance with ISO, DIN, and NIEMANN standards.
- Different input options may be provided (Coupled motor, IEC, PAM, W, Servo motor connected, ...).
- Different flange measurements may be provided in B5 mountings.
- Cases are manufactured from sfero (GGG 40-50) and peak (GG 20-25).
- Gears are made of cast and 21NiCrMo2 case-hardening steel.
- High-quality bearing and sealing components are used.
- Special requests of the customers may be considered.

Input Options



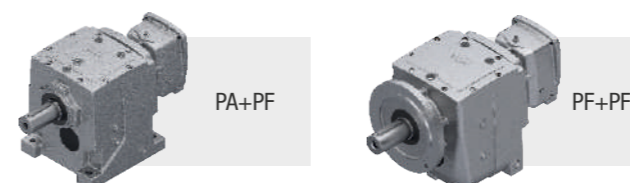
Output Options

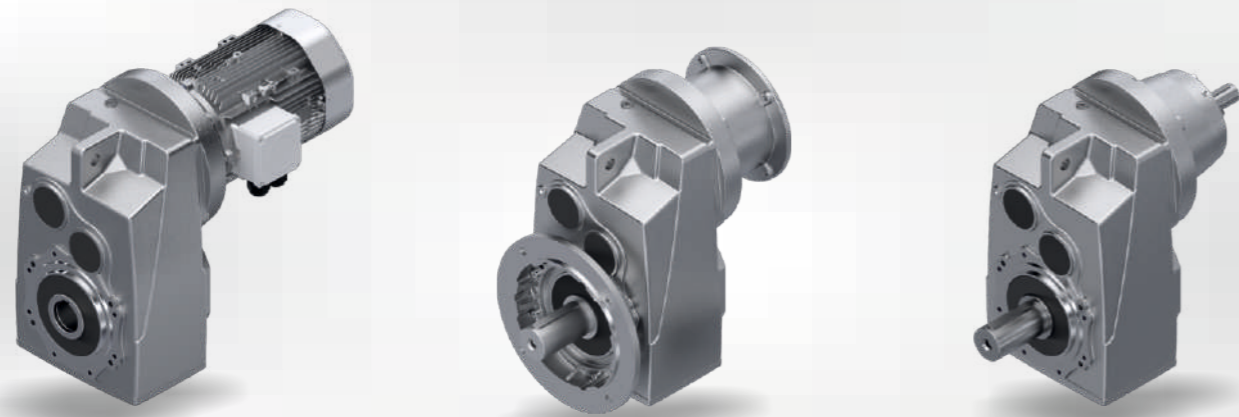


Connection Options



Combinations





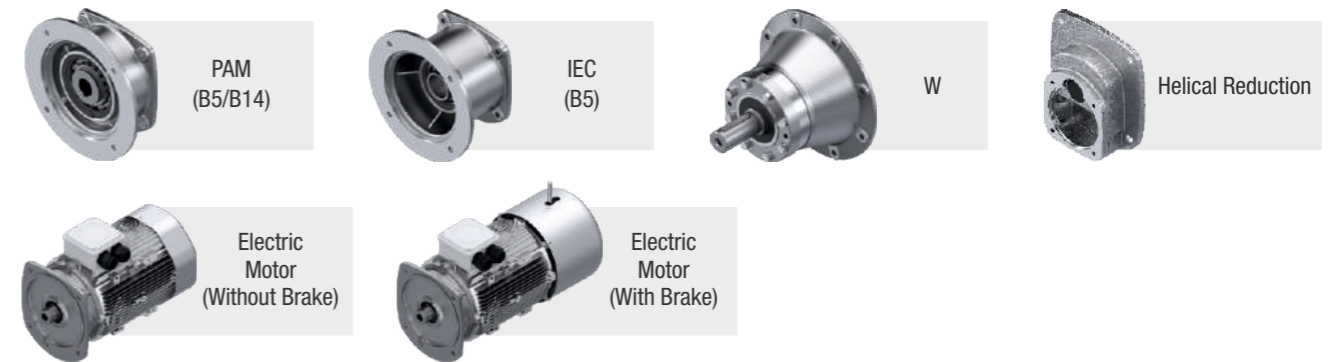
PD/PM Series

Parallel Shaft Mounted Gear Units

Power	0.12 ... 245 kW
Torque	3 ... 36928 Nm
Output Speed	0.3 ... 348 rpm
Ratio	4.02 ... 6601.35

- Helical gear units with parallel axis input and output.
- A rigid structure in case.
- System resistance calculations are made in accordance with ISO, DIN, and NIEMANN standards.
- Different input options may be provided (Coupled motor, IEC, PAM, W, Servo motor connected, ...).
- Different output options available (Solid shaft, Hollow shaft, With shrink disc, ...).
- Different mounting accessories available (B5 flange, B14 flange, Rubber buffer for torque arm, ...).
- Cases are manufactured from sfero (GGG 40-50) and peak (GG 20-25).
- Gears are made of cast and 21NiCrMo2 case-hardening steel.
- High-quality bearing and sealing components are used.
- Special requests of the customers may be considered.

Input Options



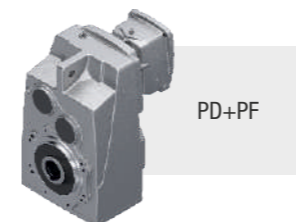
Output Options



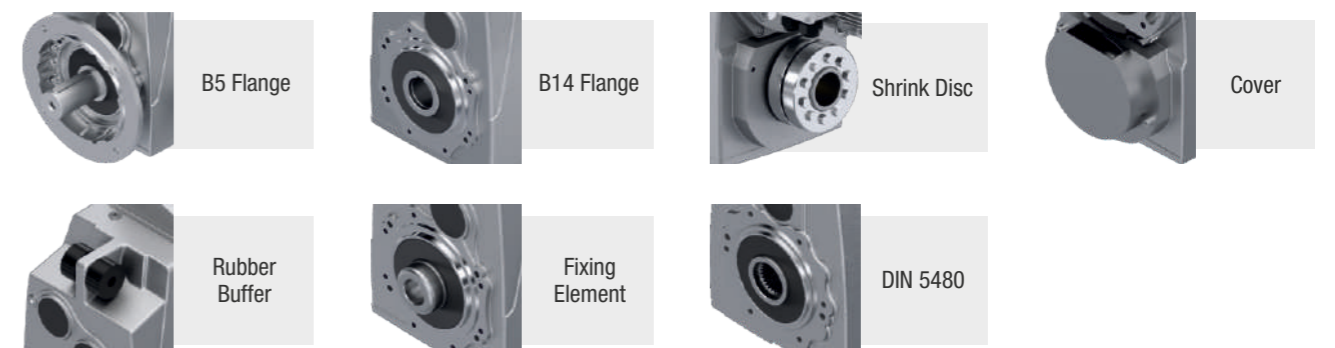
Connection Options

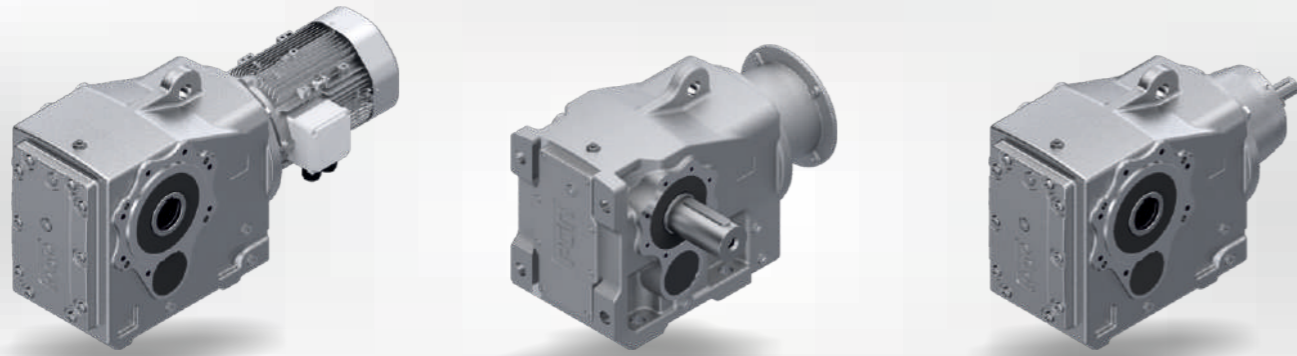


Combinations



Accessories





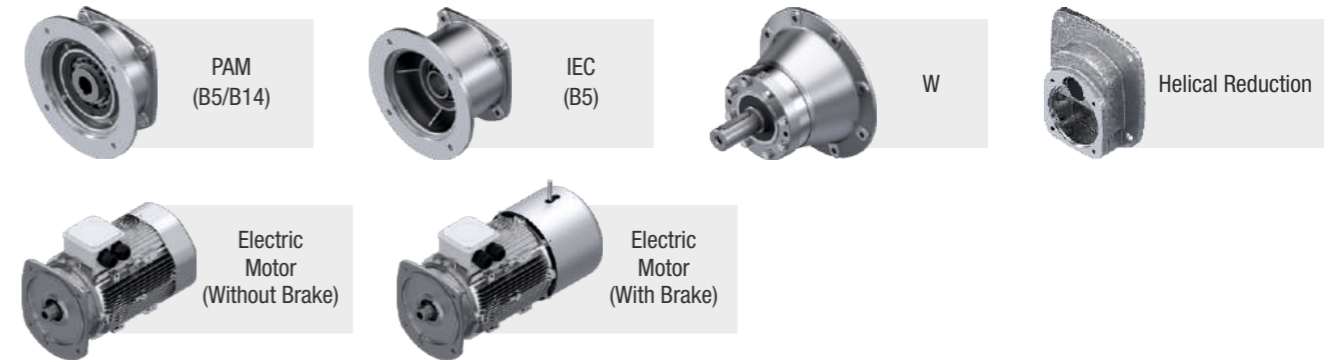
PKD Series

Helical Bevel Gear Units

Power	0.12 ... 465 kW
Torque	3 ... 51784 Nm
Output Speed	0.2 ... 363.5 rpm
Ratio	3.85 ... 7842.34

- Helical bevel gear units with 90° input and output axis range.
- Casing with feet, flange F options.
- A rigid structure in case.
- System resistance calculations are made in accordance with ISO, DIN, and NIEMANN standards.
- Different input options may be provided (Coupled motor, IEC, PAM, W, Servo motor connected, ...).
- Different output options available (Solid shaft, Hollow shaft, With shrink disc, ...).
- Different mounting accessories available (B5 flange, B14 flange, Torque arm, and Platforms, ...).
- Bodies are manufactured from sfero (GGG 40-50) and peak (GG 20-25).
- Gears are made of cast and 21NiCrMo2 case-hardening steel.
- High-quality bearing and sealing components are used.
- Special requests of the customers may be considered.

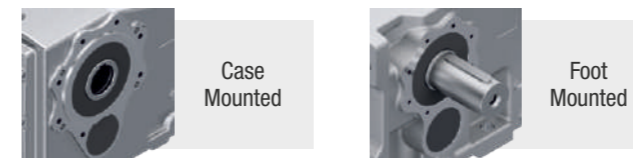
Input Options



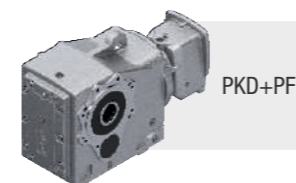
Output Options



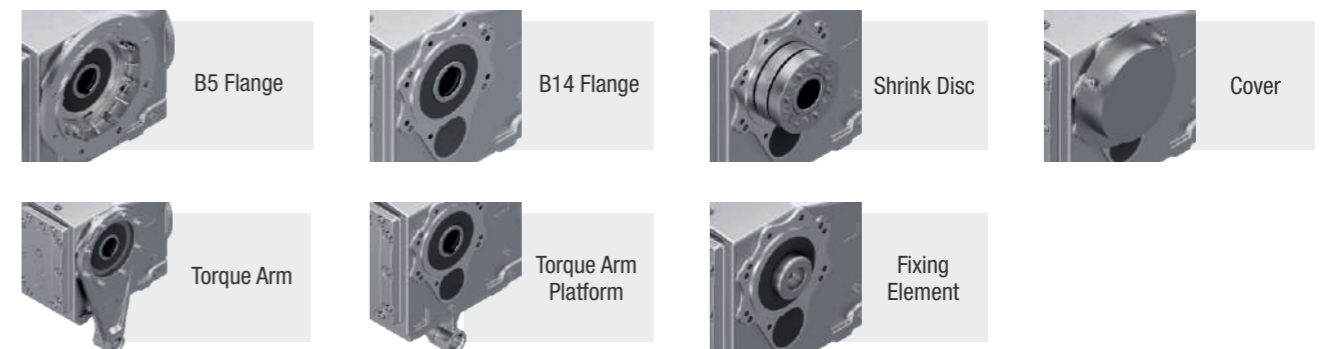
Connection Options

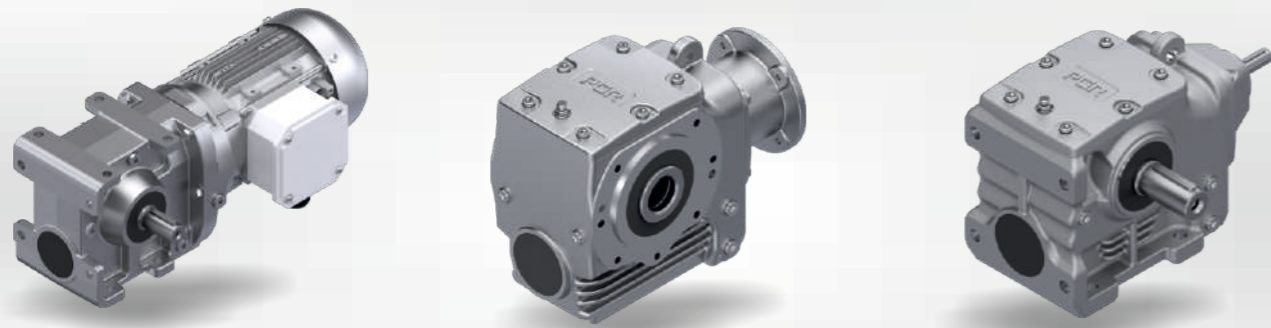


Combinations



Accessories





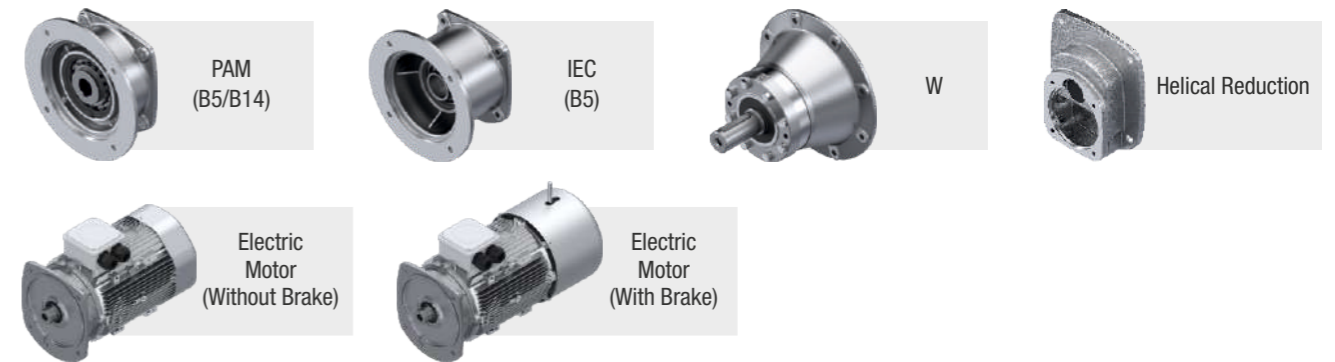
PSH Series

Helical Worm Gear Units

Power	0.12 ... 21.5 kW
Torque	3 ... 3157 Nm
Output Speed	0.4 ... 318 rpm
Ratio	4.4 ... 3735.56

- Helical and worm gear units with 90° input and output axis range.
- Casing with feet, flange F options.
- Rigid case structure and suitable for heat transfer.
- System resistance calculations are made in accordance with ISO, DIN, and NIEMANN standards.
- Different input options may be provided (Coupled motor, IEC, PAM, W, Servo motor connected, ...).
- Different output options available (Solid shaft, Hollow shaft, With shrink disc, ...).
- Different mounting accessories available (B5 flange, B14 flange, Torque arm, ...).
- Bodies are manufactured from sfero (GGG 40-50) and peak (GG 20-25).
- Helical gears are made of cast and 21NiCrMo2, screws are made of 16MnCr5 case-hardening steel, and worm wheels are made of CuSn12 Ni2-C bronze material.
- High-quality bearing and sealing components are used.
- Special requests of the customers may be considered.

Input Options



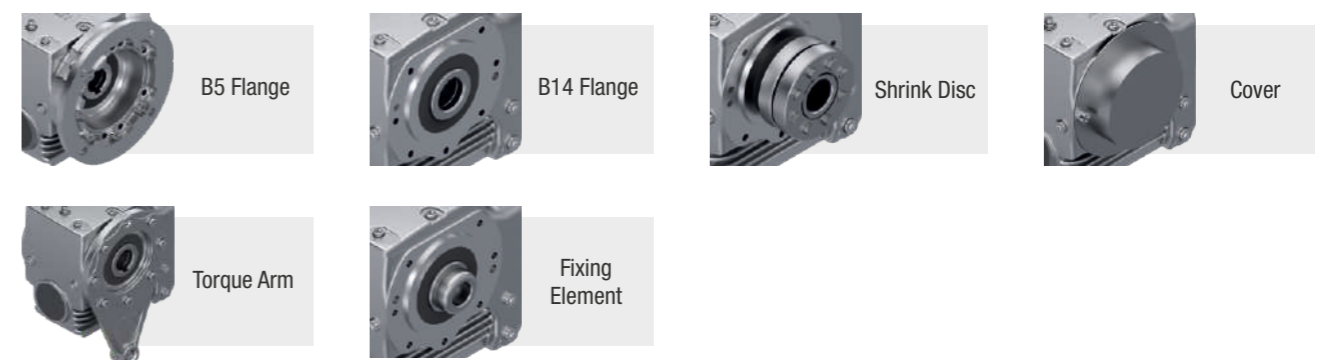
Output Options



Connection Options



Accessories





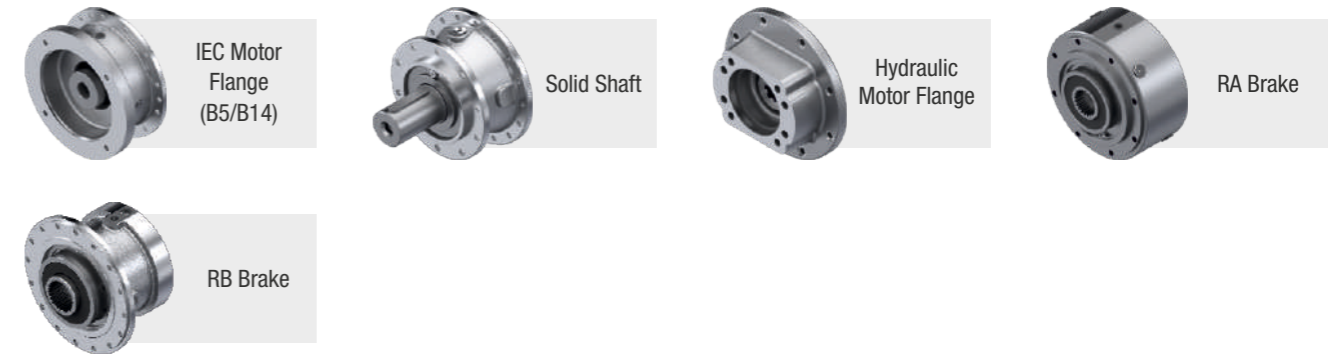
PL/PLB Series

Planet Gear Units

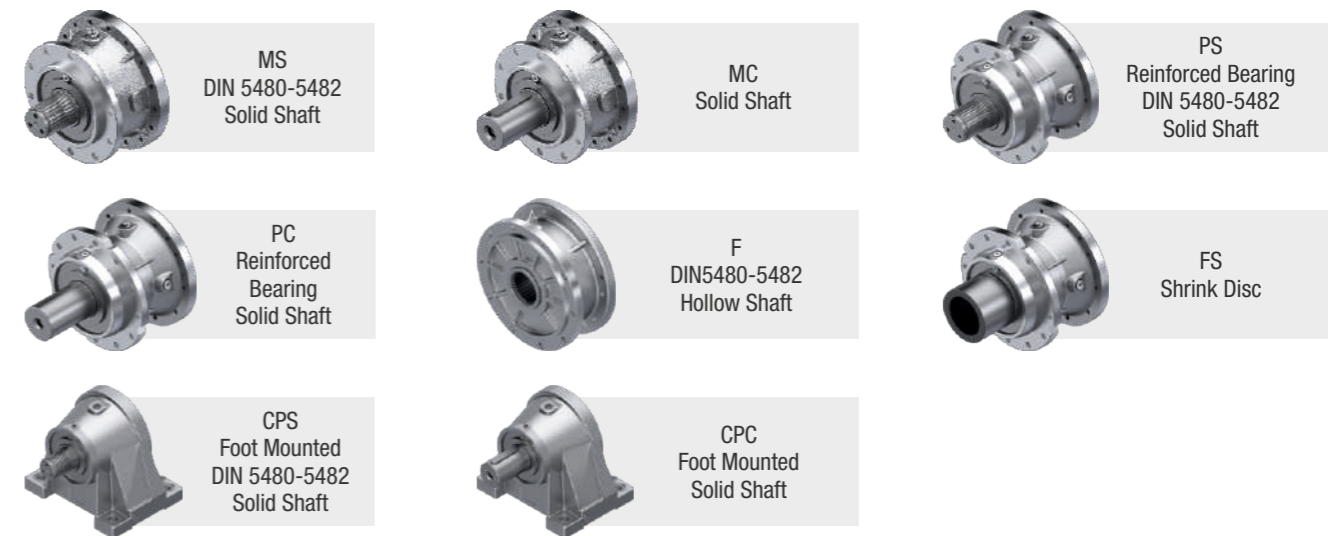
Power	0.12 ... 275 kW
Torque	86 ... 620000 Nm
Output Speed	0.4 ... 400 rpm
Ratio	3.56 ... 2968.9

- Gear units with coaxial input and output or 90° axis angle.
- Casing with feet, flange F options.
- A rigid and modular structure in case.
- Compared to other gear units, higher moment values can be met with smaller case sizes.
- System resistance calculations are made in accordance with ISO, DIN, and NIEMANN standards.
- Different input options may be provided (IEC, Hydraulic Motor mounted, Servo motor mounted, ...).
- Different output options available (Hollow shaft, Shrink disc, DIN form splined, ...).
- Cases are manufactured from cast iron (GGG 50-60).
- Gears are made of cast and 21NiCrMo2 case-hardening steel.
- High-quality bearing and sealing components are used.
- Special requests of the customers may be considered.

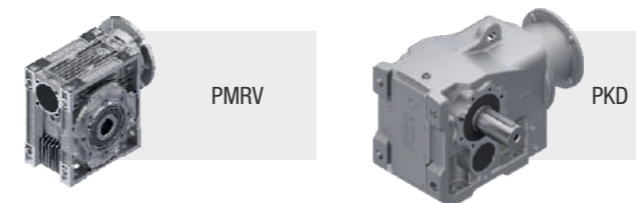
Input Options



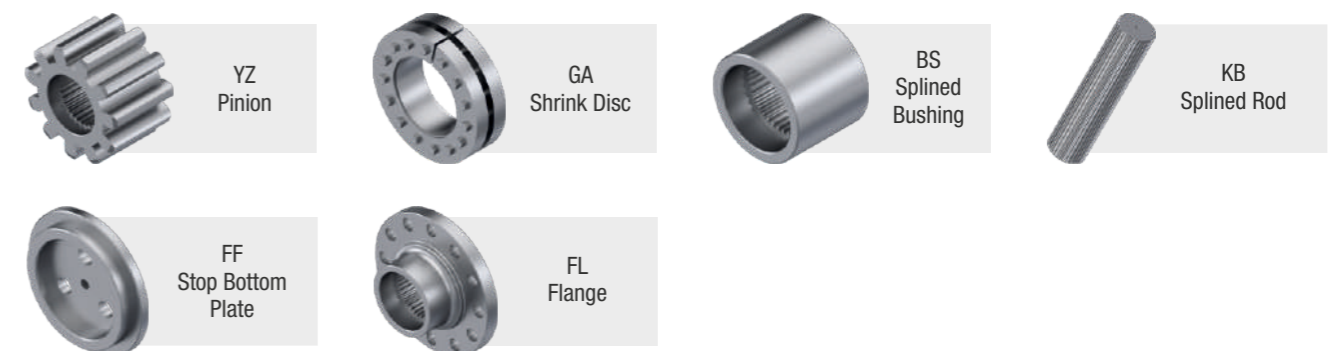
Output Options



Combinations



Accessories





PH/PB Series

Industrial Type Gear Units

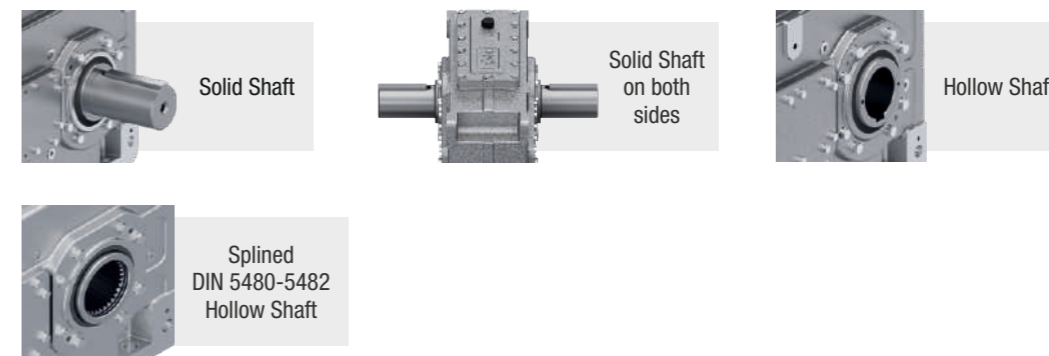
Power	3.5 ... 4650 kW
Torque	2400 ... 480000 Nm
Ratio	1.25 ... 450

- Helical - bevel gear units with parallel axis input and output or 90° axis angle.
- Casing with feet, flange F options.
- A rigid structure in case.
- Gear units used to meet needs for high power under heavy working conditions.
- System resistance calculations are made in accordance with ISO, DIN, and NIEMANN standards.
- Different input options available (IEC, W, ...).
- Different output options available (Solid shaft, Hollow shaft, With shrink disc, ...).
- Different mounting options available (B5 flange, Torque arm platform, ...).
- Cases are manufactured from sfero (GGG 40-50) and peak (GG 20-25).
- Gears are made of cast and 21NiCrMo2 case-hardening steel.
- High-quality bearing and sealing components are used.
- Special requests of the customers may be considered.

Input Options



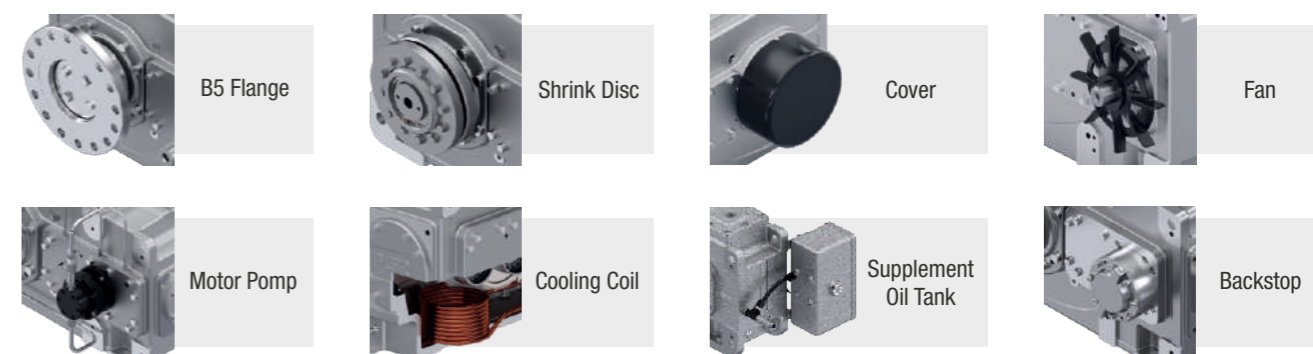
Output Options

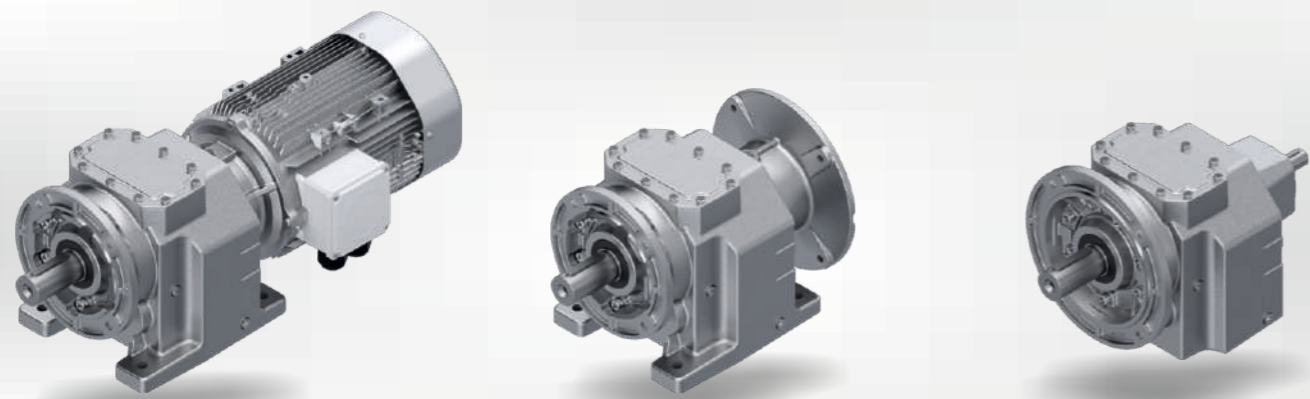


Combinations



Accessories





A/F Series

Helical Gear Units

Power	0.09 ... 136 kW
Torque	1.25 ... 8000 Nm
Output Speed	5 ... 1111 rpm
Ratio	1.26 ... 282.17

- Helical gear units with coaxial input and output.
- Casing with feet, flange F options.
- A rigid structure in case.
- It could be provided in solid shaft form.
- System resistance calculations are made in accordance with ISO, DIN, and NIEMANN standards.
- Different input options may be provided (Coupled motor, IEC, PAM, W, Servo motor connected, ...).
- Cases are manufactured from sfero (GGG 40-50) and peak (GG 20-25).
- Gears are made of cast and 21NiCrMo2 case-hardening steel.
- High-quality bearing and sealing components are used.
- Special requests of the customers may be considered.

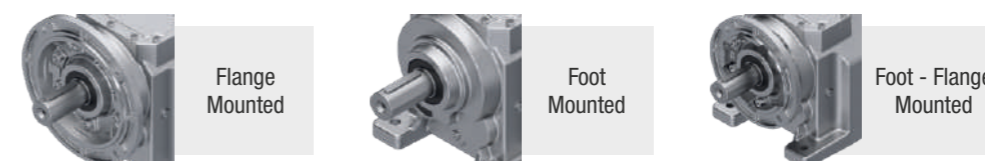
Input Options

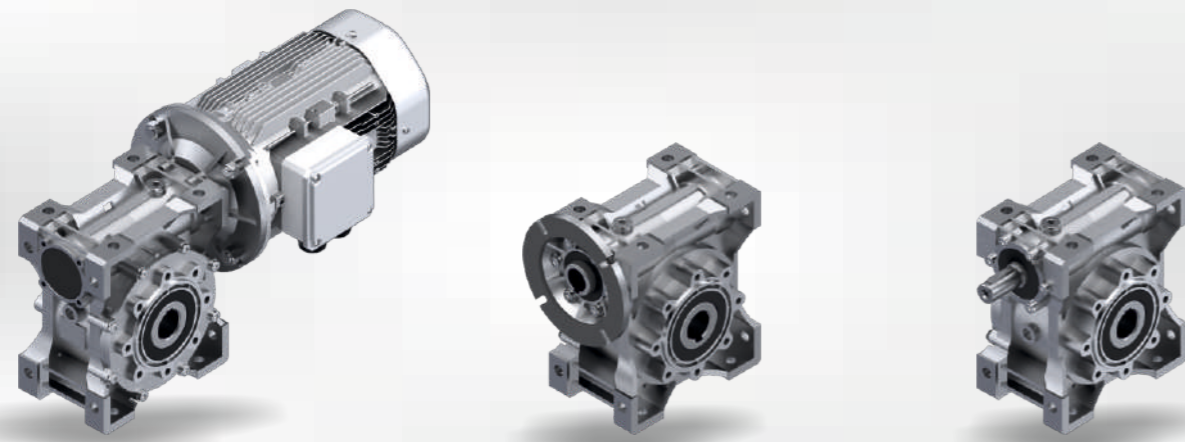


Output Options



Connection Options





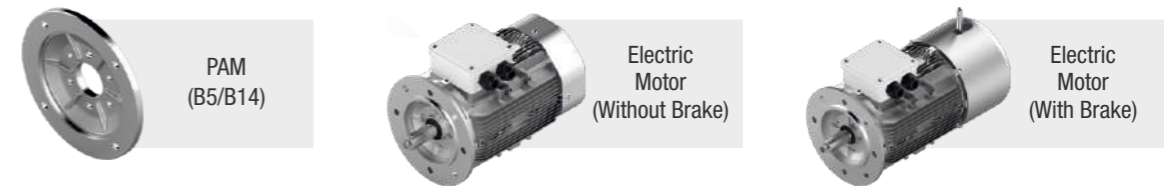
PMRV/PRV PLUS+ Series

Worm Gear Units

Power	0.06 ... 27 kW
Torque	2 ... 6060 Nm
Output Speed	0.35 ... 280 rpm
Ratio	5 ... 4000

- Worm gear units with 90° input and output axis range.
- Foot- and flange- mounting available with a single case.
- Rigid case structure and suitable for heat transfer.
- System resistance calculations are made in accordance with ISO, DIN, and NIEMANN standards.
- Different input options available (PAM B5, PAM B14, ...).
- Different output options available (Solid shaft, Hollow shaft, ...).
- Different mounting accessories available (B5 flange, B14 flange, Torque arm, ...).
- Worm screws are made of 16MnCr5 case-hardening steel, and worm wheels are made of CuSn12Ni-C bronze material.
- Cases are made of ADC-12 aluminium injection up to 105 case size and peak cast (GG 20-25) for over 110 case size.
- High-quality bearing and sealing components are used.
- Special requests of the customers may be considered.

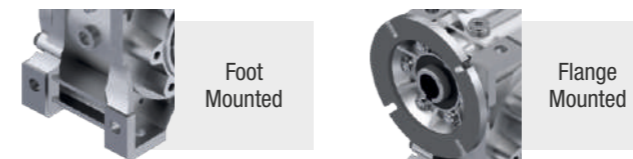
Input Options



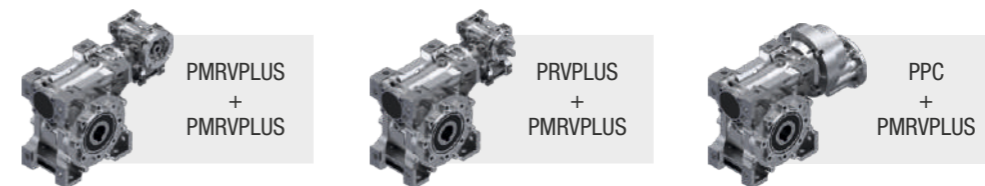
Output Options



Connection Options

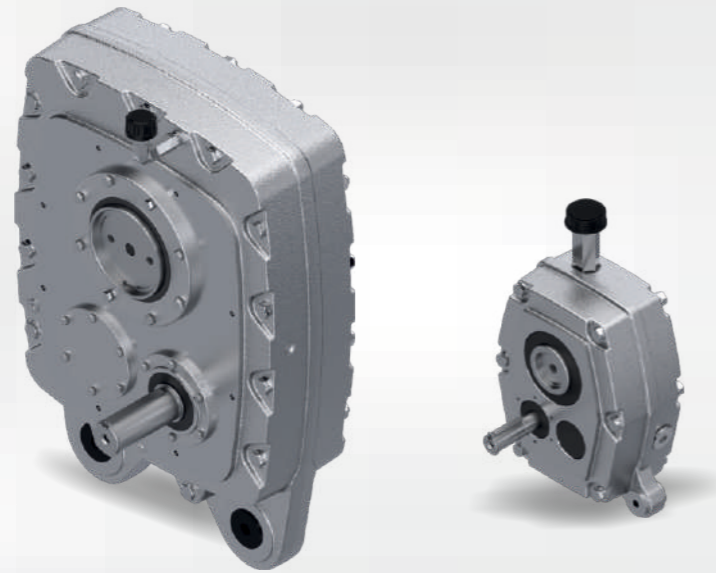


Combinations



Accessories





P Series

Shaft Mounted Helical Gear Units

Power	0.5 ... 270 kW
Torque	260 ... 42700 Nm
Ratio	5 ... 20

- Helical gear units with parallel axis input and output.
- A rigid case structure consisting of two components.
- System resistance calculations are made in accordance with ISO, DIN, and NIEMANN standards.
- Free input shaft enables driving.
- Different output options available (Hollow shaft, With shrink disc, ...).
- Mounted with torque arm.
- Cases are manufactured from cast iron (GGG 40-50) and peak (GG 20-25).
- Gears are made of cast and 21NiCrMo2 case-hardening steel.
- High-quality bearing and sealing components are used.
- Special requests of the customers may be considered.

Input Options



Solid Shaft

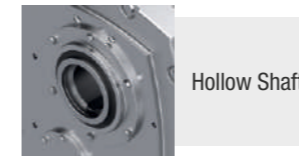


Electric Motor
(Without Brake)



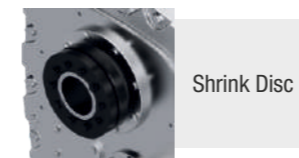
Electric Motor
(With Brake)

Output Options



Hollow Shaft

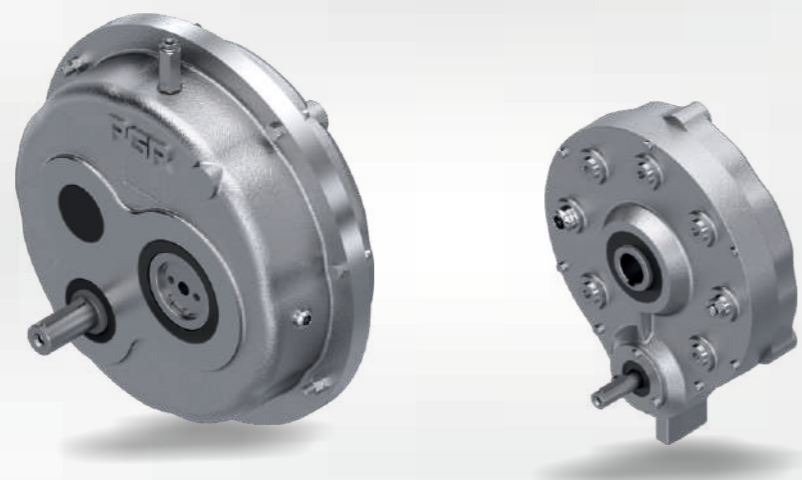
Accessories



Shrink Disc



Torque Arm



Pt/A Series

Shaft Mounted Helical Gear Units

Power	0.5 ... 240 kW
Torque	145 ... 17830 Nm
Ratio	5 ... 35

- Helical gear units with parallel axis input and output.
- A rigid case structure consisting of two components.
- System resistance calculations are made in accordance with ISO, DIN, and NIEMANN standards.
- Free input shaft enables driving.
- Different output options available (Hollow shaft, With shrink disc, ...).
- Mounted with torque arm.
- Cases are manufactured from cast iron (GGG 40-50) and peak (GG 20-25).
- Gears are made of cast and 21NiCrMo2 case-hardening steel.
- High-quality bearing and sealing components are used.
- Special requests of the customers may be considered.

▼ Input Options



Solid Shaft

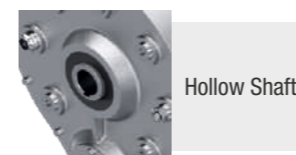


Electric Motor
(Without Brake)



Electric Motor
(With Brake)

▼ Output Options

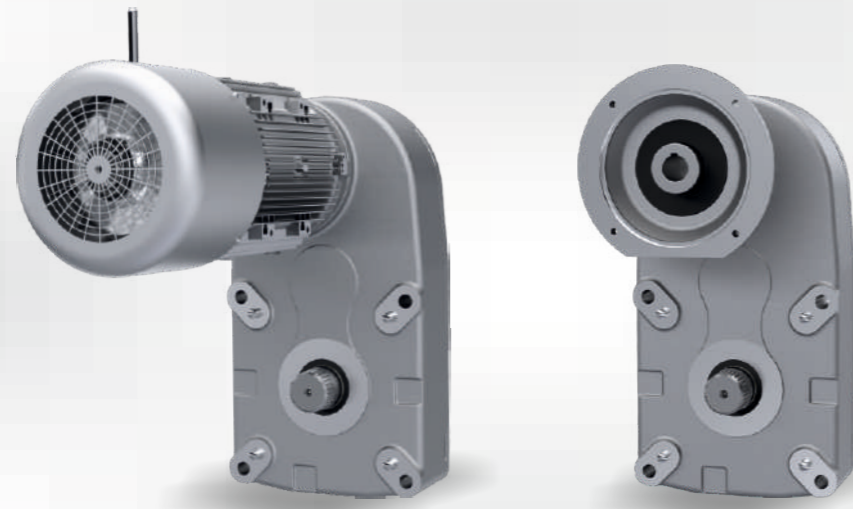


Hollow Shaft

▼ Accessories



Torque Arm



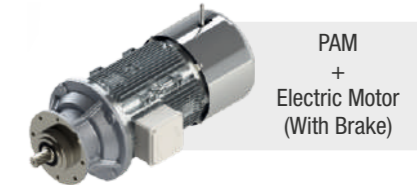
Input Options



PAM
(B5/B14)



Electric
Motor
(Without Brake)



PAM
+
Electric Motor
(With Brake)

Output Options



DIN 5480
Solid Shaft



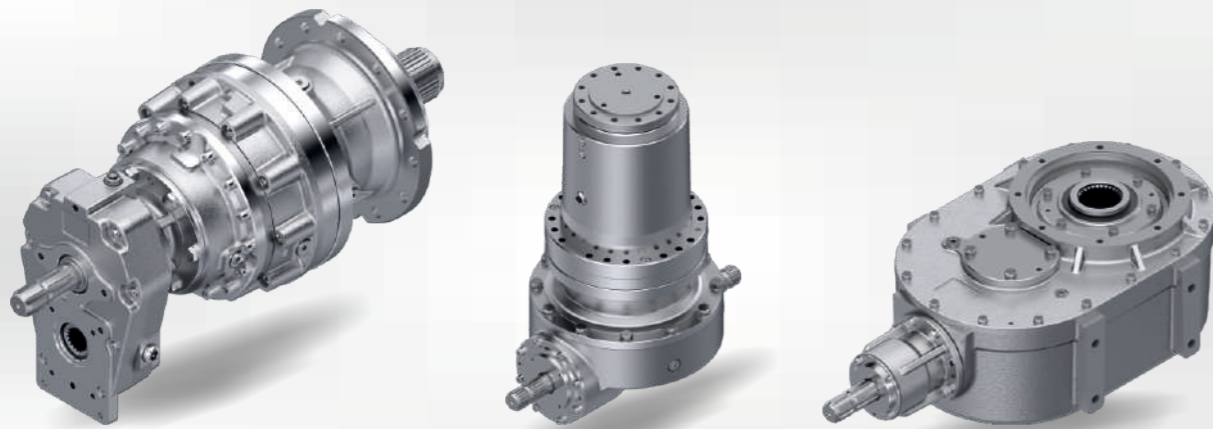
Drum Flange

PCS Series

Crane Gear Units

Lifting Speed	0.5 ... 32 rpm
Power	0.37 ... 55 kW
Load Capacity	1 ... 60 ton
Ratio	37.54 ... 231.9

- Helical gear units with parallel axis input and output.
- A rigid structure in case.
- System resistance calculations are made in accordance with ISO, DIN, and NIEMANN standards.
- Different input options may be provided (Coupled motor, PAM mounted, ...).
- Output shaft may be splined in accordance with DIN 5480-82 form and drum flange may be provided as output shaft accessory.
- Motors used are double speed (2-12 poles) or single speed (frequency inverter) and have IP55 protection class.
- Extra fan application is recommended for 2-12 pole motors.
- Cases are manufactured from aluminum and cast iron (GGG 40-50).
- Gears are made of cast and 21NiCrMo2 case-hardening steel.
- High-quality bearing and sealing components are used.
- Special requests of the customers may be considered.



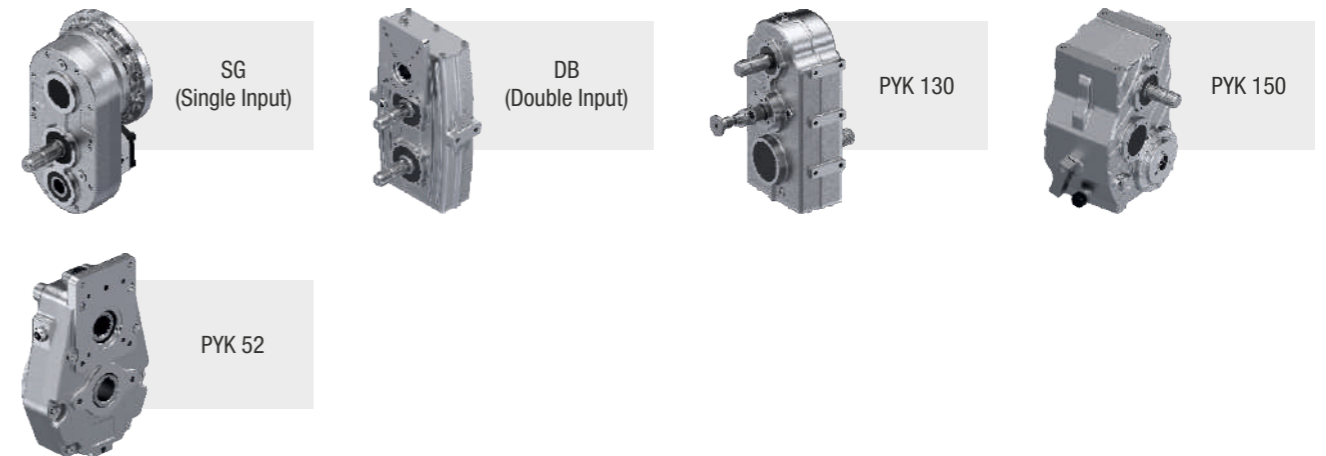
PYK Series

Feeder Mixer Drives

Capacity	0.5 ... 20 m ³
Torque	1000 ... 38250 Nm
Ratio	8.72 ... 54.2

- Feeder mixer drives with coaxial or parallel axis input and output or 90° axis angle.
- Components are mounted over the case.
- A rigid structure in case.
- System resistance calculations are made in accordance with ISO, DIN, and NIEMANN standards.
- Different input options available (PAM, W, Transmission, Diverter, ...).
- Different output options available (Solid shaft, DIN form splined, ...).
- Cases are manufactured from sefero (GGG 40-50) and peak (GG 20-25).
- Gears are made of cast and 21NiCrMo2 case-hardening steel.
- High-quality bearing and sealing components are used.
- Special requests of the customers may be considered.

Input Options (Horizontal)



Input Options (Vertical)

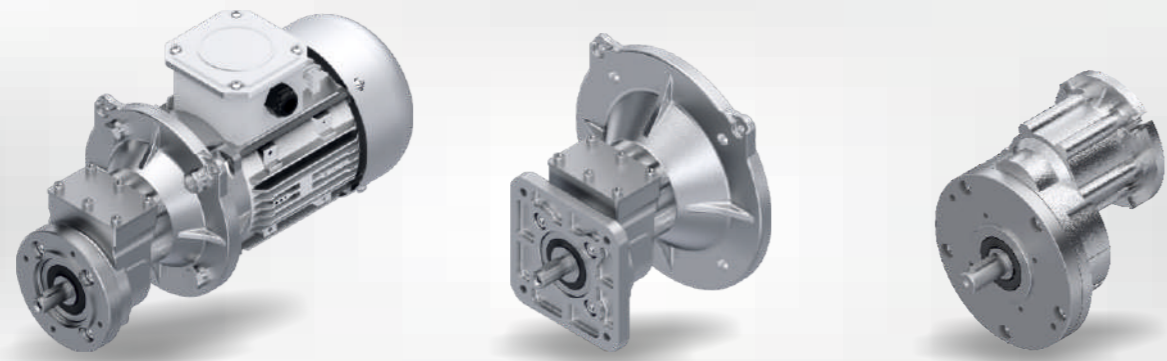


Output Options (Horizontal)



Output Options (Vertical)





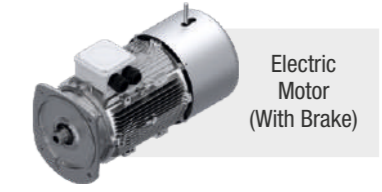
Input Options



PAM
(B5/B14)



Electric Motor
(Without Brake)

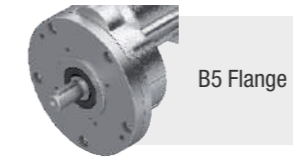


Electric Motor
(With Brake)

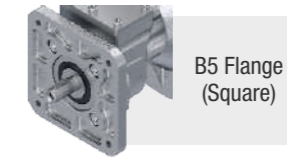
Output Options



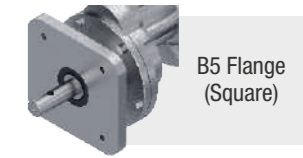
B14 Flange



B5 Flange



B5 Flange
(Square)



B5 Flange
(Square)

PX/PPC Series

Gearmotors for Poultry Farms

PX 031

Power	0.45 ... 1.10 kW
Torque	19 ... 24 Nm
Ratio	2.5 ... 7.87

PPC 071 - 080

Power	0.55 ... 1.10 kW
Torque	12 ... 22 Nm
Ratio	3.0

- Single-stage helical gear units with parallel axis input and output.
- A rigid structure in case.
- Maybe shaft-fitted.
- System resistance calculations are made in accordance with ISO, DIN, and NIEMANN standards.
- Gear units have PAM input options.
- Cases are manufactured from ADC-12 aluminum injections.
- Different flange measurements may be provided in B5 mountings.
- Gears are made of cast and 21NiCrMo2 case-hardening steel.
- High-quality bearing and sealing components are used.
- Special requests of the customers may be considered.

Certificates and Documents

PGR carries out all its activities by planning on the basis of the positive effects it could have on the customers.

All products are produced in accordance with quality standards and our production is documented in light of the quality standard.





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