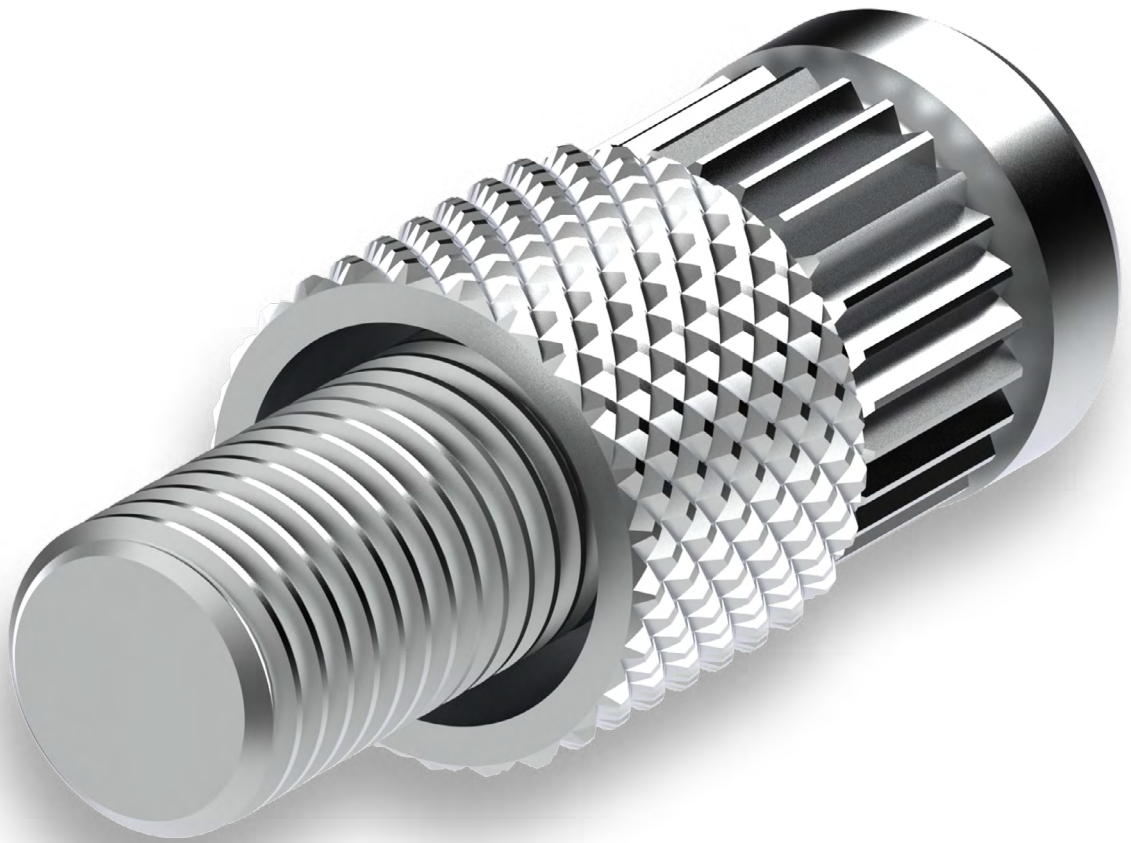


# BÖLLHOFF

## SPREDLOC®

Precision threads in modern lightweight structures —  
efficient expansion anchoring with one-sided accessibility



## SPREDLOC® Product spotlight

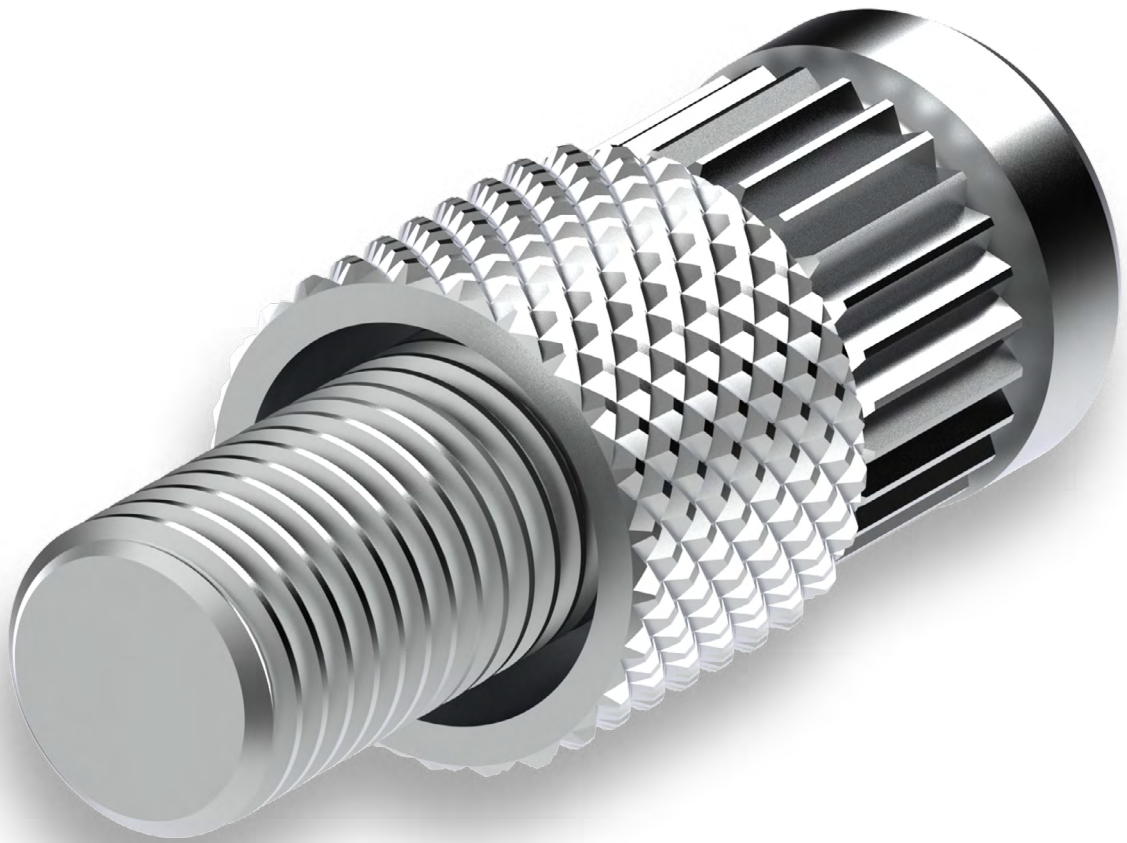
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You have lightweight structures made of aluminium, magnesium, polymers or the like and need stable stud threads according to property class 8.8?

The installation should also be simple and efficient and it should be performed after the manufacture of your component?

### **Your solution: SPREDLOC®**

Precision threads in modern lightweight structures — efficient expansion anchoring with one-sided accessibility.

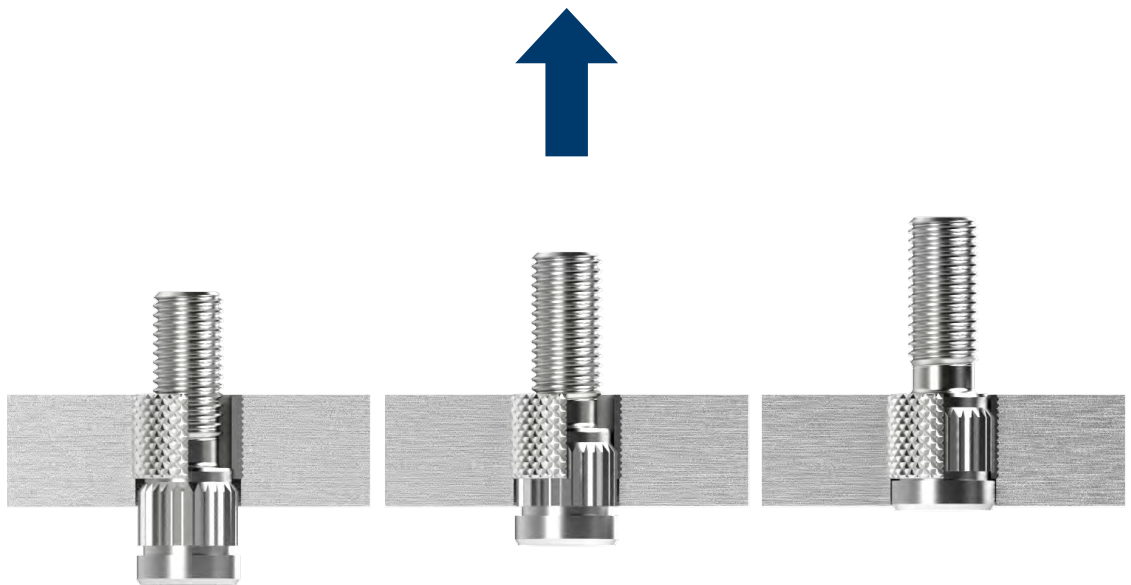


**SPREDLOC®** Product spotlight


SPREDLOC® are threaded studs which Böllhoff offers in combination with the respective processing systems for expansion anchoring. The threaded studs have been especially designed for retrofitting with one-sided accessibility. The result are wear-free, stable threads for your high-quality lightweight structures.

This innovative joining solution is suited for material thicknesses and dome heights from 6 mm.

**Try it yourself.**



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Our InfoPoint provides additional information in the form of further brochures and/or videos at the end of this brochure.	

Under the name of SPREDLOC®, Böllhoff offers threaded studs for expansion anchoring in combination with the respective processing systems. The threaded studs have been especially designed for retrofitting with one-sided accessibility. The result are wear-free, stable threads for your high-quality lightweight structures.

They are suited for the installation in lightweight materials such as polymers, aluminium or magnesium\*.

## Technology

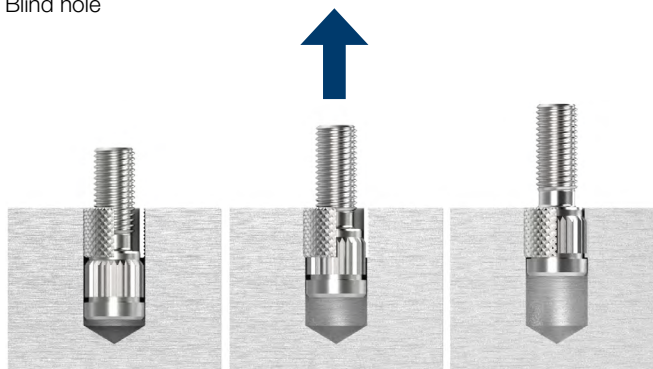
SPREDLOC® is a pre-installed fastener consisting of two elements. It is spun on using the installation tool and inserted into the mounting hole. The hole can be preformed or machined with common drills as a blind or through hole.

Through the axial pulling motion of the installation tool on the stud of the fastener, the sleeve is pulled over the stud shank and at the same time expanded. In the process, the diamond knurl of the anchoring sleeve presses into the wall of the hole on the component. The longitudinal knurling on the stud head prevents the stud from rotating inside the sleeve. A cylindrical shoulder on the threaded stud restricts the possible setting travel and increases the pull-out strength. The SPREDLOC® is now anchored and locked against screwing and pull-out.

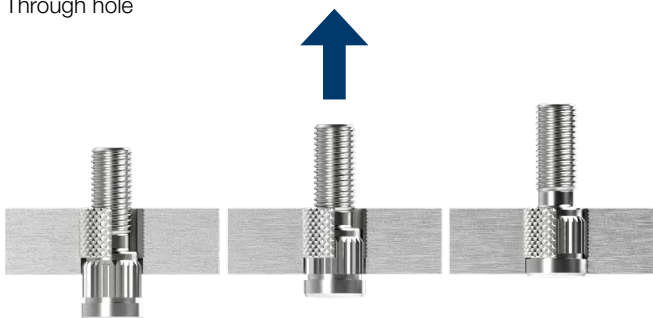
This innovative joining solution is suited for material thicknesses and dome heights from 6 mm.

### Installation principles

#### Blind hole



#### Through hole



## Your advantages — an overview

### Efficient

- Pre-installed, one-piece fastener
- Stable stud threads according to property class 8.8
- Thread creation in formed and drilled tap holes - no holding thread required

### Component cleanliness

- No chips or burrs during installation

### Versatility

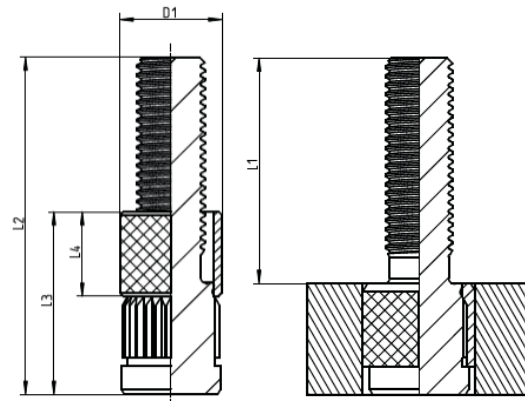
- Suited for a wide range of lightweight materials\*

### Easy processing

- "Blind" setting method (one-sided accessibility)
- Established RIVKLE® installation equipment is available for processing - ranging from hand tools to a fully automatic system.

\*Not suitable for polymer materials susceptible to stress cracking, such as PC or PMMA.

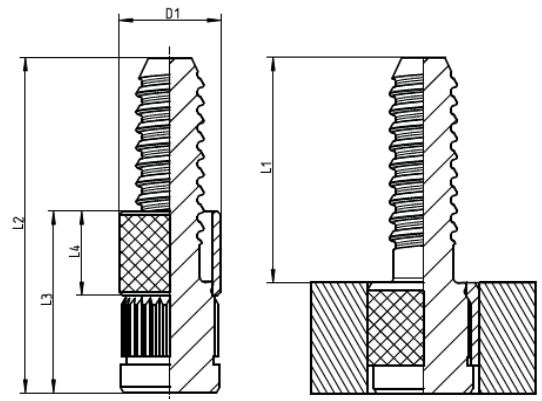
**Metric thread**



Threaded stud

Expansion-anchored

**Coarse thread**



Threaded stud

Expansion-anchored

**Dimensions**

SPREDLOC® Stud	Total length L2 [mm]	Useful thread L1 [mm]	Sleeve diameter D1 [mm]	Sleeve length L4 [mm]	Shank length L3 [mm]
D5 x 15 (coarse thread)	23.9	15.0	8.0	6.5	14.2
D6 x 20 (coarse thread)	29.9	20.0	9.0	7.5	16.2
M6 x 20 (metric thread)	29.9	20.0	9.0	7.5	16.2
M8 x 20 (metric thread)	30.9	20.0	12.0	8.0	17.7

Range of use material thickness/dome height > 6 mm\*

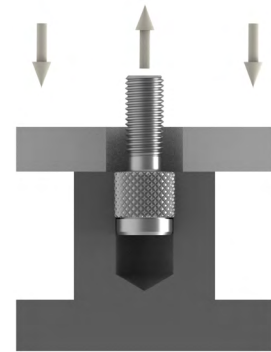
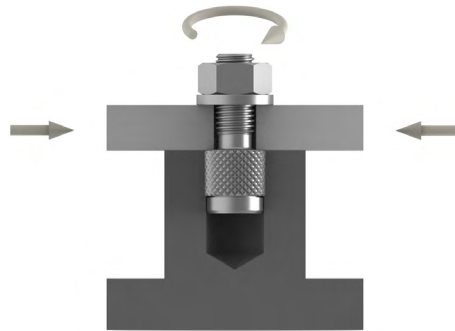
**Bore hole recommendation**

- Polymers (except PC and PMMA)
- For use in aluminium, add + 0.05 mm to the value.

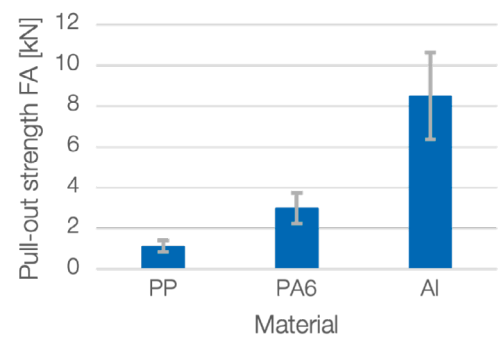
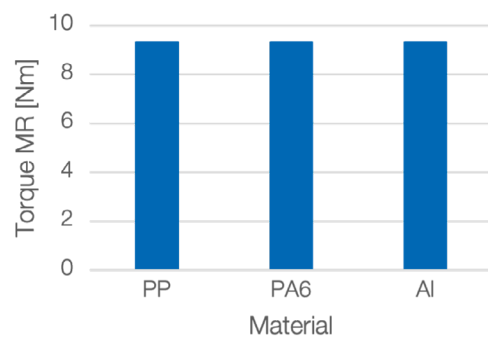
	Inner Ø [mm]		Installation depth [mm]		Outer Ø [mm]		Wall thickness [mm]	
	min.	max.	min.	max.	min.	max.	min.	max.
M5	8.15	8.25	16.00	16.50	13.40	13.50	2.58	2.68
M6	9.15	9.25	18.00	18.50	15.30	15.40	3.03	3.13
M8	12.30	12.40	19.50	20.00	20.00	20.20	3.80	3.95

\*For material thicknesses < 6 mm, our RIVKLE® blind riveting technology can be used.

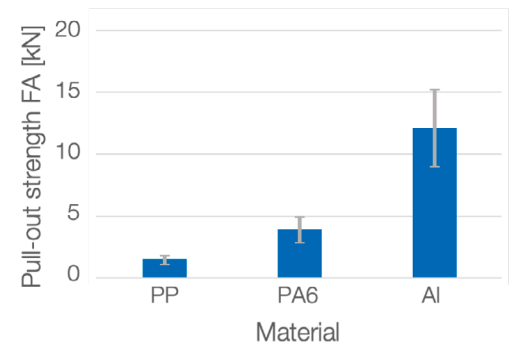
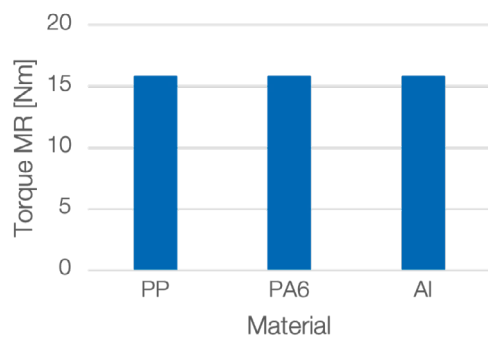
## Torques and pull-out forces



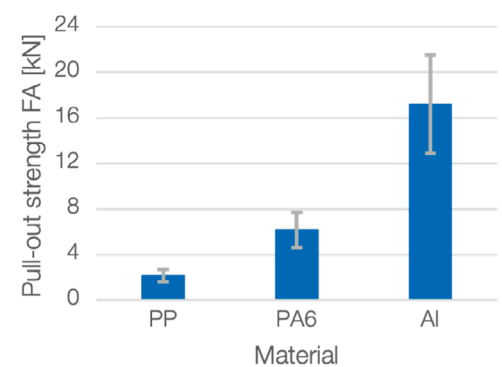
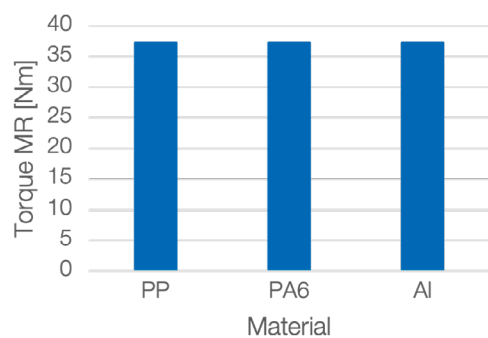
### Sizes: M5 and D5



### Sizes: M6 and D6



### Size: M8



## SPREDLOC® Processing systems

## RIVKLE® – Hydropneumatic and battery-powered setting tools

## RIVKLE® P2007



Maximum stroke	7.0 mm
Maximum setting force	21 kN
Operating air pressure	5.5–7.0 bar
Weight (without exchange unit)	2.2 kg
Sound level	< 70 dB(A)

Item code 2361 560 1000  
Basic tools without interchangeable units.

## RIVKLE® NEO B 107



Maximum stroke	7.5 mm
Maximum setting force	18 kN
Battery	Makita Lithium-ion, 18 V, 1.5 Ah
Weight (without exchange unit)	2.27 kg
Sound level	< 70 dB(A)

Item code 2361 730 1000  
Basic tools without interchangeable units.

## Processing with high process reliability



Our basis tools feature special functions to ensure the proper processing of SPREDLOC®.

## Safe and ecofriendly solution

Reduce the environmental impact through the employment of this joining technology which requires neither exhaust nor cooling.

## Simple to use

The easy-to-employ setting method combined with the simple tool adjustment allow a fast and easy integration of the SPREDLOC® technology into your processes with RIVKLE® processing systems.

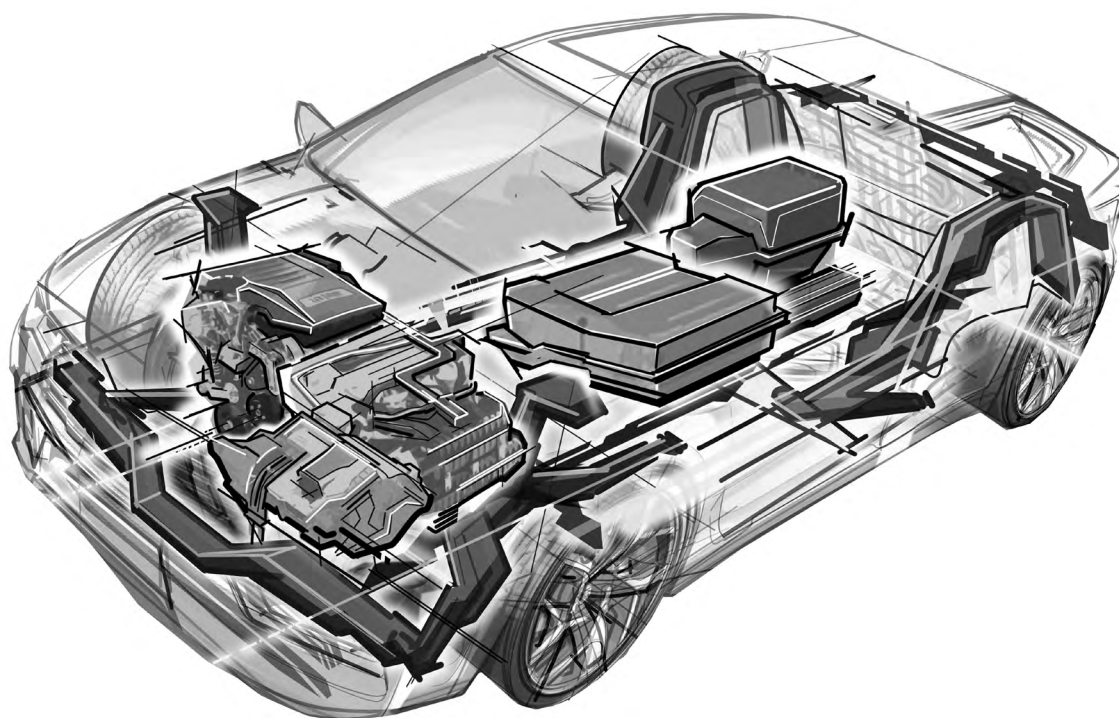
Interchangeable units		D5	D6	M6	M8
Threaded mandrel		376 913 05 401	376 913 06 515	376 113 06 020	376 113 08 020
Nosepiece		376 113 05 030	376 113 06 030	376 113 06 030	376 113 08 030



Access detailed information about our RIVKLE® product portfolio through our InfoPoint — simply click it.

## SPREDLOC® Potential scope of application

The SPREDLOC® technology can be employed for structural components in different industries such as **in the automotive and commercial vehicle industry.**



## Competence leader in 360° Joining Technology

– so what does this mean for you?



As a family-run company, we have been creating successful joints since 1877. Whenever you want to join components or need special development parts, we are by your side. For that, we rely on our enthusiastic team who have product specific know-how, as well as on our 360° Joining Technology which stands for a wide portfolio of joining solutions, processing systems and services.

### Innovation and development

- Modern methods, organisational forms and processes
- Trend analyses
- Research cooperations
- Open innovation
- In-house research and development
- Application engineering and consulting
- Customer-specific development parts
- Manufacture of samples and prototypes
- Value analyses

### Logistics and quality

- Supply chain solutions
- Quality management according to IATF 16949
- Quality management according to EN 9100
- Distinctive quality and environmental awareness
  - Accreditation of the in-house laboratory according to DIN EN ISO/IEC 17025
  - Certification according to DIN EN ISO 14001
- Regular audits through customers

### Procurement and assembly

- Engineering competence thanks to in-house production
- Fifteen modern production facilities worldwide
- Production methods:
  - Injection moulding
  - Turning
  - Cold working
  - Wire winding
  - Mechanical and plant engineering
- Acceleration of your assembly processes
- Wide range of manual and automated assembly solutions

### Sales and services

- Efficient consulting, assistance and service
- Local experienced specialists
- Proximity to customers thanks to global presence
- After-sales service
- Expert seminars, training and workshops
- Online seminars
- Customer in-house fairs
- eShop

 Product catalogues

**RIVKLE®**

Blind rivet nuts and studs  
Catalogue No 2307



[www.boellhoff.com/en/pdf/rivkle](http://www.boellhoff.com/en/pdf/rivkle)

**AMTEC®**

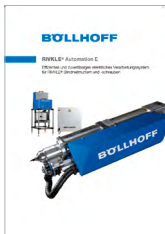
Precision thread inserts for after-mould-  
ing joining in plastic components  
Catalogue No 0200



[www.boellhoff.com/en/pdf/amtec](http://www.boellhoff.com/en/pdf/amtec)

**RIVKLE® Automation E**

Efficient and reliable electrical processing  
system for RIVKLE® blind rivet nuts and  
studs  
Catalogue No 2334



[www.boellhoff.com/en/pdf/rivkle-automation-e](http://www.boellhoff.com/en/pdf/rivkle-automation-e)

**Product Guide**

360° Joining Technology  
Catalogue No 1190



[www.boellhoff.com/en/pdf/product-guide](http://www.boellhoff.com/en/pdf/product-guide)

 Videos

**RIVKLE®**

Blind rivet nuts installation –  
setting process



[www.boellhoff.com/video/rivkle-riveting-process](http://www.boellhoff.com/video/rivkle-riveting-process)

**QUICKSERT® Hex**

Efficient thread inserts for self-tapping  
insertion into polymers



[www.boellhoff.com/video/quicksert-hex](http://www.boellhoff.com/video/quicksert-hex)

**RIVKLE® Automation E**

Efficient and reliable electrical processing  
system for RIVKLE® blind rivet nuts and  
studs



[www.boellhoff.com/video/rivkle-automation-e](http://www.boellhoff.com/video/rivkle-automation-e)

**SPREDLOC®**

Precision threads in modern lightweight  
structures — efficient expansion anchoring  
with one-sided accessibility



[www.boellhoff.com/video/spredloc](http://www.boellhoff.com/video/spredloc)



Passion for successful joining.

**Böllhoff Group**

Competence leader in 360° Joining Technology

Find your local partner at [www.boellhoff.com](http://www.boellhoff.com) or contact us at [fat@boellhoff.com](mailto:fat@boellhoff.com)