YOUR GLOBAL PARTNER FOR HIGH EFFICIENCY EXTRUDER DRIVES

GEARBOXES AND DRIVE PACKAGES FOR EXTRUSION, COMPOUNDING AND INJECTION MOLDING MACHINES
PIV Drives is a worldwide renowned producer of mechanical gear units for a wide variety of industrial applications. Based in Germany since 1928, we are a specialist in building gear units that meet the demanding requirements of modern industry – in terms of quality, reliability, exceptional performance and life expectancy. These are only the main reasons for the excellent reputation of PIV products, another one is the famous “Made in Germany” approach.

Since 2002, PIV is part of Brevini Power Transmission. Today, our product lines are fully integrated into an international network. PIV and Brevini Power Transmission together offer a complete product portfolio, ranging from helical and bevel helical gearboxes to planetary gearboxes, from special products such as single- and twin-screw extruder drives to winches. With our solutions for mining, material handling, cranes and for the rubber and plastics industry PIV Drives is among the market leaders.

Our success especially in the rubber and plastics industry is based on more than 16,000 drive units for extrusion, compounding and injection moulding machines.

We always develop the right solution in close cooperation with our customers. We are proud working for all leading companies in this industry.

Brevini Power Transmission is amongst the Top 10 companies worldwide in the field of mechanical power transmission and is one of the Top 5 producers of industrial power transmission.

The Brevini Group has a consolidated turnover of 430 million euro with a total of 2,500 employees world-wide, doing business with its own subsidiaries in 26 countries and exclusive representatives in all other major markets of the world.
We are active in the rubber and plastics industry since 1985. Our product range includes sophisticated single- and twin-screw extruder drives, rack and pinion drives for electrical injection molding machines as well as customised solutions.

**INCREASED TORQUE CAPACITY AND HIGHER EFFICIENCY**

With a PIV drive solution you will improve the operational efficiency of your production processes and generate high output volumes. This is demonstrated worldwide, day by day and for decades by our implemented solutions in the rubber and plastics industry.

Together with our customers we are always seeking for new solutions and improved products in terms of power density, efficiency and sustainability. Because every improvement strengthens the performance and competitiveness of our customers and optimizes the energy balance of our products.

**ADVANCED TECHNOLOGY FOR TWIN SCREW EXTRUDERS**

With a torque factor of up to 20 our high torque twin-screw extruder drives of the series POSITWIN guarantee highest efficiency, high output volumes for your production process and low energy consumption.

**ADVANTAGES**

- High reliability
- Increased efficiency
- Highest torque capacity
- Low energy consumption
- Lower total cost of ownership
- Worldwide professional service
- Extensive experience
TWIN SCREW EXTRUDER DRIVES – HIGHEST TORQUE AND MAXIMUM RELIABILITY

Highest torques, optimised efficiency, and maximum reliability are the main characteristics of our POSITWIN series of twin-screw extruder drives. Continuous innovation and improvement of our products, designed in close cooperation with our customers, offer competitive advantages.

Our high torque twin-screw extruder drives series now reaches a torque factor up to 20. It guarantees highest efficiency, high output volumes for your production process and low energy consumption.

More than 7000 PIV twin screw extruders prove their reliability and performance day by day – installed at the leading companies in the plastics, rubber, pharmaceutical and food industries.

The first POSITWIN twin-screw extruder drive has been built by PIV Drives in the year 1985.

KEY FEATURES
- Highest torques
- Optimised efficiency
- Low noise
- High quality housing
- Variable centre distances
- Standardised lubrication system
- Wide torque range
- Outstanding quality

CUSTOMISED CONNECTION TO EXTRUDER
Individual flange for perfect connectability

ADJUSTABLE CENTRE DISTANCE
Variable output shafts and customised output splines. The axial forces from the extruder screws are absorbed safely within the gear unit by means of tandem bearings and self-aligning thrust roller bearings.
TECHNICAL DATA

- Centre distance [mm]: 15 to 200
- Ratio: 1.25 to 5.6
- Output speed [rpm]: up to 1,800
- Output torque per shaft [Nm]: up to 35,000
- Screw diameter [mm]: 20 to 250
- Screw back pressure [bar]: up to 250
- Efficiency [%]: 98

“WITH A TORQUE FACTOR UP TO 20 FOR TWIN-SCREW EXTRUDER DRIVES OUR CUSTOMERS GET THE HIGHEST OUTPUTS.”

HIGH QUALITY HOUSING
For higher stiffness, and less deformation, which lead to longer bearing life. The gear unit’s housing is made of thick-walled grey cast iron featuring a flush-faced exterior and a strongly ribbed interior.

STANDARDISED LUBRICATION SYSTEM
For optimised lubrication of bearings and gears.

OPTIMISED TEETH
For higher torques and increased efficiency. The gear teeth are case hardened and ground. Properly designed gear tooth forms handle bending and torsional loads while achieving optimal noise behavior through a high contact ratio factor.
FOR HIGHER EFFICIENCY AND OUTPUT …
… WE ALWAYS FIND THE RIGHT SOLUTION

To satisfy the demands of international clients in the rubber and plastics industry, Brevini offers a wide range of products: single-screw and twin-screw extruder drives, rack and pinion drives for injection moulding machines, planetary gearboxes, helical and bevel helical gearboxes and complete drive packages. Whether you are looking for standard gearboxes or individual solutions engineered especially for your needs – we always find the right answer.

“Continuous innovation” is our daily point of reference, and we constantly present new and updated products according to the changing needs of our reference markets. Thanks to their exceptional performance, compact size and high efficiency, our gearboxes are ideal for driving all sorts of systems in the rubber and plastics industry: compounding, pipe and profile extrusion and manufacturing, blow film lines, sheet and foam extrusion lines, tire lines and many more.

HIGH TORQUE TWIN-SCREW EXTRUDER DRIVES – POSITWIN

HIGH PRECISION SINGLE-SCREW EXTRUDER DRIVES – POSIREX
“ENGINEERED SOLUTIONS AND COMPLETE PACKAGES FOR EVERY APPLICATION IN THE RUBBER AND PLASTICS INDUSTRY: HIGH EFFICIENCY, HIGH TORQUE, MAXIMUM OPERATING RELIABILITY.”

RACK AND PINION DRIVES FOR ELECTRIC INJECTION MOULDING MACHINES – POSIRACK

HIGH EFFICIENCY RACK AND PINION DRIVES
Rack clamping force: up to 414 kN
Rack speed up to 2.000 mm/s

COMPACT GEARBOXES FOR CALENDERS

ULTRA COMPACT SHAFT MOUNTED GEARBOXES
Nominal output torques: up to 35,000 Nm

PLANETARY GEARBOXES FOR SHREDDERS

COMPACT AND EFFICIENT PLANETARY GEARBOXES
Nominal output torques: up to 2,000,000 Nm
The PIV Drives plant in Bad Homburg is located near Frankfurt with convenient access to most countries in the world. On a surface area of 60,000 square metres, including a new assembly hall for gear boxes up to 40 tonnes, PIV produces helical and bevel helical gearboxes as well as single- and twin-extruder drives. All the core competencies you need in our business are located in Bad Homburg: research, development, design, manufacturing and testing of gearboxes. Experienced engineers as well as latest production technologies guarantee the development and production of top quality gearboxes and customised technological solutions for all kinds of demanding industrial applications.

Thanks to the high quality of its products Made in Germany, the PIV Drives brand has a solid position and excellent reputation in the marketplace.
**Brevini Power Transmission** is a mechanical engineering company that is active all around the world with headquarters in Italy and production facilities in Italy, Germany, China, the USA and Brazil.

The planetary gearbox that is the result of Brevini Power Transmission research is also gaining ground in “high torque” applications and in systems with dimensional restrictions, where the compact size, lower cost, and high performance of the planetary gearbox are most successful. Brevini products are always at the leading edge of technology.

**THE NEW HEADQUARTERS**

The new Brevini Power Transmission headquarters in Reggio Emilia has a total surface area of 83,000 square metres.

The office building covers 8,000 square metres, the production area 15,000 square metres, and its production lines were created according to the Brevini Manufacturing System, which adopts Lean Manufacturing principles to suit Brevini’s needs.
Our clients recognise our great service: engineering and design consultation, our ability to understand the needs and functioning of complex machines, and a deep respect for the relationship and partnership between client and supplier. On every latitude and in various markets, Brevini’s strategy focuses on growth, as it has happened in Germany or China, and as it will happen in Brazil and other countries in the near future. But, the final objective of establishing production units is always to get close to the customer and to better serve local markets. The starting point will always be our sales and service subsidiaries, the true heart of Brevini Power Transmission’s global approach.
“26 SUBSIDIARIES AND 5 PRODUCTION PLANTS: QUALITY PRODUCTS AND WORLDWIDE SERVICE.”
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