

THE GLOBAL EXPERT FOR **DRIVE TECHNOLOGY**

USING GERMAN CRAFTSMANSHIP

Nidec Corporation

The Nidec Group is a globally active company with multiple divisions and a focus on automation. Extensive product ranges in the field of engine technology and gearbox construction make Nidec a reliable partner for nationally and internationally active companies.

Nidec Drive Technology Corporation

With its main focus on the development and manufacture of servo gearboxes, Nidec Drive Technology is the ideal partner in the field of robotics and automation technology. For 75 years, the company has stood for innovation and continuous development and today, with almost 4,000 employees, is one of the largest manufacturers of gearboxes in the world.

Nidec Graessner Austria GmbH

The relevance of drive technology, for the successful use of a wide variety of systems, increasingly demands specialised partners who, in addition to high technical expertise, high capacity and professional flexibility, also possess the inner drive - the motivation - to offer their customers the best possible products and services. We want to be your competent partner in the complex field of drive technology.

THE GEAR COMPANY



TECHNOLOGY

The acquisition of technology is a challenging and ongoing process. With its product expertise, many years of know-how and a large, state-of-the-art machine park, Nidec has the technology to bring unique products to the market.



QUALITY

Japanese perfection, produced in state-of-the-art manufacturing facilities, is subjected to thorough outgoing inspections with the latest measuring machines. This enables us to ensure that our complaint rates are in the zero range.



RESPONSIVENESS

Information at the touch of a button (3D step files, data sheets) leads to a quick product selection. Calculations and simulations are always available online. However, we would also be happy to talk to you personally about special requirements.



DELIVERY TIME

Consistently short delivery times, even in economically difficult times, thanks to stockpiling of high sellers in Germany and Austria. Our modular design and production sites in Germany, China, Japan and the Philippines also enable us to achieve a high level of availability for our entire range.



COSTS

Moreover, our modular design allows for competitive pricing, high scaling effects and low unit costs.



FINANCES

Nidec is a globally active and financially strong company, a "big player" in the market: Top 3 in Asia & the US, No. 1 in Japan. We will continue to expand our market position in the future.

AND JAPANESE PERFECTION

107,000

NIDEC CORPORATION

Data status 31.03.23

Nidec employs 107,000 people worldwide and is the global number one in brushless DC motors, among others (market share 46%).

14.2
Billion Euros

TURNOVER

Data status 31.03.23

With a turnover of 14.2 billion euros, Nidec is one of the absolute "big players" in Asia and the US.

160,000

GEARBOXES

Data status 29.09.23

Nidec produces worldwide 160,000 gearboxes per month.

65
YEARS

GRAESSNER

Nidec Graessner has been a system partner to the industry for over 65 years, supplying solutions to renowned customers from specification to series production.



PRODUCTS

Nidec Graessner Austria is primarily dedicated to the development, production and distribution of planetary, bevel and robotic gearboxes as well as drive components for a wide range of industries.



INNOVATION

Nidec Graessner Austria not only offers standardised solutions, but also develops completely new gearboxes for special applications.



GOING GREEN

Nidec Graessner Austria was quick to recognise the need for interaction between mechanical and electrical systems and information technology in gearbox construction. Today, we support our customers as a competent partner in all areas of electrification (electromobility, driverless transport systems, etc.).

BEVELGEARBOXES

KNOW-HOW

After more than 65 years of development and experience in the field of bevel gear boxes, our customers count on our know-how in the implementation of serial solutions or tailored design solutions.



POWERGEAR P



POWERGEAR X



POWERGEAR HS



POWERGEAR MINI



DYNAGEAR



DYNAGEAR ECO



EVOGEAR



KS-TWINGEAR



DESINGEAR



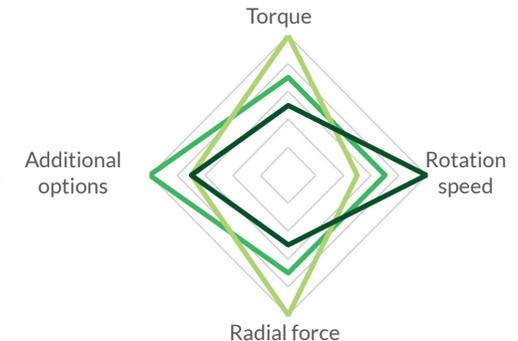
BEVELGEAR

OFFER

For our solutions, we are happy to draw on our tried-and-tested standard range, which is second to none. Even challenging orders from our customers can thus be processed in the shortest possible time.

POWERGEAR

Are you looking for the classic right-angle gearbox - powerful, fast and efficient? Then you are well advised to choose our PowerGear gearbox series. In addition to the standard model, you can choose the reinforced X version for more torque, the high-speed HS version for the highest speeds, and the miniature versions for the smallest spaces.



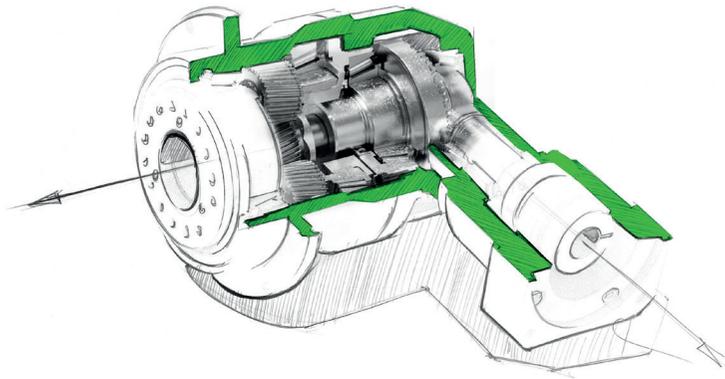
DYNAGEAR

If your application requires a servo angle gearbox - smart, light and precise - for dynamic movements, we would like to recommend you our DynaGear series. In addition to the standard type, the Evo version includes the latest technology at optimised prices.

KS-TWINGEAR

Compact, strong and precise are the keywords for our KS-TwinGear gearbox series. Highest torques with an extremely slim design characterise this type and make it an important part of our product range.

PLANETARY GEARBOXES



PRE



VRL



VRS



VRB



VRT



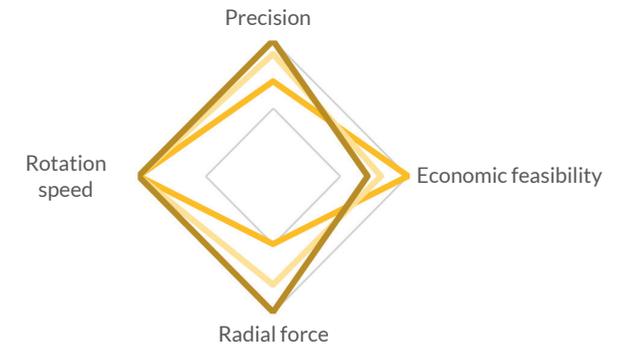
PSC

HIGHEST POWER DENSITY

Full power with maximum precision. The PlanetGear from Nidec Drive Technology has the necessary power resources for the high requirements of demanding power transmission.

PLANETGEAR

High accuracy of the helical gearing, low backlash and the wide range of sizes and ratios are just some of the exceptional advantages of these gearbox solutions.



VRL

The VRL type gearbox is the all-rounder among planetary gearboxes. With a backlash of only 5 arcmin, the VRL gearbox can be used in a wide range of applications where accuracy and dynamics, but also cost, play a major role. The VRL is an excellent choice for servo applications in packaging, conveyor and automation systems.

VRS

Thanks to two rows of robust tapered roller bearings, the VRS runs smoothly and quietly even under the most difficult dynamic and static load cases. The VRS is available with reduced backlash of less than 2 arcmin, making it easy to master dynamic machine tool and robotics applications. With a maximum acceleration torque of up to 3,700 Nm, this product is an excellent partner for powerful servo motors.

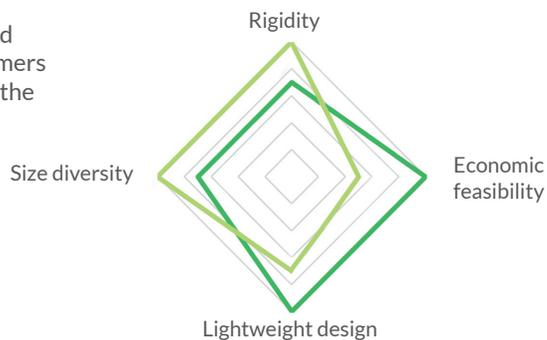
ROBOTIC GEARBOXES

PRECISION

Nidec Drive Technology is a global leader in precision gear technology.

With a comprehensive range of robotic and shaft gearboxes, we also enable our customers to choose from a diverse product range in the field of robotics.

Not least due to the long-standing partnership between Spinea and Nidec Graessner Austria, we effortlessly cover even challenging and complex customer requirements.



FLEXWAVE



FLEXWAVE UNIT



TWINSPIN

FLEXWAVE

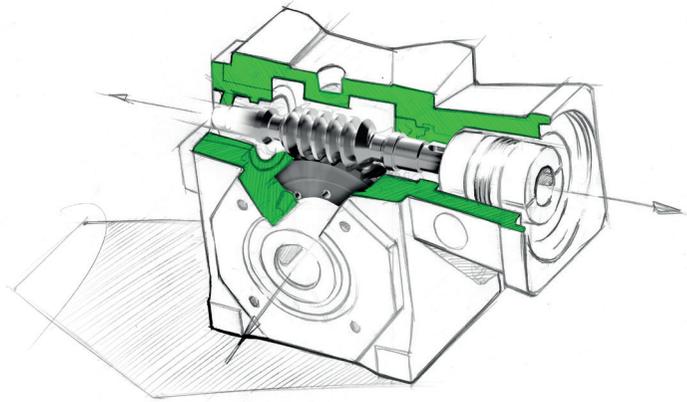
The ever-increasing demands of miniaturisation and weight saving, especially in the field of robotics, turn the Flexwave shaft gearbox, with its light and compact design, into a decisive advantage in the development of your machine.

The Flexwave is available both as a complete unit and as a built-in set. The latter has the enormous advantage of components being installed perfectly and efficiently into the overall structure.

Countless installed examples prove the superiority of the gearbox in terms of service life, precision and lightweight construction.

TWINSPIN

The TwinSpin gearbox is a high-precision robot gearbox which, due to its sophisticated system, enables the highest torques with simultaneous freedom from backlash. Due to a large number of different gearbox sizes and the resulting design flexibility, the TwinSpin gearbox is appreciated by our customers in automation, robotics and machine tool construction and is rightfully popular.



SELF-LOCKING IS NOT A MUST

Self-locking is not necessarily present in worm gearboxes. Different reversibility classes emerge depending on the geometry of the gearing, which essentially depends on the gearing ratio and the size of the gearbox.

Its efficiency is generally lower than with other servo gearboxes due to the increased sliding component in the rolling motion, but can still be >96%.



DYNABOX



DYNABOX XL



DYNASET

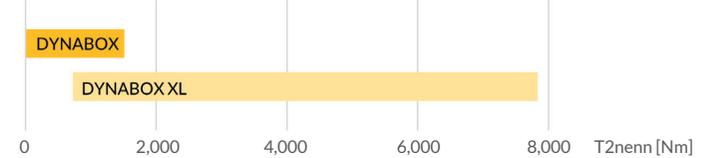
EFFICIENCY

It is no longer possible to imagine automation technology without servo worm gear units. Decades of experience in the field of Dynabox gearboxes have led to economically optimised manufacturing processes which our customers appreciate for their attractive prices. Moreover, the possible applications of Dynabox gearboxes are very diverse and allow them to be used in a wide range of different pieces of machinery.

DYNABOX

The Dynabox gearbox series stands out thanks to its ingenious duplex worm gearing, which enables precise control of the torsional backlash as well as an optimised contact pattern on the gearing.

This means that the load-bearing gear is utilised to almost 90% of its capacity, resulting in compact gearbox sizes with high transmissible torques. In their Expert version, the gears achieve torsional backlashes of <math><1 \text{ arcmin}</math> and can also be readjusted at any time.



High gear rigidity due to solid taper roller bearings at the input and output as well as precision manufactured, one-piece housings, are just some of the advantages of the lifetime-lubricated Dynabox gearbox.

DYNABOX XL

If eight sizes of the Dynabox gearbox series are not enough for you, you can fall back on a further three DynaBox XL sizes. Torques of almost 8,000 Nm are then no longer a problem for this gearbox series.

GEARBOXSYSTEMS

ONE-STOP SHOP

Based on our proven gearbox series, Nidec Graessner Austria offers system solutions for mechanical and industrial engineering. In this context, our focus lies on rack-and-pinion applications to convert rotational energy into translational working motion.



DYNAGEAR

EVOGEAR

DYNAGEAR ECO

KS-TWINGEAR



VRS

VRB

VRT



VRL

OUR SERVICE

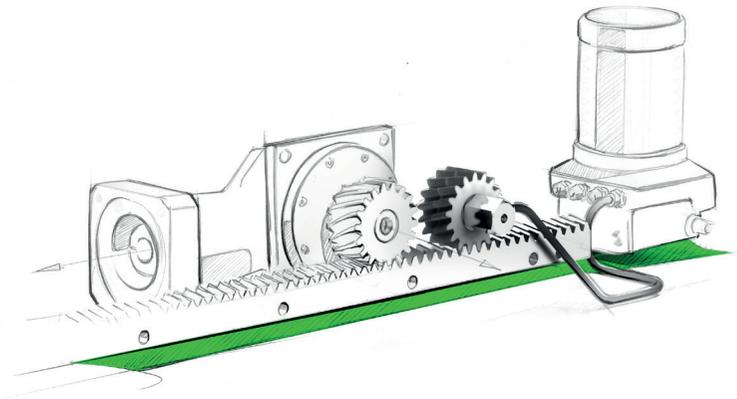
During the development of our gearbox systems, we draw on years of experience in the development of powertrains and create optimised product combinations. In addition to the choice of gearbox, our focus lies on calculations of the gearing and the connection between the pinion shaft and the gear shaft. Only when all components, connections and ultimately the entire system meet our high performance and quality requirements will the Nidec Graessner gearbox system be released for our customers.

ANGULAR GEARBOXES

If the installation space is limited, our angular gearboxes play out their advantages to the full. Whether a spiral bevel gear box, a hypoid gearbox or a helical bevel gearbox is chosen ultimately depends on the specific wishes and requirements of our customers. In any case, it is certain that all the gearboxes in our extensive product range are available to choose from, so that nothing stands in the way of providing the best possible overall solution for our customers.

PLANETARY GEARBOXES

If there is the possibility of a coaxial connection of the gearbox and motor, you will probably choose our planetary gear system. Depending on the focus of our customers, we are able to achieve very economical solutions or provide high-performance applications. However, torques, speeds and gearbox stiffness leave nothing to be desired in any given configuration.



FLEXXPUMP 400



FLEXXPUMP 125



LUBRICATION AXLES



LUBRICATION GEARS



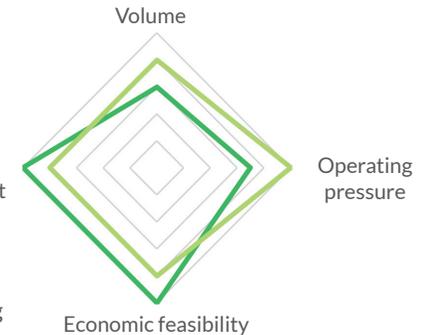
SPLITTER

THE GUARANTEE FOR LONGEVITY

Worrying about the lubrication of your gearing components is a thing of the past. Our lubrication systems are unique in technology and performance and enable efficient and controlled, centralised or decentralised lubrication processes.

FLEXXPUMP

Our Flexxpump lubricant pump is available to our customers in a variety of sizes, differing both in lubrication volume and in various additional options. Whether grease, oil, battery-powered or controlled via PLC, the Flexxpump lubrication pump meets all customer requirements with ease and confidence. An operating pressure of up to 70 bar ensures the lubrication of your components even with long pipe lengths.



PINIONS & AXLES

The lubrication pinions used are made of open-pored PU foam, are mounted on the lubrication axles provided for this purpose and bring the lubricant from the Flexxpump directly to the gearing. Lubricant is released due to the memory effect, which is also known from sponges, but can also be reabsorbed if necessary. Leakages and reduced speeds are thus a thing of the past. In addition, temperature ranges from -30°C to +150°C can be operated as standard.

SPLITTER

If the lubricant has to be correctly dimensioned and divided across different pipe lengths, our splitters are available to fulfil this task. Uneven lubrication quantities are thus a thing of the past.

SHAFT HUB - SYSTEMS

SAFE & BACKLASH FREE TRANSMISSION

Shrink discs and internal clamping sets transmit torques and axial forces in a space-saving and backlash-free manner. Shaft diameters from 8 to 1,000 mm allow transmittable torques of over 11 million Nm. Depending on the configuration, the friction surfaces are tensioned hydraulically or with screws, making the shaft-hub system a secure connection that is insensitive to shocks, blows and corrosion.



HSD



WK / WKL



IS



FKH / FKHA



AS



GF



HYD

HSD

The shrink disc type HSD is a maintenance-free, dirt-resistant as well as detachable machine element to connect a hollow shaft with a shaft. The HSD type is a cost-effective connection of shaft and hub in, for example, wind turbine drives, packaging machines or luggage sorting systems.

HYD

The hydraulic shrink disc type HYD is based on the same principle as the mechanical shrink disc type HSD. Due to the hydraulic bracing, only a fraction of the time is required for assembly and disassembly compared to the mechanical type HSD.

IS

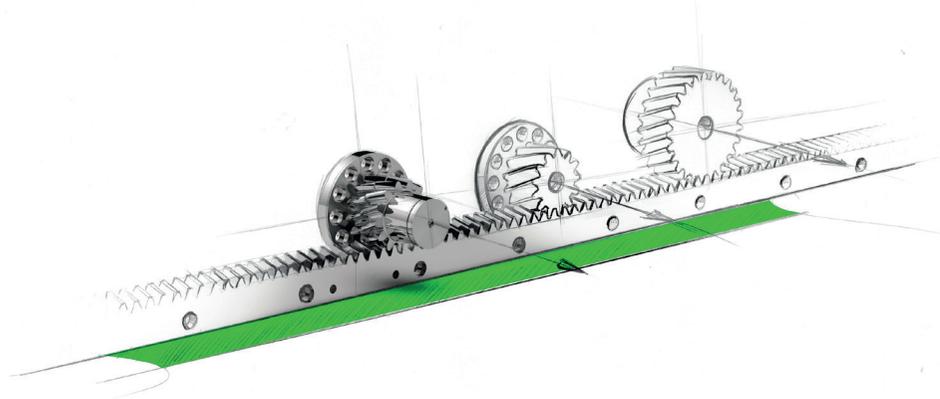
Internal clamping sets allow hubs of all types to be mounted on standard commercial shafts. Each type offers the following advantages: Self-centring, self-locking taper angles, increase in concentricity through pre-centring.

WK / WKL

The shaft couplings WK and WKL are suitable wherever a safe, rigid connection between two free shaft ends is required with little effort. The couplings are offered for shafts with the same or with different shaft diameters. Larger axial distances between the shaft shoulders call for shaft couplings of the WKL type.

FKH / FKHA

The flange coupling type FKH consists of two flange halves. It serves to establish a rigid connection of two shafts. If only one flange half is required, the FKHA coupling is used. The flange coupling type FKHYD is a flange coupling half that is hydraulically clamped. The hydraulic flange coupling reduces the assembly time to a minimum.



MASTER WHEEL



BLOCK FLANGE



BACKLASH FREE



RACK

MASTER WHEEL

Our master wheels feature hardened and ground gears, while the hub and bore are prepared for further work. This results in shorter delivery times and a wide range of application possibilities.

In addition to the master wheels, we rely on a large range of standard products and are also happy to manufacture according to drawings and customer requirements.

BLOCK FLANGE PINIONS

To match our gearboxes with block flange output, we offer our block flange pinions. The connection between the gearbox and the spur gear is reduced to a few simple steps and allows easy assembly and disassembly of individual components. The flange in use can also be combined with our backlash-free spur gear system.

BACKLASH FREE SPUR GEAR SYSTEM

Our backlash-free spur gear system enables backlash-free transmission between pinion and rack. As with the block flange pinion, the connection to the gearbox is made via a flange in accordance with ISO 9409-1. The backlash-free spur gear system is available in both helical and straight gear versions.

RACK

Our product range includes straight and helical geared racks in ground as well as milled versions. We manufacture both standard and special solutions in various modules, dimensions and materials, also hardened and coated.



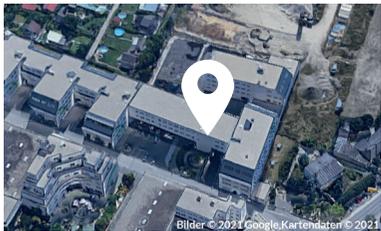
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ENTHUSIASM,
TENACITY,
PASSION,
NIDEC.

