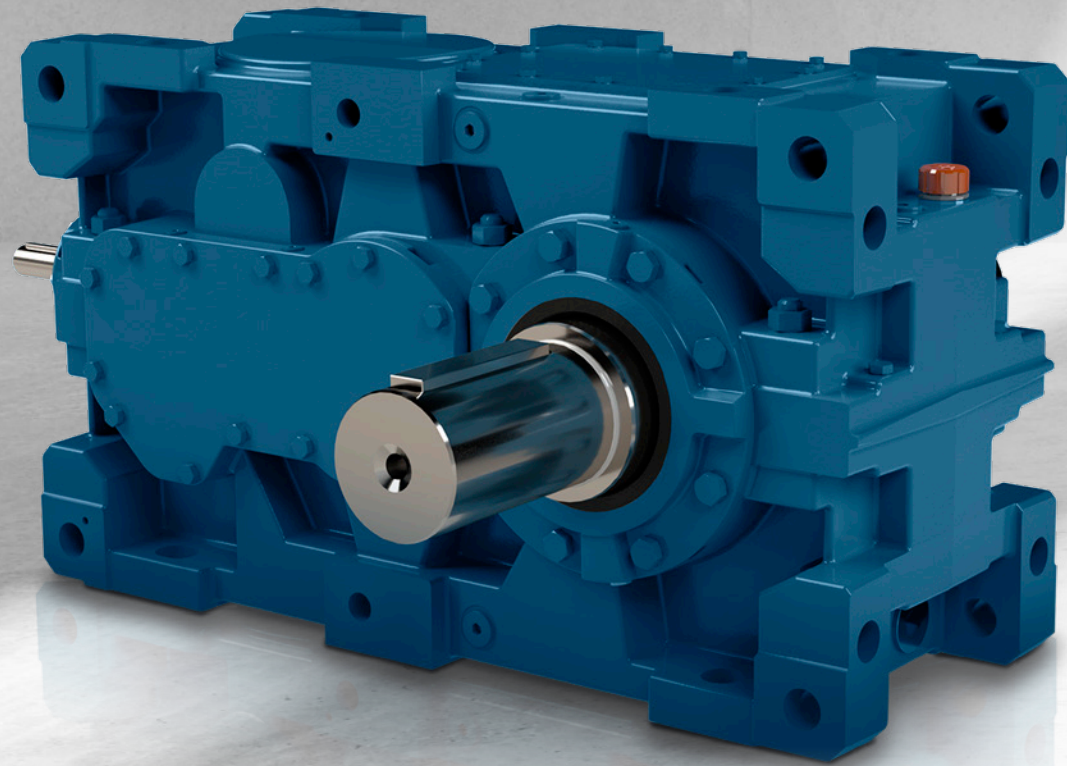


WG50

Reduce costs, increase productivity



Efficiency and modularity in a versatile solution

WG50 gearboxes are versatile and reliable with a modular design, solving a wide range of applications in different industries. The housings were designed to simplify maintenance and offer better thermal dissipation and oil circulation, extending the service life of their parts. The gearing was specially developed to reduce the noise level and increase durability and efficiency.

The scope of WEG Group solutions is not limited to products and solutions presented in this catalogue.
To see our portfolio, contact us.

For WEG's worldwide operations visit our website



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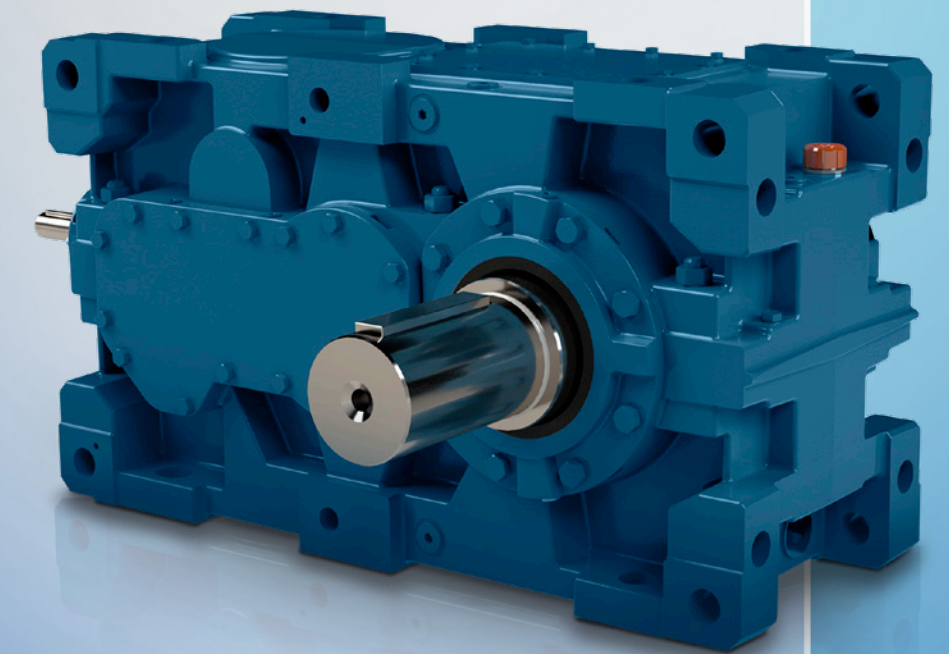
motores@weg.net

Jaraguá do Sul - SC - Brazil

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The values shown are subject to change without prior notice.
The information contained is reference values.

WG50

Industrial Gears
NEMA Market



Industrial Motors

- Commercial & Appliance Motors
- Automation
- Digital & Systems
- Energy
- Transmission & Distribution
- Coatings

Driving efficiency and sustainability



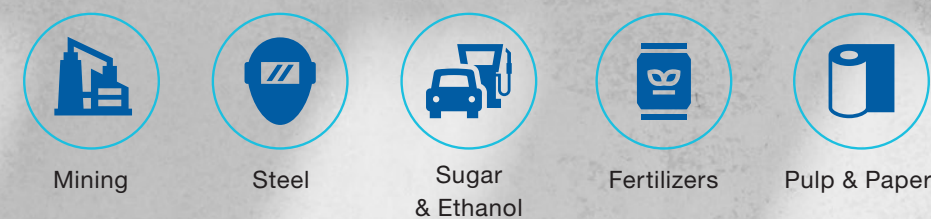
CHARACTERISTICS

- Modular housing for mounting in different working positions.
- Split housing for easy maintenance.
- Two-stage housing with optimized geometry and fins for better thermal dissipation.
- Gearing with optimized tooth profile for better efficiency, noise and load.
- Wider size range with better torque distribution and fewer components.
- Standard thread for coil and cartridge heater.
- Modular motor flange allowing more motors with fewer components and designed for fan mounting, offering optional coupling for hazardous areas.
- Available with parallel and orthogonal shafts in R and T shapes.

- Available in two, three and four stages in reductions from 6.3 to 450 and torque from 22 kNm to 178 kNm.
- Available with backstop and optional items for the mining industry.
- With oil dipstick and VITON lip seals (Standard).
- Available with standard cooling and forced lubrication SKID.
- Available with solid single-ended and double-ended input shaft.
- Available with single and double ended solid or hollow output shaft with key slot or shrink disk.
- Shafts and pinions dimensioned considering bending-torsion deflections for optimization of load distribution on the tooth flanks.

APPLICABILITY

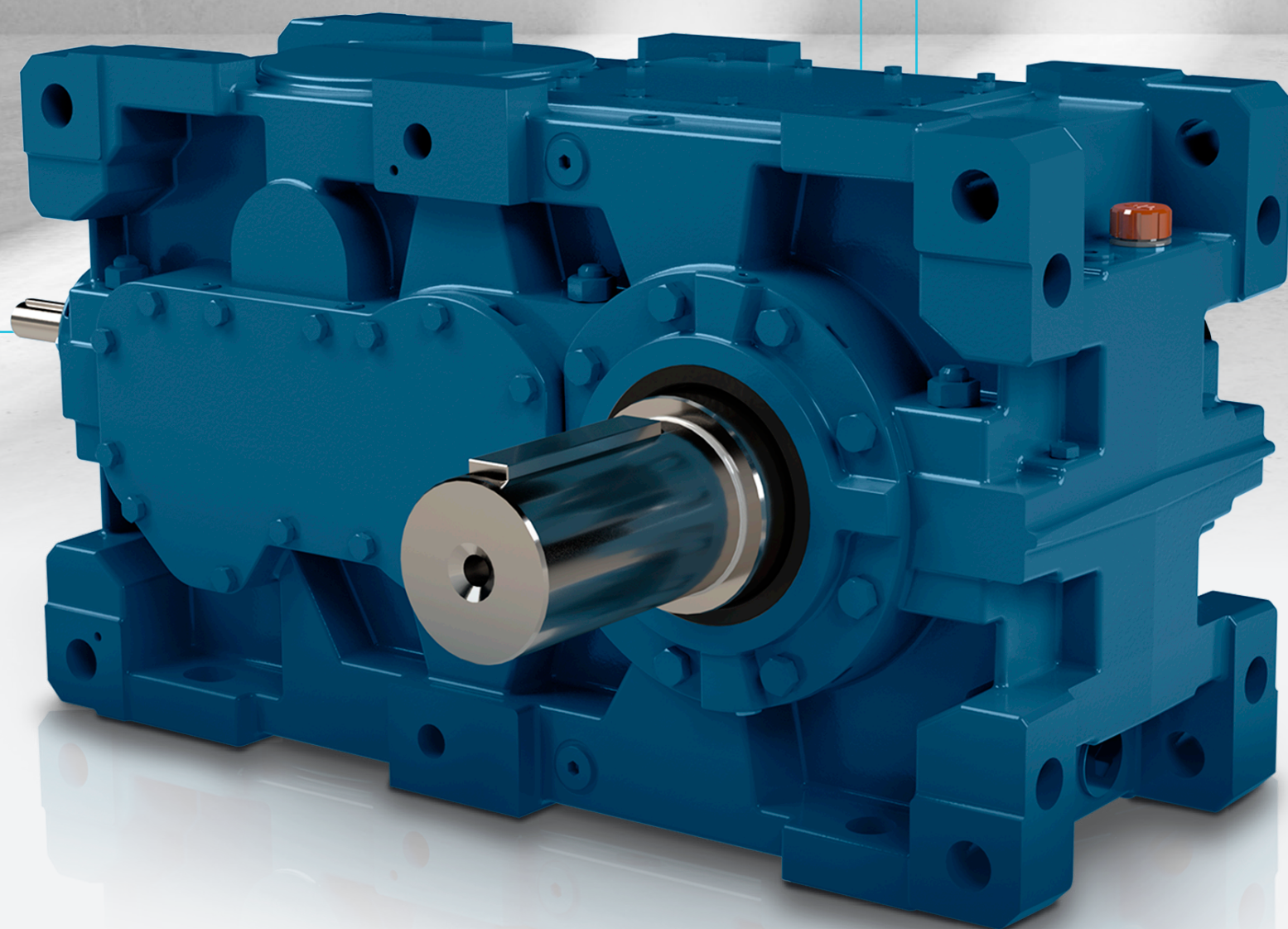
The versatile and modular design of the WG50 allows its application in a great variety of industries.



Size	W01	W02	W03	W04	W05	W06	W07	W08	W09	W10	W11	W12	W13	W14	W15	W16	
Torque [lb.in] x 1000	66	84	115	146	195	248	319	407	518	593	708	817	1.018	1.168	1.398	1.575	
Torque [Nm]	7500	9500	1300	16500	22000	28000	36000	46000	58500	67000	80000	92000	115000	132000	158000	178000	
Shaft arrangement	Parallel and right angle																
Parallel and right angle shafts	Ratio	6,3-80	8-100	6,3-355	8-450	6,3-355	8-450	6,3-355	8-450	6,3-355	7,1-400	6,3-355	7,1-400	6,3-355	7,1-400	6,3-355	7,1-400
	Number of stages	2/3	2/3	2/3/4	2/3/4	2/3/4	2/3/4	2/3/4	2/3/4	2/3/4	2/3/4	2/3/4	2/3/4	2/3/4	2/3/4	2/3/4	2/3/4
T right angle shafts	Ratio	16-80	20-100	16-355	20-450	16-355	20-450	16-355	20-450	16-355	18-400	16-355	18-400	16-355	18-400	16-355	18-400
	Number of stages	3	3	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

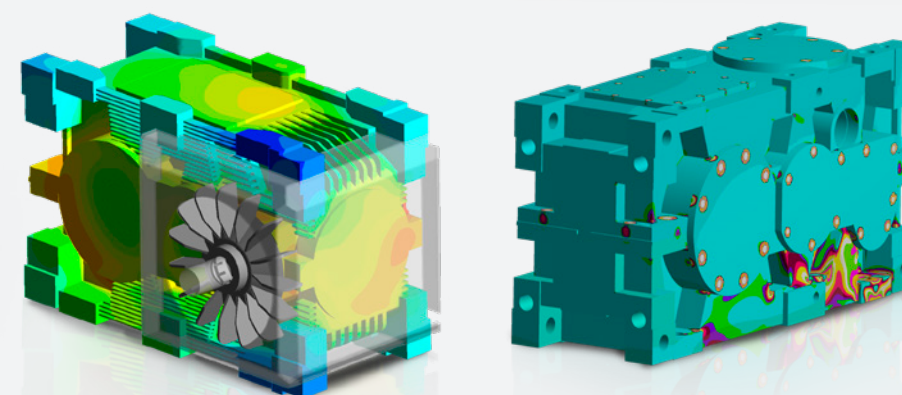
BENEFITS

- Greater durability
- Better heat dissipation
- Greater torque distribution
- Optimized gearing
- Modular flange
- Modular and split housing
- Easy assembly and maintenance
- Versatile in all projects
- Efficient in all applications



ADVANTAGES

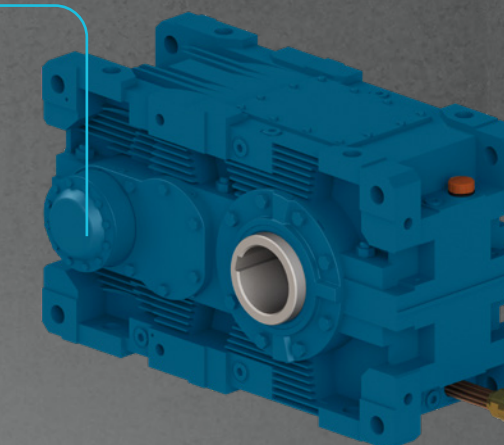
- Finite Element Analysis (FEA) for optimization of the housing material, better torque/mass ratio.
- Topological analysis of the housing, motor flange, torque arm and orthogonal bearing using finite elements.
- Fluid analysis (CFD) for thermal optimization of the housing, fan and fan cover.
- Housing with optimized inner design (CFD) to reduce oil stirring and consequent losses.



AVAILABLE ACCESSORIES

BACKSTOP

The backstop is an accessory used to prevent the speed of the output shaft from reversing, after a shutdown or failure in the system. You must specify the direction of rotation of the output shaft or the direction in which the shaft should be locked. The direction of rotation is indicated on the gearbox housing.

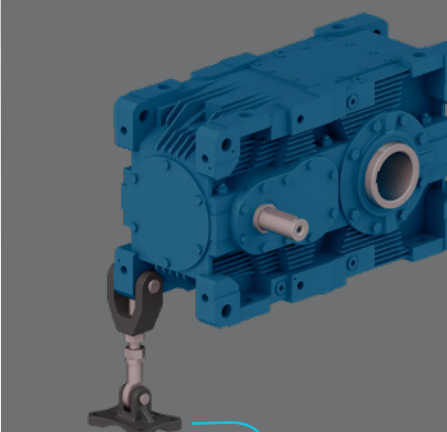
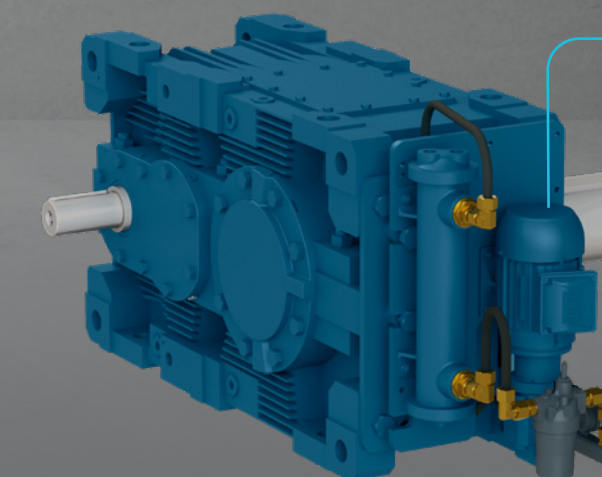


COOLING COIL

The coil performs the thermal exchange with the lubricant to ensure its original characteristic and the useful life of the internal components, keeping the best cooling of the gearbox. The cartridge-type coil is used with two G 1/2 threads and copper pipes. The maximum operating temperature is 95 °C, and the permissible pressure is 10 bar. The use of clean water, free of chemically aggressive impurities, is recommended.

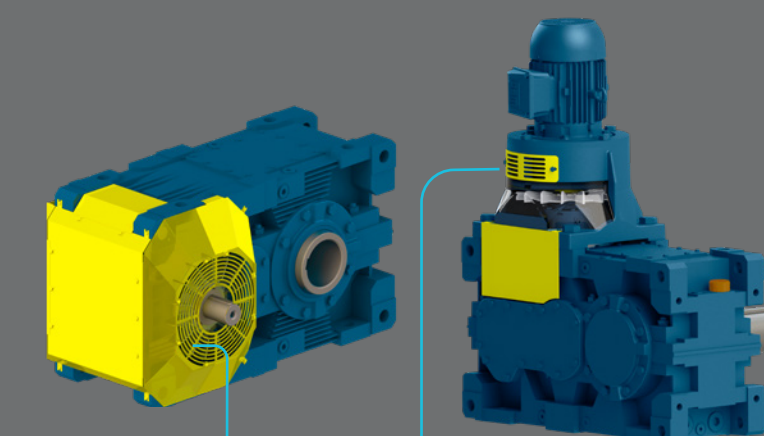
LUBRICATION AND COOLING SYSTEM

The main function of the forced lubrication and cooling system is to lubricate the bearings and gear pairs. It is composed of a helical gear pump driven by an electric motor and connected through an elastic coupling, a water-oil tube and shell heat exchanger (contact WEG for air-oil radiator) with a single filter, a stainless steel case manometer with glycerin for local reading, and a pressure switch to regulate the low pressure (0.8 bar). There are eight system capacities available, which must be selected to meet the required thermal power.



TORQUE ARM

The torque arm is an optional fastening accessory, which is intended to absorb the vibration produced by the application. The length of the torque arm can be adjusted within a certain range to suit the customer's needs. It is recommended to mount the torque aside of the driven machine, keeping the shaft bending to a minimum.



FAN

The fan is of the radial type and can be used in both directions of rotation. It is made of aluminum with a steel hub, steel fan cover according to NR12 and balanced according to ISO 1940 G6.3. It can be installed on the input flange or on the additional end of the gearbox with fan cover.