

RENK



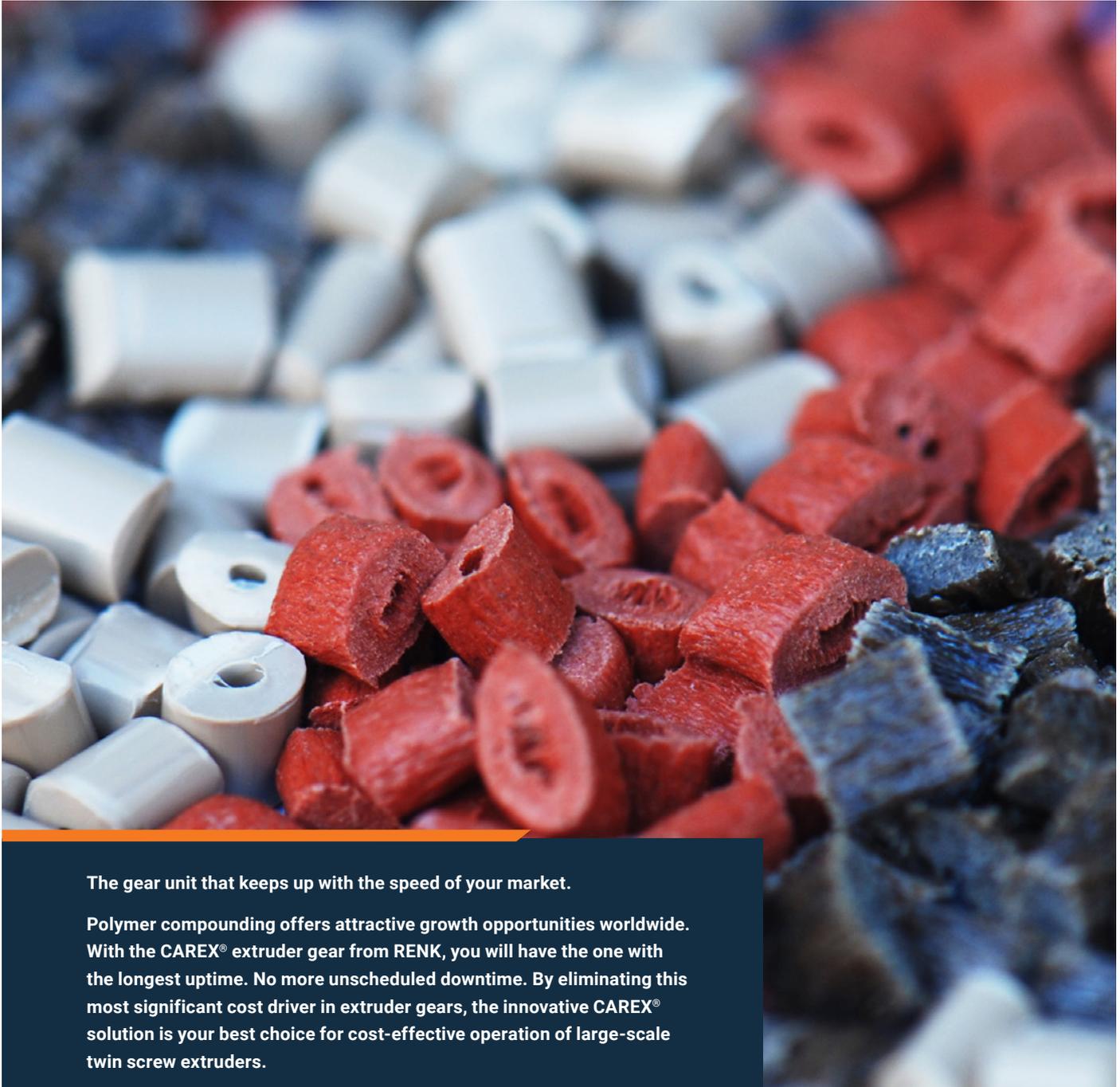
INDUSTRIAL GEARBOXES FOR EXTRUDERS

CAREX[®].
Maximize your extruder
uptime. Large-Scale twin
screw extruder drives.

/ The worlds longest service intervall

/ 10 years maintenance free

/ Unlimited lifetime bearings



The gear unit that keeps up with the speed of your market.

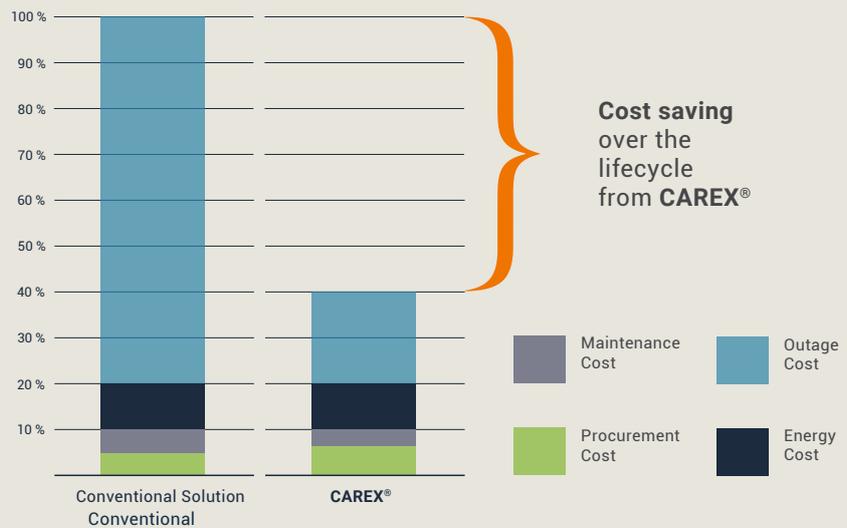
Polymer compounding offers attractive growth opportunities worldwide. With the CAREX® extruder gear from RENK, you will have the one with the longest uptime. No more unscheduled downtime. By eliminating this most significant cost driver in extruder gears, the innovative CAREX® solution is your best choice for cost-effective operation of large-scale twin screw extruders.

Experience a new level of availability and reliability with CAREX®, your solution for consistently high and predictable throughput rates.

A new level of reliability and cost efficiency with CAREX®.

Your advantages with CAREX®.

- Superior cost efficiency through 10-year service intervals, easy accessibility and maintenance-free bearings
- Competitive advantage through 50% reduction in downtime for maintenance
- Coupling-free technology eliminates the operation-critical weak point of conventional extruder drives
- Highly reliable, especially cost-effective operation of large-scale extruders
- Reduced CAPEX for spare parts



CAREX® eliminates the biggest cost factor: the downtimes.

Cut the costs of your extruder line. With CAREX®.

CAREX® eliminates a critical cost factor. What is the most expensive part of an extruder line? Right, it is the downtime. In fact, shutdowns in large-scale extruder systems can cause damage of up to 1 million US-\$ per day, making this the no. 1 cost driver. With CAREX®, you can significantly cut this risk. The innovative gear solution from RENK, the world's leader in extruder-gear technology, is designed to provide superior reliability and therefore uniquely cost-effective operation while covering all your needs for many applications.

Designed to increase your competitive advantage.

CAREX® takes an innovative approach to optimize your operating and maintenance costs over the lifetime of the system.

In case the 2-speed option is selected, CAREX® uses a manually operated state-of-the-art clutch mechanism avoiding known reliability issues from other solutions available in the market.

Defeat friction in bearings as well as in your processes.

Your CAREX® benefits at a glance.

- Maximum availability
- Maintenance interval (MTBO) > 10 years
- Lower spare-parts costs
- Less downtime for maintenance
- Minimal total cost of ownership (TCO)

No-wear sleeve-bearing technology.

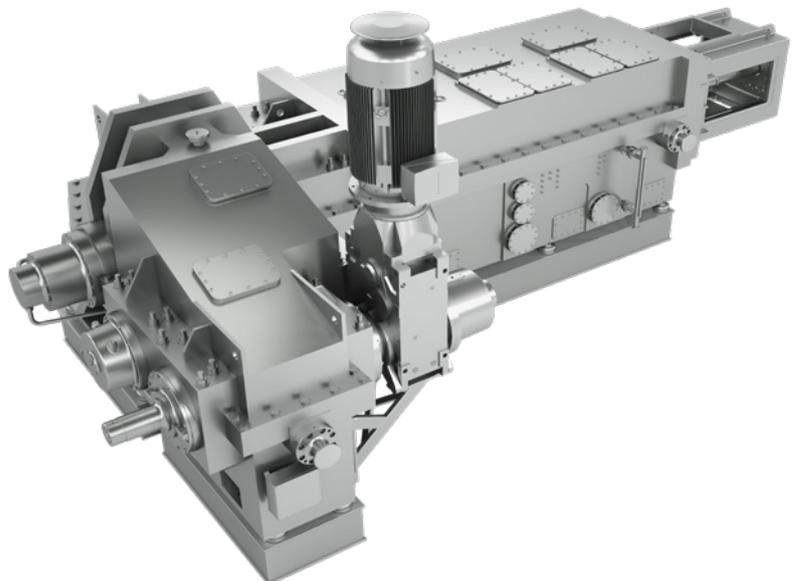
Extremely reliable extruder gears are called RENK. They have proven their outstanding performance worldwide since 2004. One of their key advantages is RENK's leading know-how in sleeve-bearing technology. This makes CAREX® an endurance winner with impressively high availability and extremely long maintenance intervals of more than 10 years.

Less downtime.

The CAREX® housing is built-up in several parts which allows a quick assembly and disassembly of the gear set for maintenance. A further gain in efficiency is achieved by using radial sleeve bearings with a calculated unlimited lifetime in combination with a life extension option for the axial roller bearings. CAREX® is available both in single and two-speed version.

CAREX® fits your strategy and your environment.

Do you want to bring your existing twin screw extruder line up to state-of-the-art level? Are you planning to build a new extruder line? In either case, CAREX® will get you there. The extruder gearbox is available in various configurations. Thanks to the foundation adapter for drop-in replacement, you can upgrade existing configurations without cost-intensive modification for foundations and other interfaces.



/ 130 – 482 kNm

output torque range per
output shaft

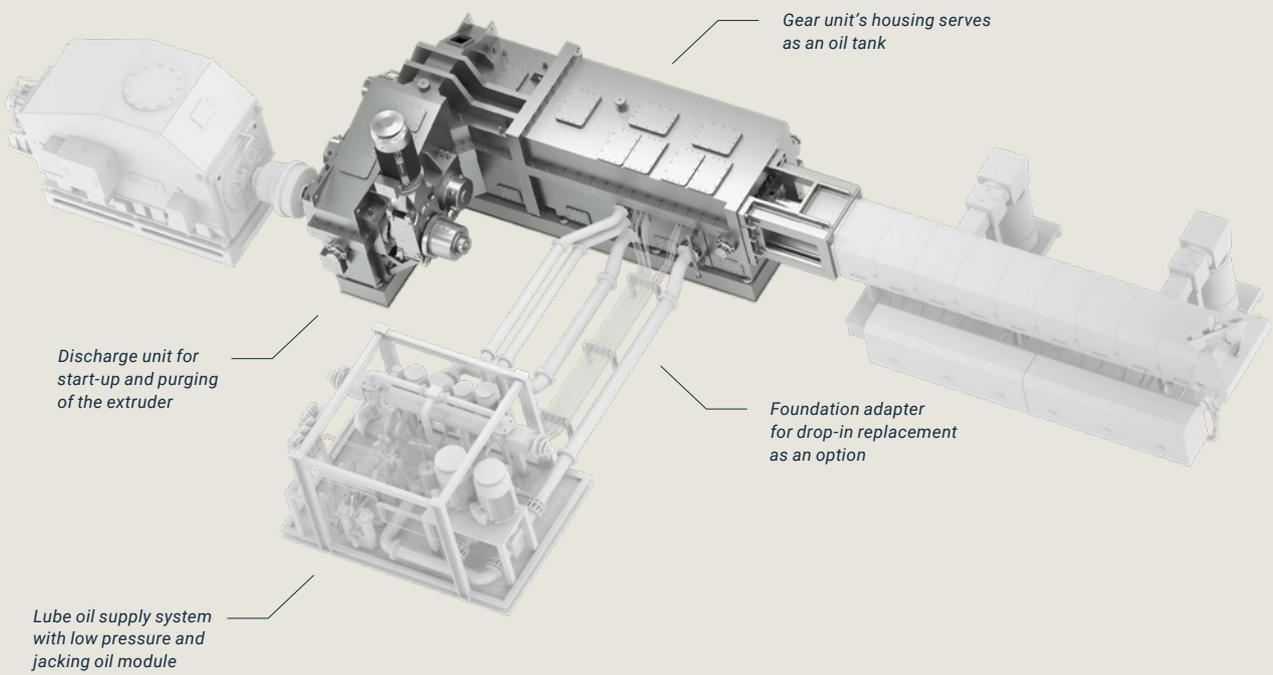
/ Co-rotating or
counter-rotating

twin screw extruders and mixers

/ 261– 564 mm

center distances

**Example arrangement: CAREX® connects with your extruder
twin screw system in various ways and configurations.**



CAREX®, a key driver of your extruder systems' success.

Our unique extruder drive expertise is your advantage: RENK stands for innovative progress in extruder drives. Because we improve what drives your business forward. And eliminate what slows down your success. That is how we create solutions that give you lasting technical and economic advantages. Give your plant's profitability more drive. With RENK Extruder Drives.

Outstanding performance across all KPI's.

Its convincing technical features speak for CAREX®. Yet the solution also convinces in the critical, economic analysis, underlining its superiority over conventional solutions. CAREX® achieves an impressively low Total Cost of Ownership (TCO) and an outstanding Mean Time Between Overhauls (MTBO). The transmission simultaneously reduces your Operational Expenditures (OPEX) and noticeably increases Overall Equipment Effectiveness (OEE).

Excellent endurance, reliably delivered.

CAREX® is reliably efficient. This is not just theory, yet proven fact. RENK operates Europe's largest and most modern test bay facilities for gear units. On an area of over 25,800 square feet, gearboxes are commissioned, optimized and tested under real-life conditions. Extreme loads as well as running through and optimizing maintenance processes are also part of the testing. This is where CAREX® has shown its big impact on the competitive advantages of large-scale extruder systems.



RENK's multifunctional testing facility with lifting capabilities up to 240 tons and test power up to 12 MW is located at RENK Group headquarters in Augsburg, Germany.

RENK digital solutions: your decisive advantage. Optimization in availability, efficiency and costs.



RENK Digital Solutions combined with our original Services. Seamlessly leveraging the full potential.

Our original service, combined with RENK Digital Solution (RDS), will redefine the value and control of your system. This holistic approach is the core of our commitment to a higher level of support.

RENK RVM Advanced

Our leading condition monitoring system for CAREX® and connected equipment. Focused on maximum availability and optimized Total Cost of Ownership (TCO). Continuous and intelligent monitoring of your machine data, combined with individual analysis by RENK experts. Secured data transmission and full transparency for you. Together we determine the optimal course of preventive action. Anywhere. Anytime.

RENK Remote Service

For immediate support of your team. When travelling is not possible, not economical or simply not fast enough. RENK service via online video chat. Our experienced Field Experts, remotely at your side. Worldwide. Now.

RENK Virtual Reality Training and Support

The exact VR-model of your gear unit. Already proven technology as basis for highly efficient immersive training and a platform for technical clarification. Repeatable, cost-saving and globally available across your company's network.

RENK Digital Documents

The gear unit manual, a spare parts catalogue, maintenance tasks and more. All digital. For ensured continuity of your information.

This is just the beginning of RENK's progressive digitalisation. Our effort for your daily advantage.



Trusted Partner.

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