

# Gear Drive Solutions

a Dedicated and Reliable Partner



/// Gears, spindle gears, actuators, motors etc.

/// Standard or customized products

/// Complete drive solutions

/// High degree of innovation and know-how

/// Highly automated production facilities



## /// Dedicated gear drive solutions

Today, BJ-Gear is one of the leading companies in developing, manufacturing and supplying gears, geared motors, linear products, special gears and complete transmission solutions. The combination of innovation, know-how, high-technological production facilities and our focus on customer requirements make us a competent partner. We prioritize short reply and delivery times together with a high and qualified service level.



## Quality based on experience, precision and method

Since 1964 BJ-Gear has been acting as a quality oriented manufacturer of gears and linear products for many different industries and for widely different purposes. We are certified according to EN ISO 9001:2008 and we focus on precision and care when manufacturing. Our components and finished products strictly observe all prescribed specifications and requirements. On request the products can be supplied with reports which documents the specifications and performance like efficiency, backlash, key measurements etc.



## CSR - Investing in sustainability and good environment

BJ-Gear takes responsibility for the environment in and outside the company. We want to make our contribution to reducing CO2 effect on climate, while also focusing on strengthening employee welfare and health. Therefore, we prioritize sustainability and decent working conditions in our investments and the activities we put in place.

# Targeted benefits for your business

BJ-Gear has great expertise and a specialized knowledge of specific requirements for transmission solutions. Our knowledge is built up through many years of close collaboration with various companies within the same industry.

It has given us a precise knowledge of what is required for development, design, functionality, quality, documentation and specific trade requirements for achieving the best result in a number of key industries such as:

- /// Healthcare
- /// Food Processing and Packaging
- /// Aerospace and Defense
- /// Offshore and Marine
- /// The Energy and Environment Sector
- /// Many other Business Areas



# /// Lean Enterprise - an overall philosophy



Our Company is driven by means of Lean Enterprise as overall management philosophy. BJ-Gear has put continuous improvements of quality and customer service on top of the agenda. The goal is to optimize the entire value chain from order to delivery and thus meet customer demands and expectations even better.

Highly qualified employees, the use of 3D CAD / CAM, advanced CNC machining centers, CNC measuring machines and modern robotic technology means that we can offer an efficient, quick and flexible production of a uniformly high quality.

The flexible production machinery - together with our modular designed product range - allows very short and precise delivery times, even when they are adapted products or special products. The flexibility also means that we are able to produce standard products or special products in smaller numbers for your business.

## More than 25,000 part numbers in stock

Our component stock contains more than 25,000 items. So, in most cases we keep the spare parts in stock and they can be dispatched immediately. Alternatively, our flexible production system allows us to manufacture the desired parts within a short time.

## Fast delivery worldwide

A targeted internal logistics, a large stock of components and an efficient network of international shipping companies ensure in urgent cases that spare parts or replacement products from BJ-Gear can reach our customers within 1-2 days on virtually all continents.



# Standard Products

A large standard programme is one of the strengths of BJ-Gear. It comprises own manufactured worm gears, helical gears, spiral bevel gears, actuators and spindle gears.

All sub-components are kept on stock meaning we are able to supply immediately the many sizes and variations of our standard products. Our products are based on well-proved and reliable designs and approved for zone 2 and 22 according to the Atex directive. Products for zone 1 and 21 are supplied according to task.



Product Configurator

## /// Worm Gears

BJ-Gear offers a very wide range of worm gears. Due to the modular design, the standard program comprises countless combinations when it comes to selection of gear housings, mounting and connection options, flanges, shaft designs, type of lubricants, surface treatments etc. All products are available both as gears and as geared motors.



### Features and advantages

- /// Sturdy and reliable
- /// Compact design
- /// Low noise generation
- /// Strong bearings in solid housing
- /// High efficiency or self locking
- /// Aluminium, stainless steel or cast iron
- /// Custom design

## /// Stainless Steel Worm Gears

BJ-Gear offers a stainless gear range of high quality. The products are developed specifically for the food industry and other industries in which the requirements for the material resistance and the easy-to-clean design are continuously stringent. The gears are life lubricated and can of course be supplied with lubricants approved for the food industry.



### Features and advantages

- /// Hygienic design
- /// Sturdy and reliable
- /// Compact design
- /// Can be fitted with stainless AC motors, servo motors, encoders and brakes
- /// High efficiency or self locking
- /// Custom design

## /// Precision Worm Gears

The precision gears are characterized by a low backlash and a low generation of noise and vibrations. The degree of backlash is adjustable and can be documented by measuring reports.



### Features and advantages

- /// Backlash down to 1 arc minute
- /// No loss of efficiency
- /// Aluminium, stainless steel or cast iron
- /// Can be fitted with AC, DC or servo motors, encoders and brakes
- /// Custom design

## /// Helical Gears

BJ-Gear's helical gears are designed with an easy-to-clean and robust cast iron housing that is machined in one fixing. This ensures maximum torque transmission with high precision of the gears.



### Features and advantages

- /// Easy-to-clean design
- /// Low noise generation
- /// Strong bearings in solid housing
- /// Compact design
- /// High durability
- /// Custom design

## /// Spiral Bevel Gears

BJ-Gear offer a wide range of spiral bevel gears in high quality. Our spiral bevel gears are characterized by high performance in a very compact and modular design. This design also make the spiral bevel gears easy to incorporate in many applications.



### Features and advantages

- /// Robust performance
- /// Compact design. Available in hygienic design
- /// A quiet, steady and efficient operation
- /// High quality
- /// Can be fitted with AC, DC or servo motors, encoders and brakes
- /// Custom design

## /// Actuators

For linear motions, we offer our successful actuator program, which basically consists of two variants:

Actuators based on a worm gear drive or actuators based on belt drive.



### Features and advantages

- /// High speed range
- /// Extremely robust
- /// Simple and compact design
- /// Modular design with great flexibility
- /// Custom design

## /// Spindle Gears

For linear motions with larger loads, BJ-Gear offers the spindle gear which is one of our successful standard products. The BJ spindle gear is basically with trapezoidal spindle or ball screw spindle.



### Features and advantages

- /// High loads
- /// Rotating spindle or rotating nut as a part of the gearbox
- /// Modular design with great flexibility
- /// Simple and compact design
- /// Extremely robust
- /// Custom design

# Adapted Products

One of BJ-Gear's most important and successful fields of business is to offer adapted solutions. We can quickly and efficiently adapt standard gears or actuators to numerous variants by virtue of our technical expertise and our flexible production system. Our standard program is highly adaptable and products are supplied at competitive prices, whether the order consists of one or more products.

We offer customizations of our entire standard program. The degree of adaptation may vary from a simple adjustment to a more fundamental change in our standard products.

Even minor adjustments like for instance special flanges and output shafts can help giving your business a more optimum transmission solution financially and technically.

All components are kept in stock or manufactured for prompt delivery.

All gears and actuators from BJ-Gear are fitted with an unique serial number, which ensures that they can always be identified and reproduced later.

Unique serial number



**Actuator with inner and outer tubes in stainless steel**



**Spindle gear with ball screw spindle and special nut**



**Worm gear with special motor flange, output shaft and reduced backlash**



**Worm gear with special output shaft and flange**



**Worm gear with special output shaft and flange**



**Stainless worm gear with special motor flange for DC motor and stainless motor shield**



**Worm gear with special motor flange, output flange and brake**



**Worm gear with special worm shaft for brake and encoder. Special output flange**



# Special Products

Another of our key business areas is special gears and special actuators. BJ-Gear has excellent expertise in consulting, engineering and production in this field. In many cases special products offer advantages, because the task cannot be optimally solved with a standard product. Often it will be a less expensive solution to choose a special product precisely designed and dimensioned for the task in question.

With engineering based on knowledge and innovation, we can ensure a competent delivery from the conception of design and

production to delivery of prototype and subsequent serial delivery. Also in this field, our flexible R&D department and production facilities allow us to produce quickly any special gears and actuators at a reasonable price, even in small series.

For larger and more complex projects where the object is to develop new products, our engineers may contribute through their professional project management to ensure that the transmission solution is implemented successfully on time and according to the agreed specification, functionality and price.

**Worm gear with double reduction and high safety factors**



**2-step helical gear with DC motor, brake and encoder**



**Highly efficient worm gear with DC motor and clutch**



**Double acting spindle gear with ball screw, servo motor and brake**



**Compact inline actuator with planetary gear and servo motor**



**Special gear solution integrated in a lever arm**



**Stainless steel water cannon with 3 special gear motors**



**Stainless meat cutting saw with stainless AC motor**



**Stainless spindle gear with stainless spindle and tube**



/// Examples of adapted and special products

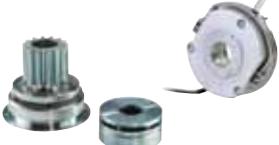
# /// Accessories

In addition to our own manufactured gears and actuators, we offer transmission components of recognized brands, which make it possible to supply complete transmission solutions at short notice.

We stock AC motors, DC motors, servo motors, frequency converters, encoders, electromagnetic brakes and clutches, electromagnets, permanent magnets, vibrators, one way clutches and backstops,

mechanical couplings, shaft and hub connections, connection shafts, universal joints, acme threaded spindles, right angel gears etc.

The advantage of choosing BJ-Gear as total supplier is a guarantee of correct assembly of all part components with subsequent functional test.

<p>AC, DC and servo motors</p> 	<p>Stainless AC and servo motors</p> 	<p>Frequency converters</p> 	<p>Encoders</p> 
<p>Electromagnetic brakes and clutches</p> 	<p>Electromagnetic pull/push magnets and vibrators</p> 	<p>One way clutches and backstops</p> 	<p>Mechanical tooth couplings</p> 
<p>Mechanical claw couplings</p> 	<p>Mechanical safety and bellow couplings</p> 	<p>Mechanical flexible couplings</p> 	<p>Shaft / hub connections</p> 
<p>Connection / line shafts</p> 	<p>Universal joints</p> 	<p>Acme threaded spindles</p> 	<p>Right angel gears</p> 

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