



HELICOIL[®] plus

Thread technology for
high-strength fastenings in automation

BÖLLHOFF

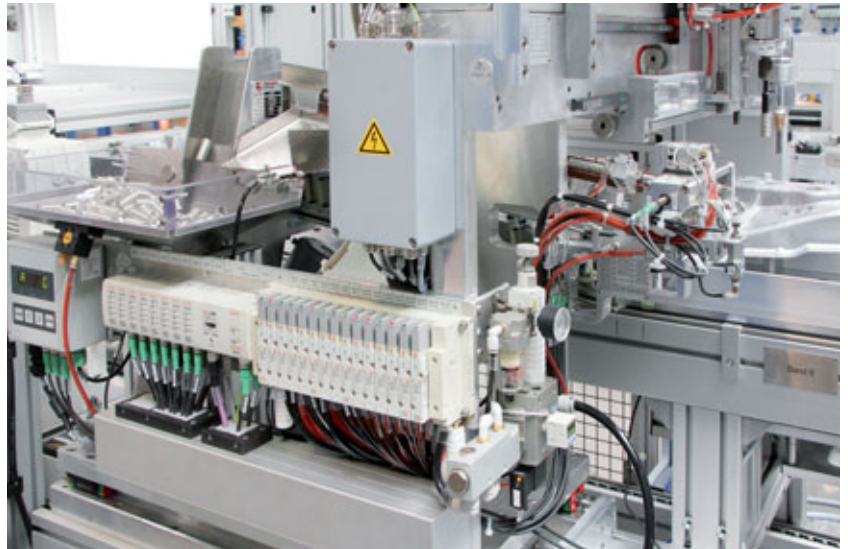
Thinking in systems

To improve your competitiveness, to optimise processes and to allow sustainable savings – that is what we strive for, that is our passion. As your partner for reliable joints worldwide, we are continuously seeking sustainable solutions for your success.

Thus, our know-how in fasteners and our system competence result in efficient overall solutions. You would like to automate an existing or a new process? High productivity and reliability is important for you?

We offer standardised automation modules for HELICOIL® *plus* installation designed as fully automatic or semi-automatic workstations.

According to your requirements, parts can be handled by the operator, a handling system, a rotary indexing table or a transfer system. We also offer complete systems.



Your advantages – an overview

- Improved competitiveness
- Increase of productive time
- Reduced labour costs and less personnel required
- Consistent high quality

From



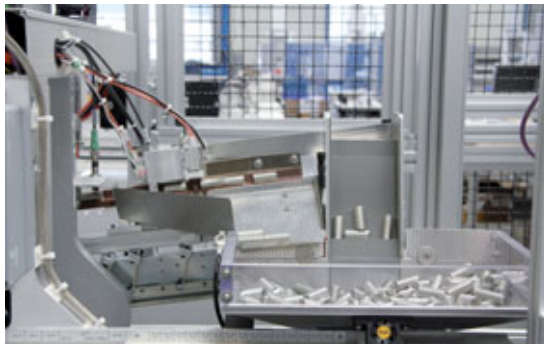
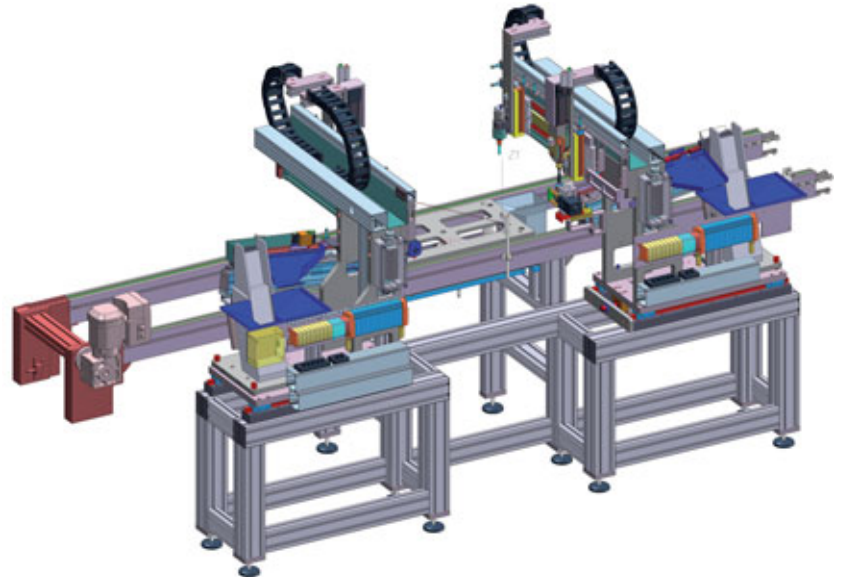
Application consultancy services

From A to Z, we support your automation projects – from the very first concept to the final realisation.

Our dialogue with you is the central theme of our working process. Smart innovation management and intensively working on the realisation of your wishes lead to tailor-made automation solutions for HELICOIL® *plus* thread technology.

Parameter monitoring

- Controlled number of required rotations of the installation mandrel for screwing-in
- Checking of the HELICOIL® *plus* installation depth (final tang position) by means of a linear measuring system
- Power consumption of the servo motor to detect too tight holding threads not true to gauge
- Time window for HELICOIL® *plus* installation
- For blind holes, tang break is directly queried. For through holes, query is done indirectly by the customer.



Quality

Customer orientation means quality- and environment-oriented behaviour as well. To us, continuous improvement is a constant process.

Böllhoff – your system partner for reliable joints. Strategic. Focussed. Joint.

Separation and provision

HELICOIL® *plus* thread inserts are filled into the pan as bulk material. By two stroke levels, the HELICOIL® thread inserts are transferred to a linear feeder.

The hopper capacity of the step feeders amounts 5 litres.

On the linear feeder, the HELICOIL® *plus* thread inserts are sorted and separated.

The HELICOIL® *plus* thread inserts are provided through a defined pick position in pick-and-place design.

As an option, vibratory feeder bowls can be used.

to



Certifications

Stationary screwdriving unit

Do you employ robot handling with a robot holding the component? Do you use a rotary indexing table or transfer system?

The stationary screwdriving unit with automatic HELICOIL® *plus* thread inserts feeding through pick-and-place is the solution.

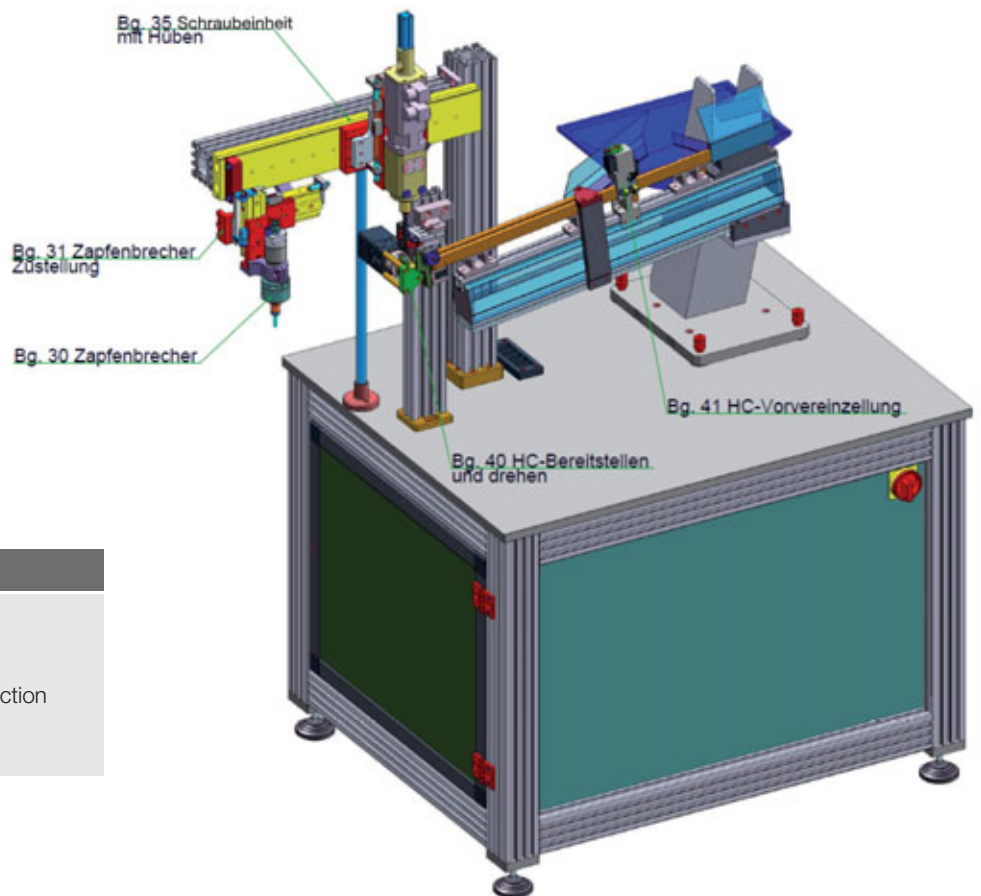
All systems feature the following standard configurations:

- Feeding and provision
- Screwdriving unit
- Tang break-off tool
- Control cabinet
- Frame
- Operating panel

The HELICOIL® screwdriving unit consists of a Lenze servo motor with integrated PLC.

Standard installation mandrels without depth stop are used to install HELICOIL® *plus* thread inserts.

By using the tang-break off tool, the tang of HELICOIL® *plus* thread inserts at the predetermined breaking point.



Your advantages – an overview

- 100 % process monitoring
- Suited for large-scale production
- Can be integrated into automatic production processes



Project management

Our project management supports you with management- and product-specific expertise.

Together with you, planning fundamentals are developed and summarized in requirement specifications.

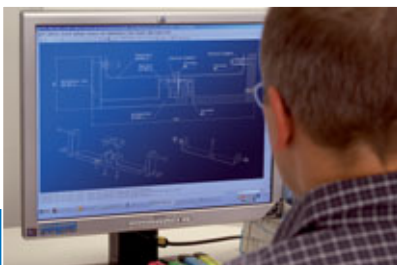
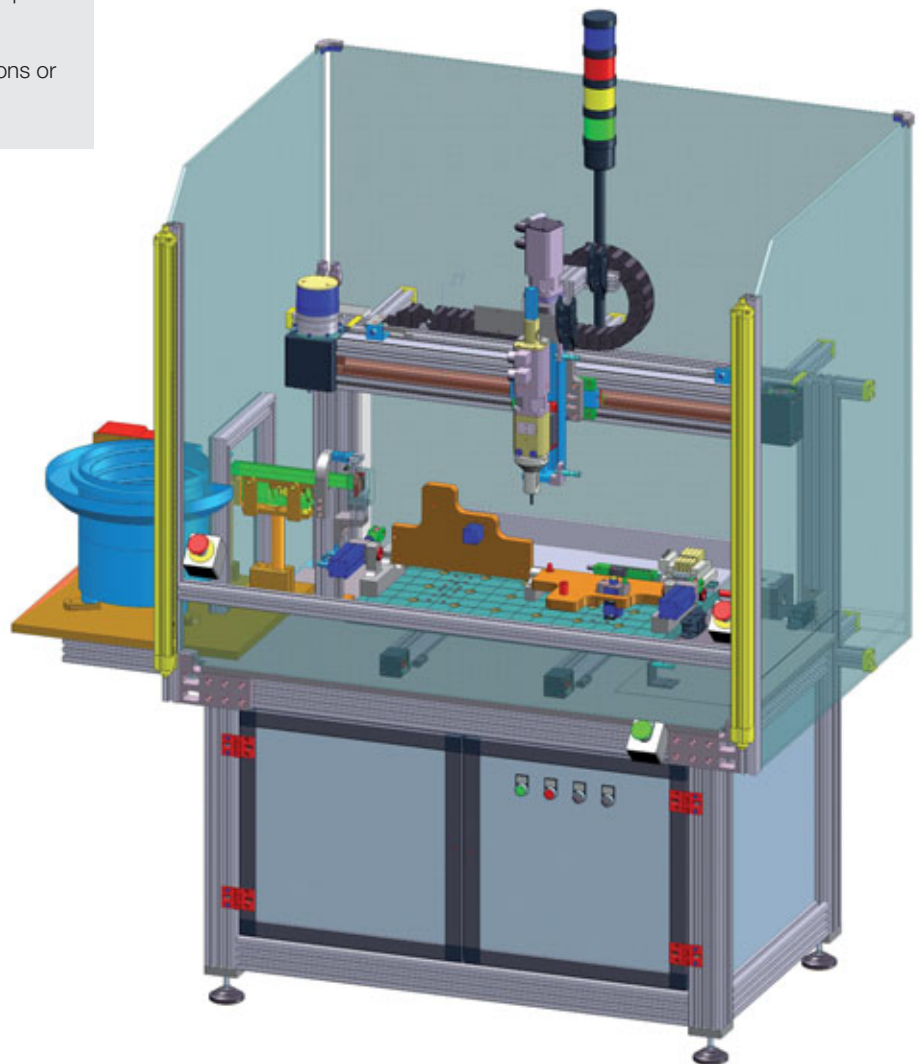
Automatic 3-axis system

You need complete process monitoring for HELICOIL® *plus* installation and do not want a fully automatic system for economical reasons?

The automatic 3-axis system can be easily integrated into a manual workstation. The component to be installed is manually fixed on a supporting device and subsequently, fully automatic HELICOIL® *plus* installation is started.

The advantages of the product – an overview

- 100 % process monitoring
- Economical, automated production, also for a smaller number of pieces
- Reduced personnel retention
- Savings potential through parallel processing of upstream and downstream installation steps
- Suited for large-scale production
- Can be integrated into manual workstations or robot cells with handling robot



Construction and development

Efficient automation is based on efficient engineering. Qualified employees are constantly working to optimise existing products and develop new products.

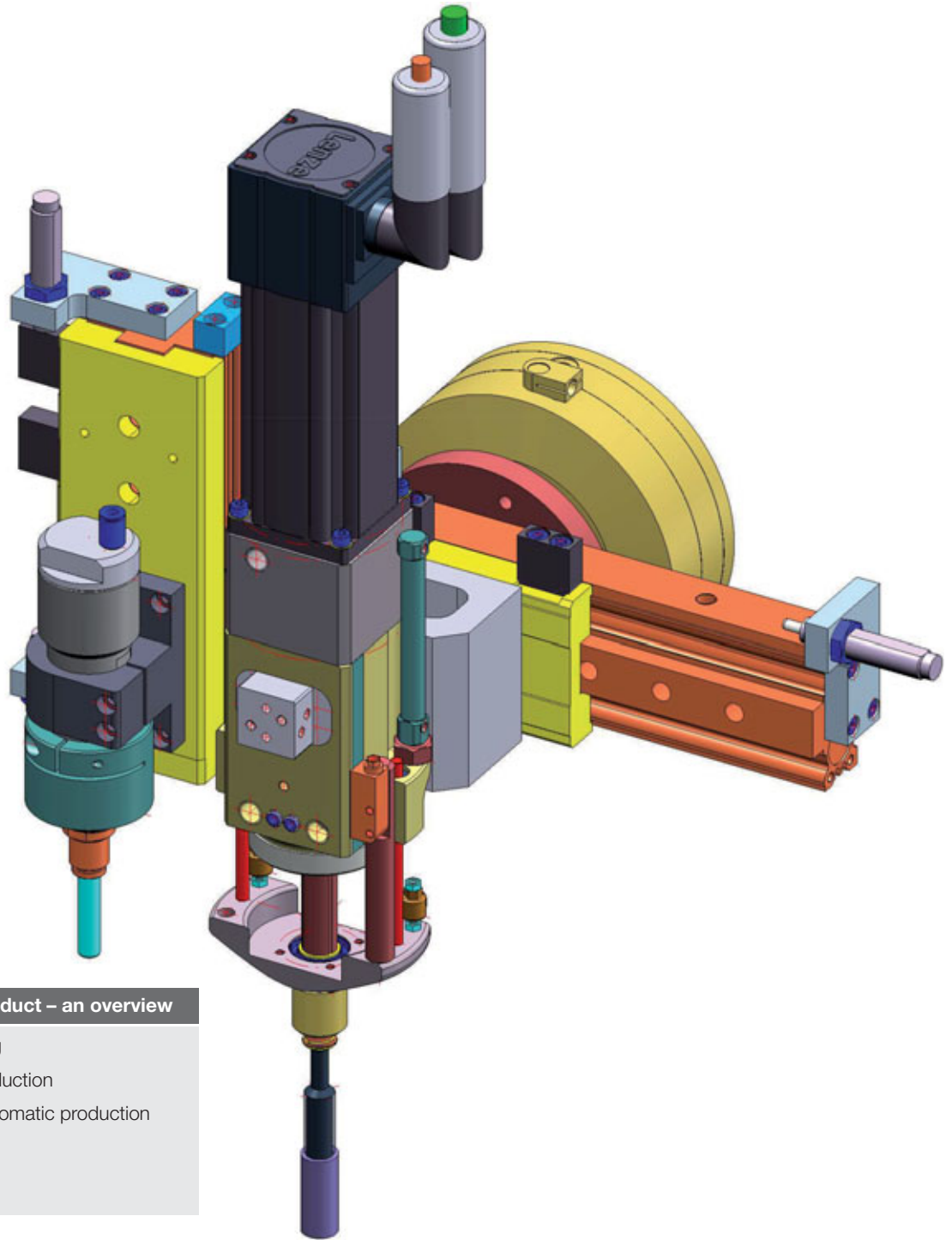
We use up-to-date CAD systems and realise data transfer flexibly as you require.

Screwdriving module for robot connection

You work with robot-assisted production?
You need production flexibility?

The HELICOIL® screwdriving module with standard adapter plate for robot connection is perfect for applications in large-scale production with maximum flexibility.

The component is fixed in a holding fixture. Continuous thread inserts feeding is realised through pick-and-place.



The advantages of the product – an overview

- 100 % process monitoring
- Suited for large-scale production
- Can be integrated into automatic production processes
- Flexible production



Production – fasteners and automation

In-house development and production of innovative systems and components ensure consistent first class quality and an extensive range of solutions for your specific applications.

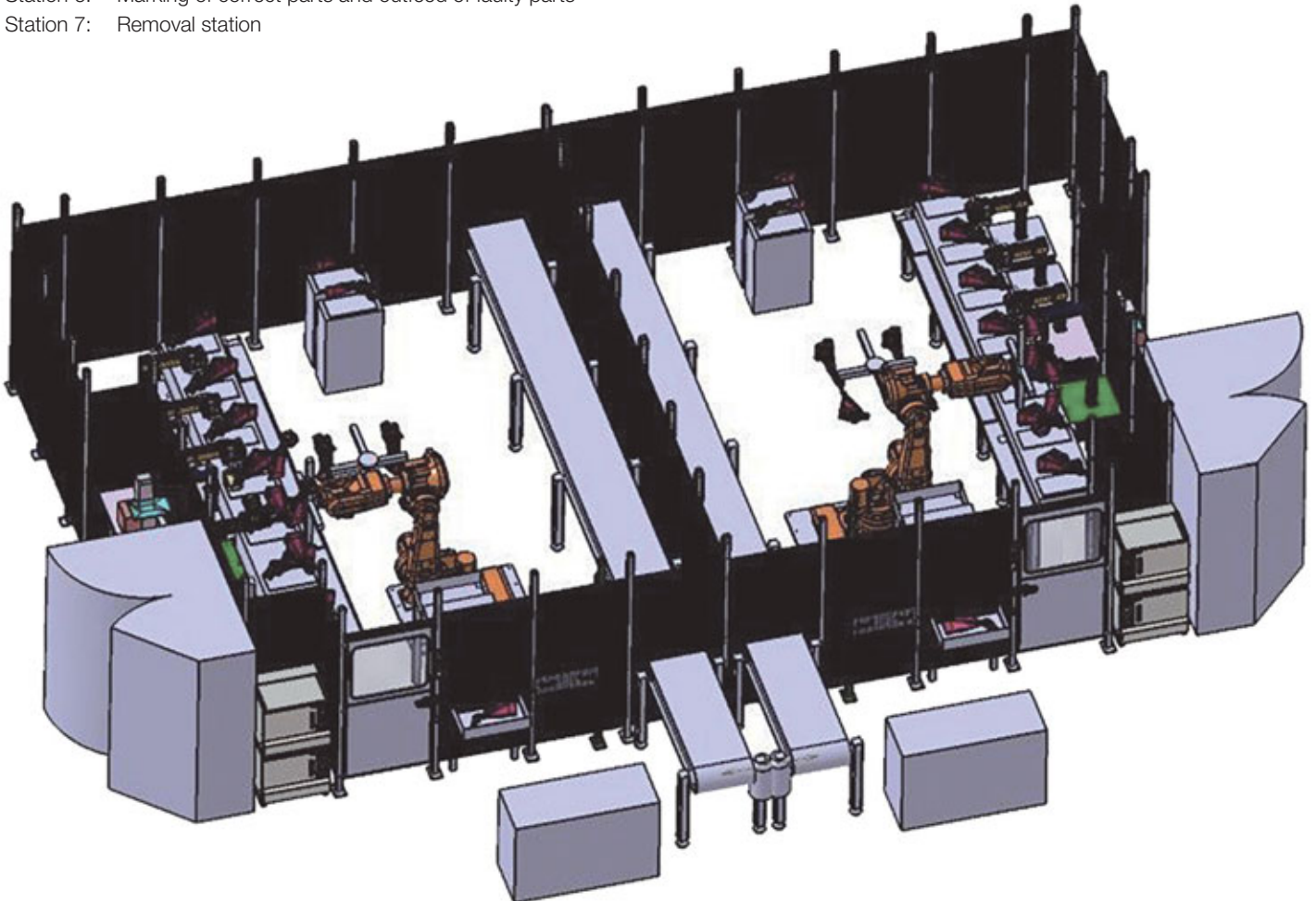
Integration – an example

This is how a stationary screwdriving system can be integrated.

The core of the system is a cycled slide system with 7 positions.

A robot in the centre picks up the raw components and places them on the conveyor belt.

- Station 1: Handover and clamping station
- Station 2: Drilling stations (incl. cleaning)
- Station 3: Thread-forming station (incl. cleaning)
- Station 4: HELICOIL® *plus* installation and tang break
- Station 5: Test station
- Station 6: Marking of correct parts and outfeed of faulty parts
- Station 7: Removal station



QR-Code: HELICOIL® Automation
www.boellhoff.de/helicoil-automation

Sales and service

We are at your service, when you need us.

To support you in protecting the value of your investment and to ensure the economic efficiency of your production is our specialty.

From expert advice to automation design and on-site commissioning to training your employees.

Böllhoff International with companies in:

Argentina
Austria
Brazil
Canada
China
Czech Republic
France
Germany
Hungary
India
Italy
Japan
Korea
Mexico
Poland
Romania
Russia
Slovakia
Spain
Switzerland
Turkey
United Kingdom
USA

Apart from these 23 countries, Böllhoff supports its international customers in other important industrial markets in close partnership with agents and dealers.

Böllhoff Group
Please find your local contact on www.boellhoff.com
or contact us under fasteningtechnology@boellhoff.com

