Your application: Drives for mixers and agitators

Our solution: E4 Agitator Drives

Drive requirements
- High system reliability coupled with freedom from leakages
- Long service life – in spite of high load peaks due to the influence of the agitating medium
- Absorption of process-related high axial and radial forces by the gearbox
- Scalable service life, e.g. bearing service life 25,000 hrs or 50,000 hrs
- Optimised ratio of size to performance (power density), no leap up in size (overdimensioning) from load influences and environmental conditions
- Accessibility and ease of use for servicing and maintenance intervals
- “Appropriate” ratios for catering to the required speed and torque ranges
- Catering to the application spectrum (ATEX, standard, stainless steel shafts, special flange, etc.) with one product range

Features product line Mixers & Agitators

E4-Agitator Drives
- Rugged housing design (high rigidity thanks to reinforcing ribs and large wall thicknesses)
- High gear teeth quality (carburized shaved gearings)
- Bearing dimensions matched to service loading combination
- Various flange types – adapted to the active forces (up to 380% higher force absorption within a size)
- Reinforced bearing versions – long-life sealing system and relubrication fixtures
- Drywell version with integral oil circuit
- Broad range of options (oil sensor, special shafts/flanges/paintwork, breathers, oil level indicators, built-in cooling systems, etc.)
- All the motor options available for IEC motor and integral versions (e.g. ATEX, brake, protective hoods, etc.)

Premium Stephan E4 solution:
Product line Mixers & Agitators

E4-Agitator Drives
- Adaptable performance features for helical, helical-bevel and parallel shaft gear drive designs
- Broad range of options for the best fit in the application, for example reinforced bearings, various agitator flange versions, flange/foot-mounted versions, ATEX, ATEX belt drive (certified complete solution), special seals, customer interfaces (flange, shafts, etc.) as per customer specification
- Version available for attaching standard IEC motors or as an integral solution (geared motor)

Your benefits with Premium Stephan

E4-Agitator Drives
- High system availability
- Ruggedness even under the harshest application-conditions
- Optimised product configuration coupled with outstanding performance/size ratio
- Low maintenance requirement – overall system optimised for durability and freedom from leaks
- Reduction of the total cost of ownership, e.g. with the “integrated pump” version, a reduction of 17% coupled with enhanced efficiency
- Flexibility with regard to end-user specifications for make/configuration of motor

More than 25 years experience in agitator and mixer applications.

We ensure that your application is a success!
### Performance range of the Premium Stephan gearboxes for mixers and agitators.

<table>
<thead>
<tr>
<th>Product group</th>
<th>Mounting examples</th>
<th>Nominal ratio range and output torque (Nm) for gearbox size</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SI</strong> Helical gearbox</td>
<td></td>
<td>1 - 6 7 8 9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>200 - 5000 Nm 9000 Nm 15000 Nm 25000 Nm</td>
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<tr>
<td><strong>SP</strong> Shaft-mounted helical gearbox</td>
<td></td>
<td>1 - 6 C D E F G H J K L M</td>
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<tr>
<td></td>
<td></td>
<td>200 - 5400 Nm - 6000 - 8000 - 11000 - 15000 - 18000 - 22000 - 25000 - 31500 - 35000 - 40000 - 50000 Nm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>i = 3.15 ... 200 (2 - stage) i = 35.5 ... 315 (3 - stage) i = 100 ... 30000 (with pre-stage) i = 6.3 ... 100 ... &gt; 2000</td>
</tr>
<tr>
<td><strong>SK</strong> Helical bevel gearbox</td>
<td></td>
<td>200 - 4900 Nm - 6000 - 8000 - 11000 - 15000 - 18000 - 22000 - 25000 - 31500 - 35000 - 40000 - 50000 Nm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>i = 7.1 ... 315 (3 - stage) i = 100 ... 30000 (with pre-stage) i = 12 ... 315 ... &gt; 2000</td>
</tr>
</tbody>
</table>

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**Our world revolves around you**

**Conveyor Solutions**  
C4-Gearmotor Series

**Environmental Solutions**  
E4-Gearmotor Series

**Customized Solutions**  
by Premium Stephan

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**Your benefits**

- **Speed and time to market**  
  - Independent project teams comprising project management, design, order handling and processing  
  - Pragmatic approach and the elimination of non-productive bureaucracy, coupled with professionalism in project handling

- **Professional project management**  
  - Many years’ experience with customer-specified developments and series production with international logistics requirements  
  - Clear processes and standards for project management and project milestones combine to ensure reliable processes and efficiency in the customer-supplier relationship

- **A partner in project engineering**  
  - Years’ experience and references to our reputation for project engineering  
  - Customer and project-specific product and project documentation

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**Flexibility of range. Speed of implementation. Reliability of partnership.**

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**Premium Stephan Hameln**  
Zweigniederlassung der Premium Stephan B.V.  
D – 31789 Hameln / Germany  
Ohsener Strasse 79-83  
Tel.: +49 (0) 5151 / 780-0  
Fax: +49 (0) 5151 / 780-441  
Email: info@premium-stephan.com  
www.premium-stephan.com

**Service**  
Tel.: +49 (0) 5151 / 760-0  
Weekend freecall  
0800 43 27 269  
(Gearbox)  
Email: service@premium-stephan.com