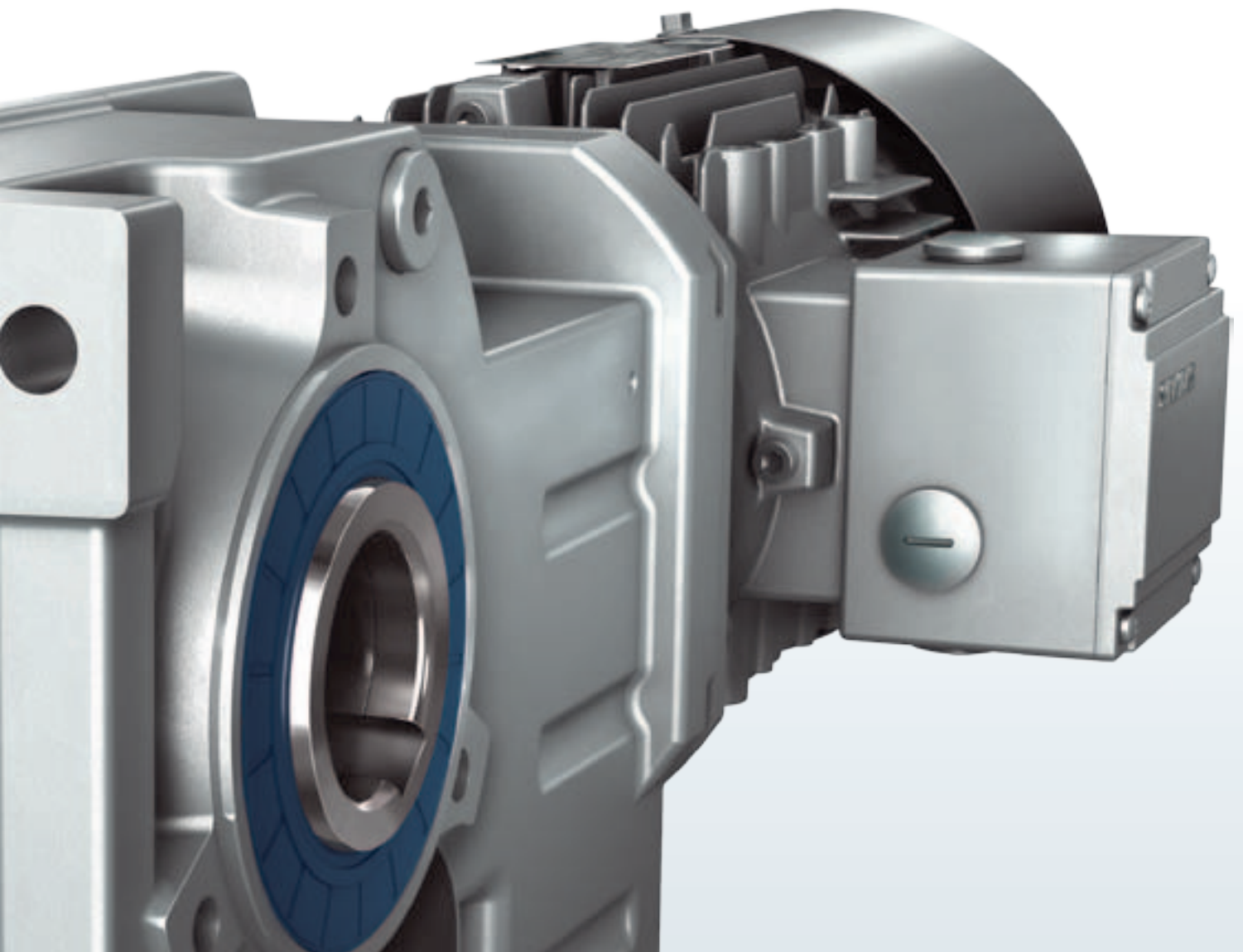


# What can you rely on for maximum power and minimum space requirement?

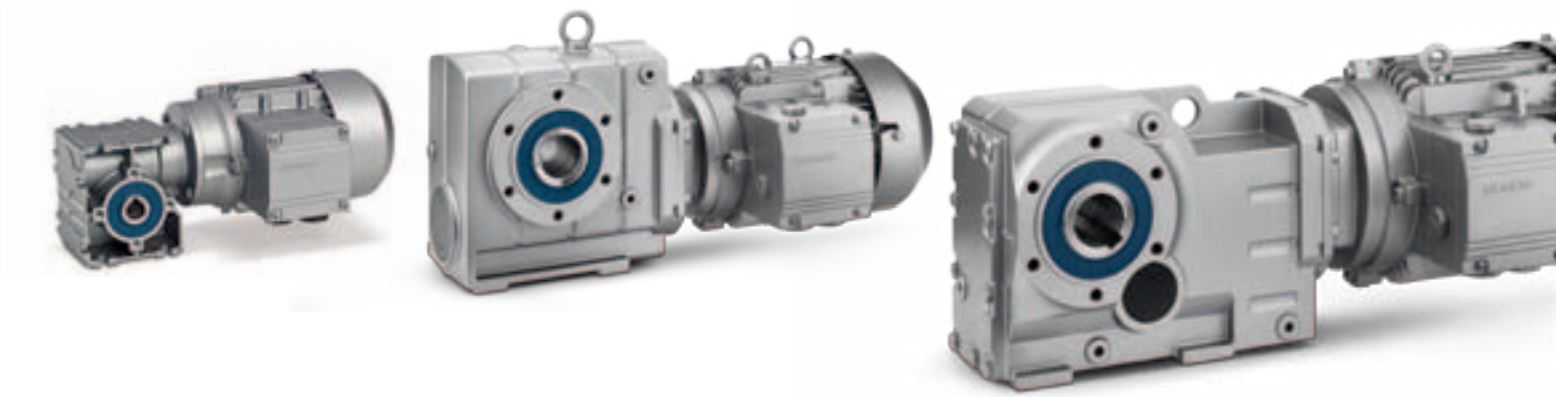
---



MOTOX has higher rated torques than is customary in the market - but with the same size.

Answers for industry.

**SIEMENS**



## Unbeatable power in a geared motor family: MOTOX

f.l.t.r.:

Worm geared motor  
Helical worm geared motor  
Bevel helical geared motor  
Parallel shaft geared motor  
Helical geared motor

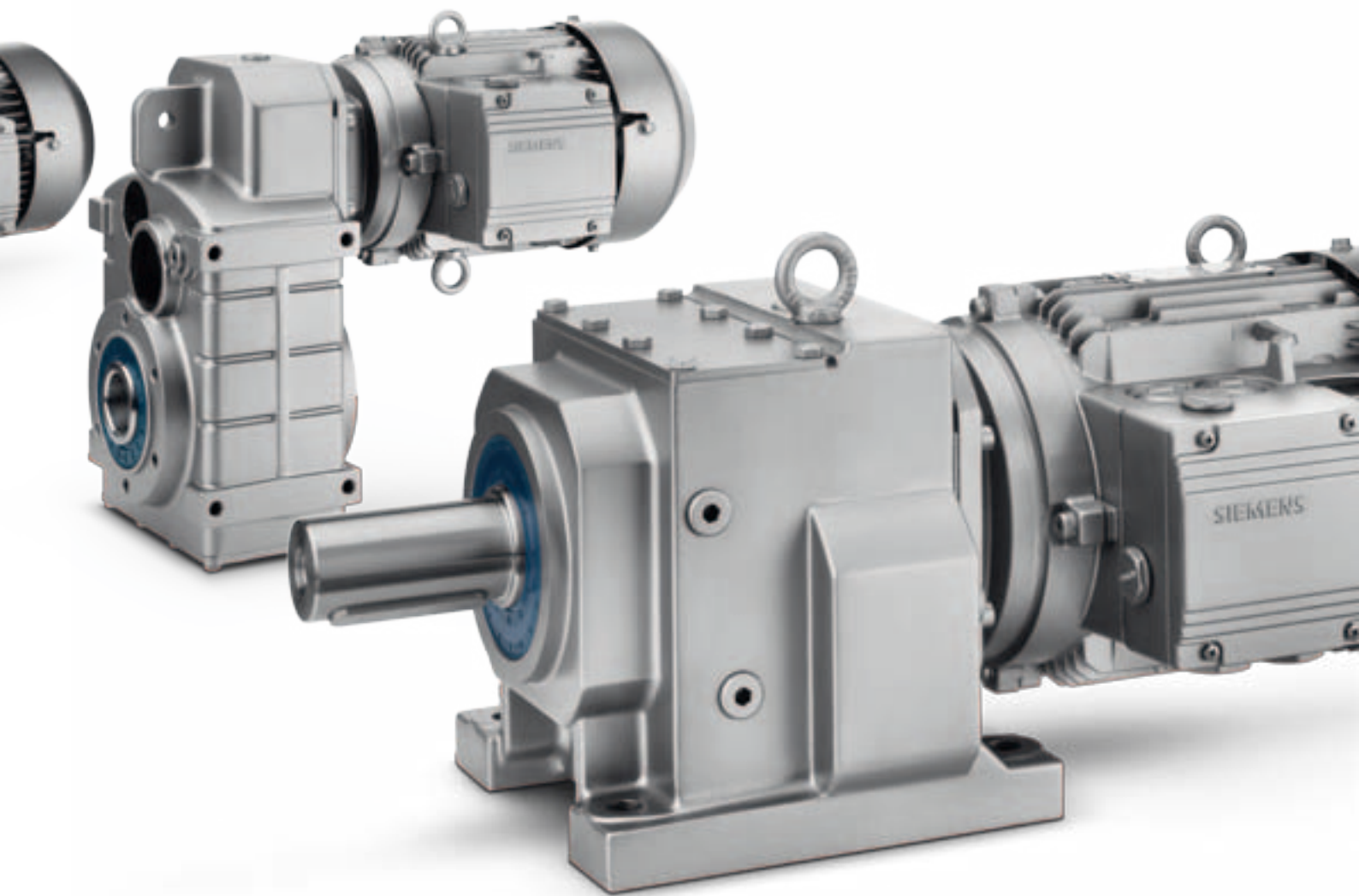
Complete range – it's your choice

Higher torque – benefit from the power

Practical modular system – remain flexible

Part of Totally Integrated Automation –  
increase your competitiveness

100% service – we are always there for you



When it comes to your drive we don't make any compromises. With our MOTOX family of geared motors, we can offer you the complete range of geared motors – and therefore the optimum solution for each and every task.

Our portfolio includes all of the usual gear unit types and covers all drive applications. You can profit from output torques of up to 34,000 Nm and higher rated gear unit torques when compared to geared motors of the same size from our competitors. With MOTOX, our drive portfolio is complete with all gear unit types in the power range from 0.09 up to 200 kW.

**Convince yourself of this power.**

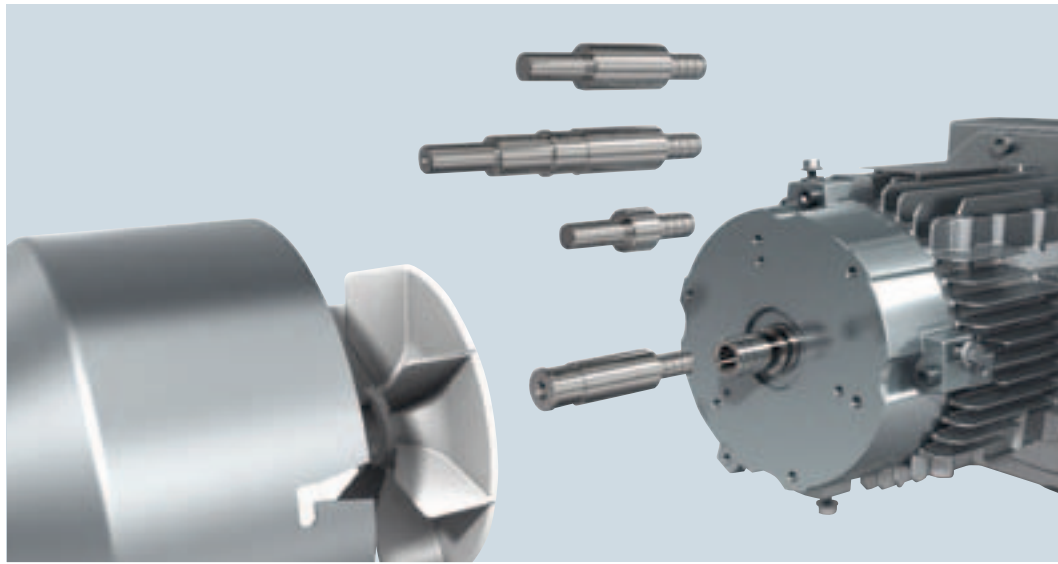
# The unique comprehensive portfolio for your application

## Complete portfolio – the choice is yours

And when we say complete, we also mean it. With the new MOTOX series of geared motors, we complete our drive portfolio and can offer you all gear unit types from 0.09 up to 200 kW - from helical through parallel shaft, bevel helical and helical worm, up to worm geared motors. As a consequence, with us, you can implement comprehensive drive solutions for every conceivable application and in any sector worldwide. Not only this, our geared motors are in compliance with all of the relevant international regulations.

- The standard motors are in compliance with the relevant IEC/EN standards.
- We can offer you motors with the following specifications for export to the NAFTA market (US, Canada, Mexico): electrical NEMA, UL, CSA.
- CCC-certified motors are available for export to China, GOST-R-certified gear units and motors are available for export to Russia.
- Our energy-saving motors in High Efficiency (IE2) corresponding to the EU Directive 2005/32/EC (EuP Directive) ensure that your energy balance is cost-effective, based on the minimum efficiencies corresponding to standard IEC 60034-30.
- For operation in hazardous zones, we can offer you our geared motors for Zones 1 and 2 (gas) as well as 21 and 22 (dust) corresponding to EU Directive 94/9/EC.



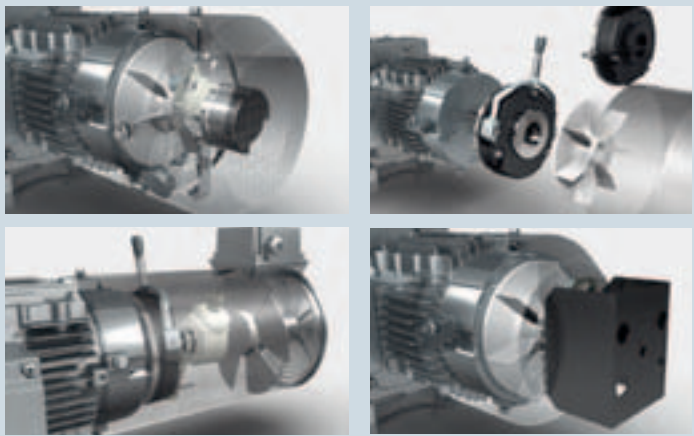


**Practical modular system – maximum flexibility for you**

We've been creative to keep you flexible. Whatever your requirement: Our complete portfolio can be individually combined thanks to our modular system for geared motors. Based on this you can assemble all conventional designs and installation variants of geared motors.

You can configure your geared motors in-line with the designs and mounting versions generally available in the market.

On the motor side, MOTOX features a modular and logistically optimized design. Functional units such as brake, external fan and encoder can be mounted onto a standard basis motor. As a consequence, MOTOX always keeps you flexible as the motor can even be retrofitted with additional functional units after it has been shipped.



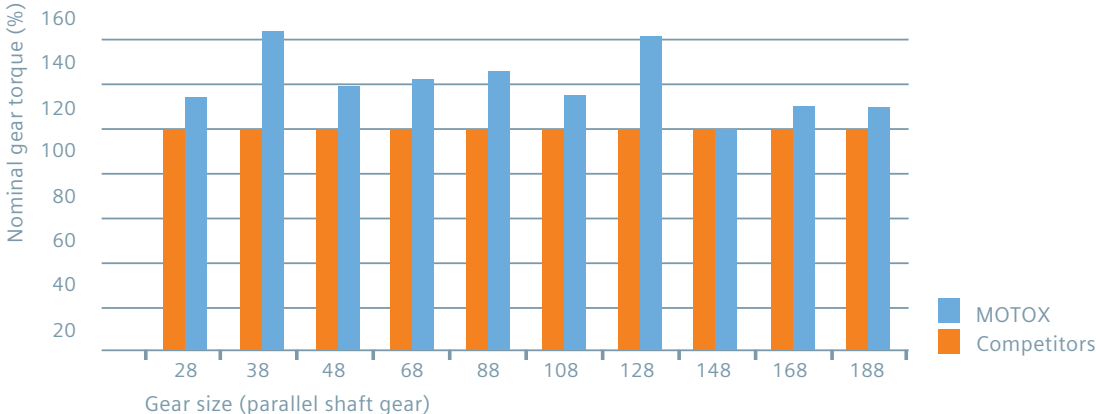
MODULOG principle

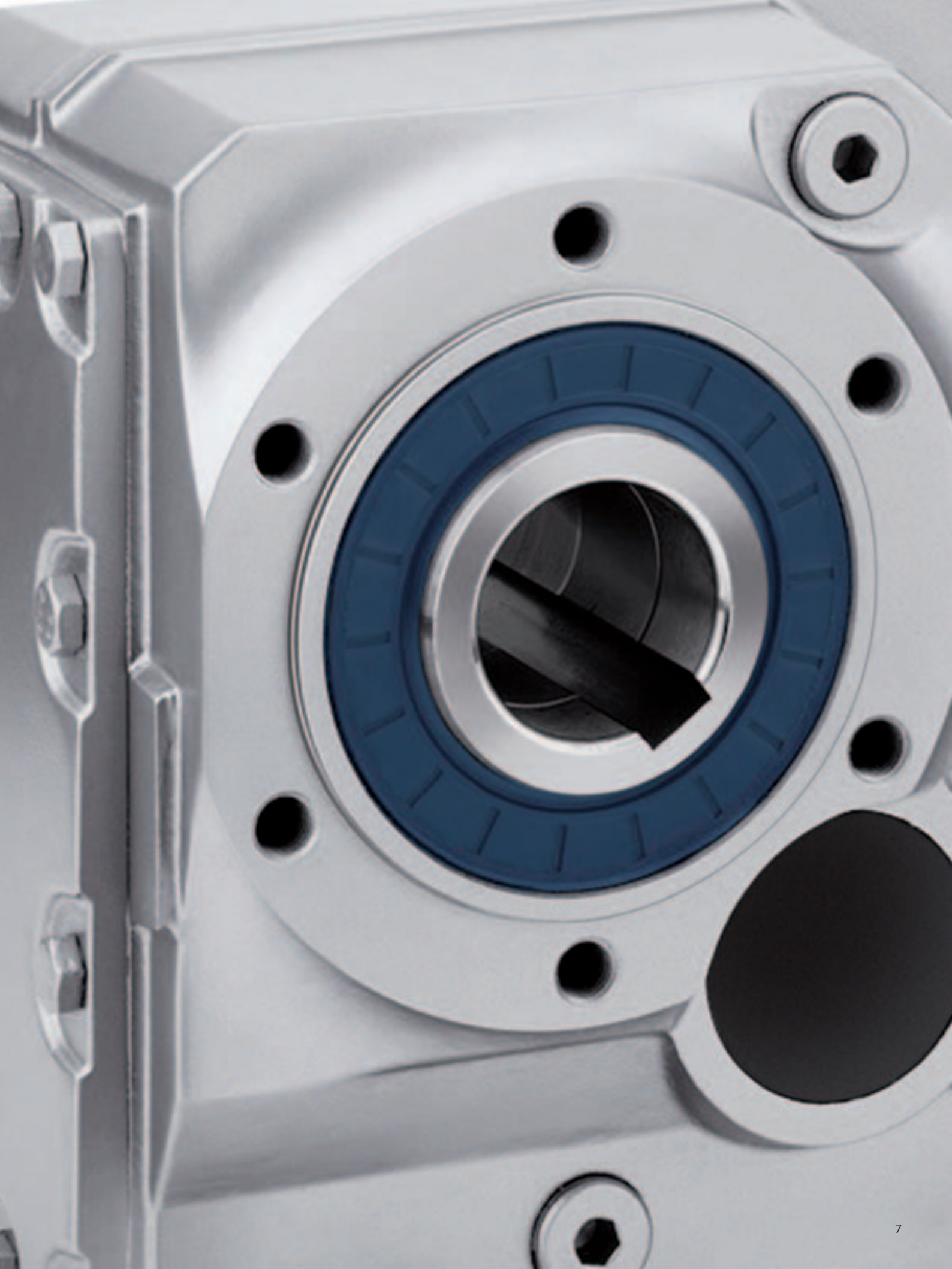
# Maximum Power in Minimum Space

## Higher torque – increased power

We put tremendous effort into our development so that you can operate even more profitably. Our new MOTOX series of geared motors stands out with its excellent performance, particularly when used in conveyor, crane and lifting technology. Among other things, you benefit from output torques of up to 34,000 Nm and higher rated torques when compared to geared motors of the same size from our competitors. In addition, they facilitate an improved operating factor and thus an increased system availability and operational reliability.

As a result of their special mechanical design, MOTOX geared motors attain a very high gear ratio. In many applications, more efficient solutions can be implemented as one gear stage can be eliminated. Due to the higher ratio, you can also benefit from cost advantages by opting for the 4-pole standard motors instead of 6- or 8-pole motors. With MOTOX, you also decide in favor of low-noise geared motors as we were able to drastically reduce the noise as a result of the low circumferential speed after the first gear stage.









# All from a single source

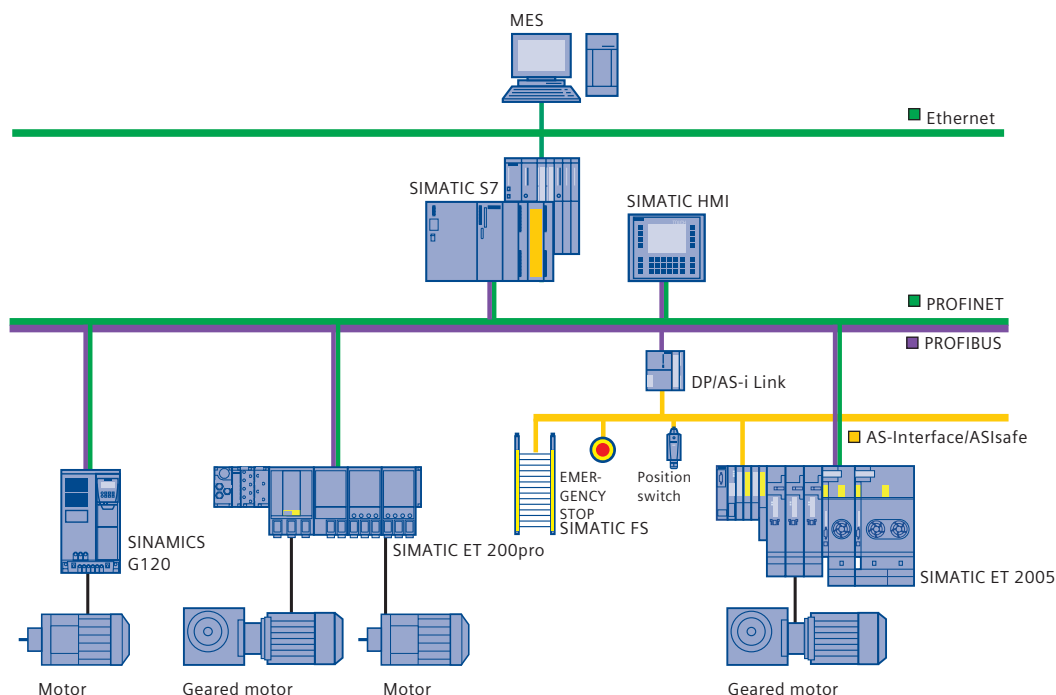
## Part of Totally Integrated Automation – for improved competitiveness

MOTOX geared motors are an integral part of Totally Integrated Automation (TIA), the comprehensive product and system portfolio by Siemens for company-wide automation in all sectors. Thanks to its unique level of integration, Totally Integrated Automation essentially contributes to the reduction of total cost of ownership, reduced time to market and increased investment protection – thus helping to sustainably improve your competitiveness.

You can also leverage these benefits for your drive solutions – no matter what your specific requirements may be:

Based on Totally Integrated Automation, you can realize your plans using components that are perfectly matched with one another from a single source. MOTOX geared motors are compatible, among others, with our comprehensive series of MICROMASTER and SINAMICS inverters.

The result: You benefit from integrated system solutions to improve your productivity – solutions that are characterized by minimum interface overheads, cost efficiency and sustainability.



# Safeguarding the Future with Systems and Services

## **100% service – through permanent support**

We want you to be on the safe side with MOTOX at all times. This is why we offer support services right from the very start. Our user-friendly electronic catalog already makes it easy for you to select and configure your application. You can rapidly and reliably select the optimum geared motor, call up 2D and 3D CAD data in various file formats and directly process them in your mechanical design.

The tool is available on the Internet at [www.siemens.com/gearedmotors](http://www.siemens.com/gearedmotors).

If you are facing a rather specific drive requirement, which cannot be met by our standard portfolio, we will be pleased to develop a customized solution. In addition, we offer comprehensive on-site support – from commissioning and maintenance down to fault rectification and service contracts. Our global regional contact partners ensure the availability of your machines and systems by rendering individual on-site services and providing suitable spare parts.



# Overview of Geared Motors



	Helical geared motors	Parallel shaft geared motors	Bevel helical geared motors	Helical worm geared motors	Worm geared motors
<b>Gear designation</b>	E38 ...148; D/Z18 ...188	FZ/FD28 ...208	B28 ...38 / K38 ...K188	C28 ...88	S08 ...28
<b>Typical application areas</b>	Agitator technology Conveyor technology Cooling tower drives	Conveyor technology Mixers Extruders	Crane technology Airport technology Warehouse systems	Theater and stage technology, waste water technology	Conveyor technology
<b>Nominal gear torque</b>	Up to 20,000 Nm Up to 177,000 in-lbs	Up to 34,000 Nm Up to 177,000 in-lbs	Up to 20,000 Nm Up to 177,000 in-lbs	Up to 1,590 Nm Up to 14,000 in-lbs	Up to 80 Nm Up to 1,470 in-lbs
<b>Maximum motor power (50Hz)</b>	200 kW	200 kW	200 kW	11 kW	1.5 kW
<b>Maximum motor power (60Hz)</b>	300 HP	300 HP	300 HP	15 HP	2 HP
<b>Number of gear sizes</b>	11	11	10	5	3
<b>Number of ratios</b>	1-/2-/3-stage	2-/3-stage	2-/3-stage	2-stage	1-stage
<b>Number of ratios double gears</b>	4-/5-/6-stage	4-/5-/6-stage	5-/6-stage	4-/5-stage	--
<b>Gear ratio single-stage</b>	1.360 ... 14.455	--	--	--	5 ... 100
<b>Gear ratio 2/3-stage</b>	3.07 ... 359.30	3.80 ... 449.21	3.57 ... 307.24	9.67 ... 440.70	--
<b>Gear ratio double gear</b>	207 ... 71,317	299 ... 71,388	181 ... 60,115	324 ... 33,491	--
<b>Sector-specific solutions</b>	Agitator variant Cooling tower variant	Mixer variant Extruder variant	Mixer variant Extruder variant Variant for electric monorail systems	Variant for electric monorail systems	Variant for all types of washing systems variant for carwash

**Inform yourself about our products for comprehensive  
and efficient drive solutions!**

[www.siemens.com/gearedmotors](http://www.siemens.com/gearedmotors)

[www.siemens.com/tia](http://www.siemens.com/tia)

[www.siemens.com/conveyor-technology](http://www.siemens.com/conveyor-technology)

[www.siemens.com/energy-saving](http://www.siemens.com/energy-saving)

Siemens AG  
Industry Sector  
Drive Technologies

[www.siemens.com/gearedmotors](http://www.siemens.com/gearedmotors)

Subject to change without prior notice 09/10  
Order No.: E80001-A440-P220-V3-7600  
DISPO 21505  
WÜ/28147 GD.SD.FL.XXXX.52.0.04 WS  
09103.0  
Printed in Germany  
© Siemens AG 2010

The information provided in this brochure contains merely general descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract.

All product designations may be trademarks or product names of Siemens AG or supplier companies whose use by third parties for their own purposes could violate the rights of the owners.