

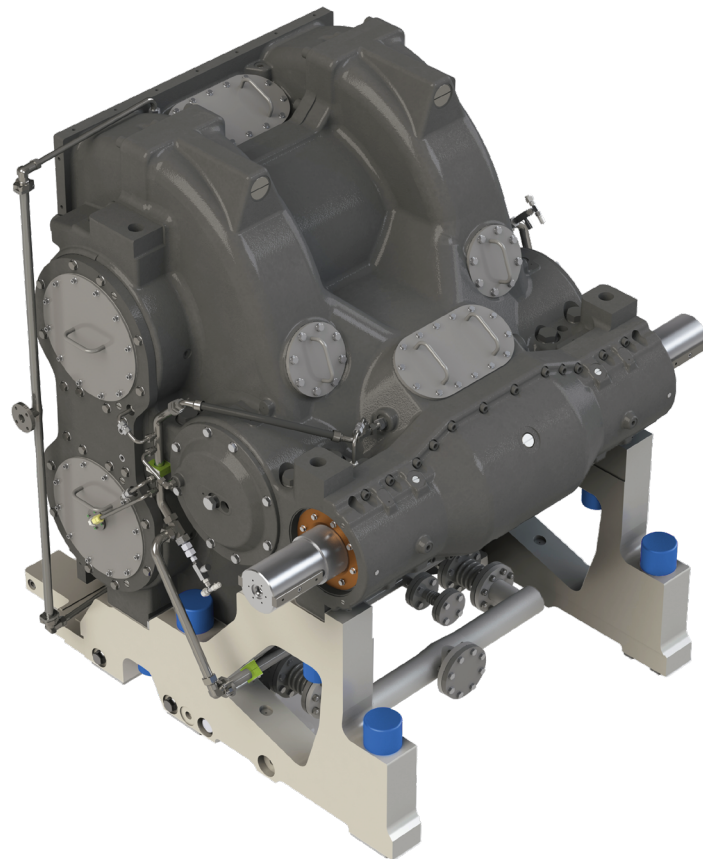
MAAG® LGDX Lateral Gear Unit

Designed for longevity



Next level side drives

Our MAAG LGDX Lateral Gear Unit delivers high performance with long-lasting operating time – all within a small footprint. The clever approach to lubrication and ingenious reversible housing makes this gear unit the perfect fit for your grinding process.



Key benefits



Design based on proven technologies and experience



Enhanced lifespan thanks to smart lubrication and symmetric casing



Usable in single and dual arrangements



Compact mill arrangement reduces foundation vibration risk



Perfect fit for replacements and overhauls

The latest redesign of our lateral side drive improves an already high-quality product. Our MAAG LGDX Gear Unit now has the longest possible lifetime, which we achieve by maintaining our proven gear philosophy, updating the casing design and developing a clever lubrication concept.

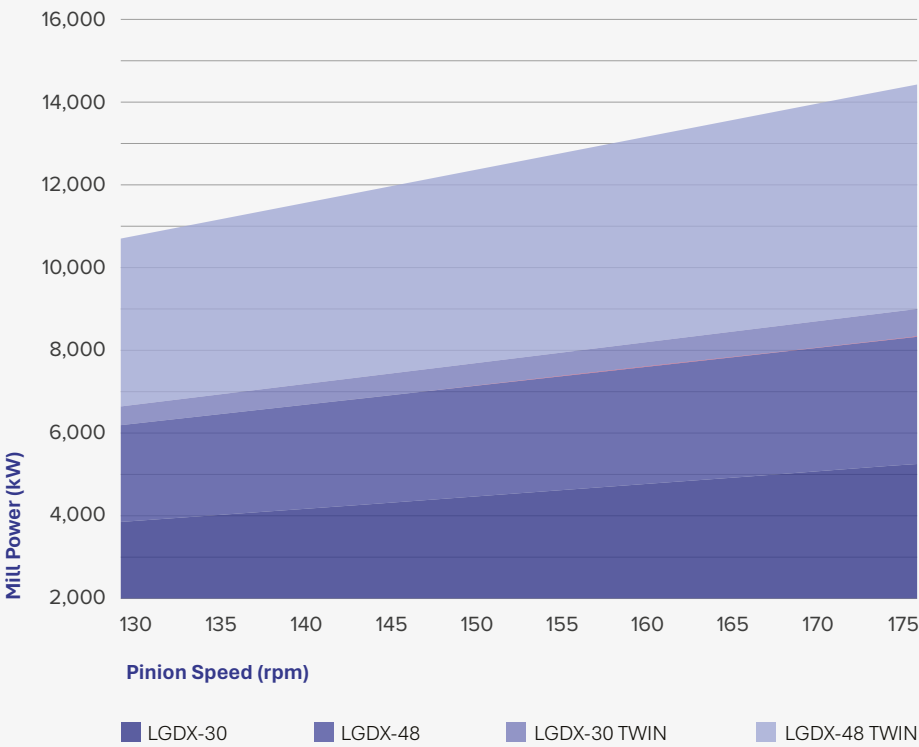
Our unique symmetrical gear casing gives you the flexibility to install the side drive at the center line or 40° below your mill. The latter reduces construction cost by cutting down on foundation height. In addition, the low, compact foundation is less sensitive to vibration, which contributes to the continued smooth operation of your mill.

Design

Our MAAG LGDX is a three-stage parallel shaft gear driving your ball mill directly with two output pinions and reduces the speed of the main drive motor to precisely the required mill speed. The mechanical torque split of the MAAG LGDX Gear Unit guarantees an equal load distribution between the two output pinions.

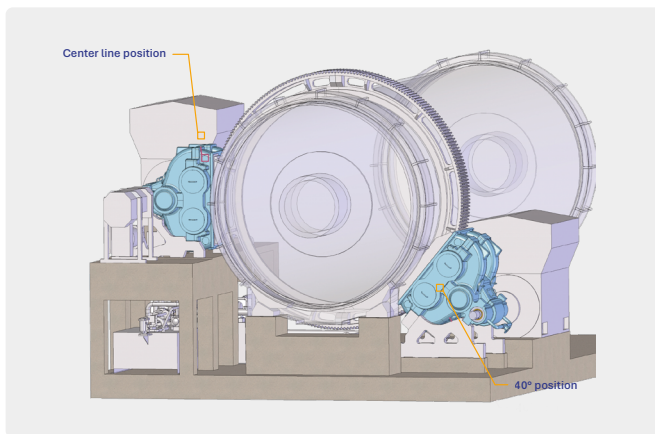
Self-alignment of the pinions ensures full tooth contact to the girth gear and adapts to movements and run outs.

Selection chart for a Lateral Gear Drive system



Formula:			
$P/n2p = P/(n2 \times (Z2 : Z2p))$		2p	= Pinion speed
Example:		n2	= Mill speed
4750kW/158.59 rpm		Z2	= Teeth girth gear
= 15.33 rpm x (300:29)		Z2p	= Teeth pinion
		Type	P/n2p
		LGDX 30	30.0
		LGDX 48	48.0

Efficient side drive – ideal solution for ball mills in small spaces

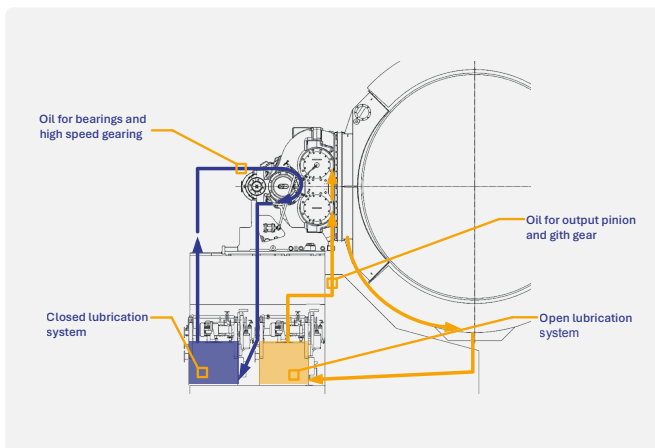


Symmetrical casing for high flexibility

The unique symmetrical casing design provides you with the flexibility to install our LGDX on centre line or at 40° below the mill.

Our LGDX is built symmetrically and detachable from its foot. The gearbox can be flipped, placed in two different positions around the mill and offers a twin-drive availability.

The symmetrical design permits a pivoting of the whole unit and prolongs the lifetime by approx. 40%.

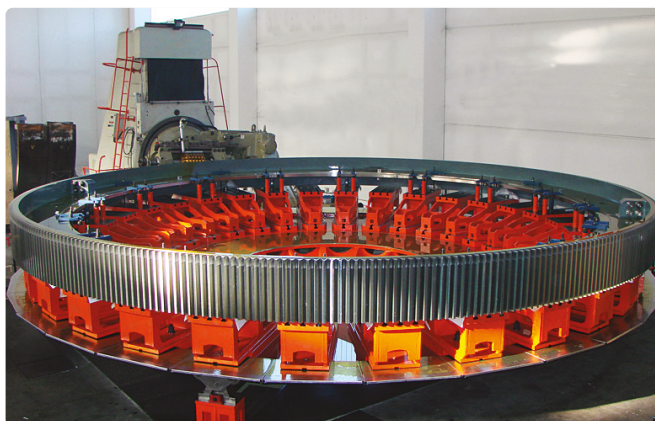


Smart lubrication leads to longer lifetime

We have extended the lifetime of our LGDX Gear Unit by approx. 40% through a clever lubrication concept and the ability to flip over the gear unit and operate it in reverse.

The MAAG LGDX includes two independent lubrication systems, one which services the girth gear and intakes more dust and dirt, and a second which supplies oil for the fast rotating gearing and bearings. The second circuit stays clean and will therefore provide longer lifetime and less maintenance for the gear unit.

For replacement projects, the existing lubrication unit can be reused with minor modifications and only a small unit for the closed circuit will be distributed.



Girth gear

We build our fabricated girth gears using forged gear rim material and bodies made in an electro-welded structure. The uniform and homogenous crystal structure of the forged rims guarantees identical material properties throughout the entire tooththing.

Casting defects like hot tears, porosity or shrinkage are excluded—increasing the wear resistance and resulting in a stronger and more reliable girth gears.

The connection to the mill is adaptable to customer needs. The T-section of the girth gear gives the system an additional flexibility to absorb misalignment between the mill and the LGDX gear unit.



Whenever possible the existing auxiliary drive will be reused – if this is not possible we dispose of a very good alternative

Irrespective of the original manufacturer

Every gearbox has a limited lifetime. Apart from the obvious reasons age and malfunction, there are other considerations to a replacement

- Increased plant efficiency
- Increasing spare parts and maintenance costs
- Modernization of plant
- Avoiding unscheduled downtime/ “running until it fails”

The unique modular design of the LGDX offers a very high flexibility to adapt to most existing interfaces and foundations. Gearbox foot and interface to girth gear guard are highly customisable.

The existing lubrication unit can be reused with minor modifications and only a small unit for the closed circuit will be distributed.

Whenever feasible existing adjacent components such as couplings or auxiliary drives will be reused – if this is not possible very good alternatives are available.

Benefit of replacement

- New warranty after recommissioning through MAAG specialists
- Saving of future maintenance costs
- Improved reliability
- Newest technology installed
- Low spare part diversity

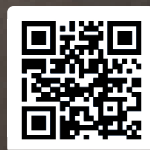
We find out the best solution for you – case by case!

Rely on over hundred years of experience! Our replacement service guarantees you a great cost-performance ratio with the least possible downtime of your cement line with outstanding service to support your business success!

Home of Precision Engineering

For more than 100 years, the MAAG® Gear brand has successfully lived up to its founding vision and values.

Evolving demands in heavy-duty industries are driving the need for more efficient, reliable, and sustainable gear technologies. At MAAG, we are dedicated to providing high-precision solutions that respond to this need and enhance the productivity, sustainability and reliability of our clients' operations in cement, mining, and beyond. With a rich history of innovation and a robust product portfolio, we stand as trusted partners, committed to our mission of driving progress through precision. Discover how MAAG can help you elevate your business.



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