Bobtail®
Lockbolt System – Pintail-less Design
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BobTail® lockbolts

Faster installation, easier tools, more time-savings

The BobTail® lockbolt system offers the highest levels of safety for all permanent fastener applications. BobTail® is the next evolution in Huck pin and collar technology – with an array of outstanding features going for it: there are no breakoff pintails, no mandrels, no corrosion points – in other words, no waste. Compliance with environmental and noise emissions is no issue whatsoever, as the typical bang otherwise heard on installation has been eliminated. The availability of significantly lighter tools makes for a more ergonomic process and more efficient performance. Unlike conventional fastener systems, these pins are especially ideal for permanently marrying different materials, such as steel, stainless steel, aluminium alloys, or plastics. This ability to perform with mixed structures benefits lightweight construction and reduces the mass weight of the overall design.

BobTail® is a grade 10.9 bolt that stands out for its high fatigue and clamp strength with a high dynamic load. The readily identifiable economic and ecological benefits make the BobTail® lockbolt system a highly attractive product for fulfilling the demands that trade and industry place on modern fasteners – especially the commercial vehicle and automotive sectors.

Tools to match the BobTail®

Special hydraulic tools are available for installing the BobTail® lockbolt system. These comprise a nose assembly and puller, along with a hydraulic power unit. The tools have also been designed for lockbolt pre-assembly. The bolt is held in place by a fixing attached to the collar. This ensures that every lockbolt is installed to the same high level. Installing the bolts is exceptionally easy and barely takes 2 seconds per fastener. The strength values for the fastener are generated automatically during the installation sequence. No tightening or retorque is needed. Unlike conventional nuts and bolts, lockbolts will not come loose even when subjected to heavy vibrations. A simple visual inspection is all that is needed to determine if the fastener has been correctly installed. The tools have been engineered to enable even untrained operators to constantly achieve the same high levels of quality after some brief training.
Benefits at a glance

- No pintail, no pin break
- Lower material consumption
- Low installation noise, no banging noise
- Increased corrosion resistance
- Pre-assembly possible
- Quick and easy installation
- No installation tool recoil
- No discharged pintails
- No corrosion-prone breakneck grooves
- High-strength, grade 10.9 fasteners
- High-quality, corrosion-resistant coating systems possible
- Installation indicator on collar for visual installation inspection

Installation steps

1. Pre-assembly: The pin is inserted into the prepared hole, and the collar is rotated onto the pin.
2. The nose assembly is applied to the pin grooves: The tool is applied to the annular pull grooves and triggered. A puller in the nose assembly draws the pin into the tool. The anvil presses the collar against the pin and tension loads the joint.
3. As the nose assembly continues to pull, the anvil swages the collar. The material flows into the lock grooves, with part of it also being pressed towards the component. This significantly increases the clamp force between the two components.
4. The anvil retracts and the jaws are released. The swaging of the collar is complete. The tool ejects the fastener. The installation sequence is complete.

Please note:
The markings (swage indicators) on the flange are used to visually check that the fastener has been properly installed. The installation is correct if the swage indicators are indented. A ring gauge can also be used to check if the collar has been swaged.
Bobtail® lockbolt systems - pintail-less

**Truss**

**Material**

Carbon steel 10.9, black

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Other designs available on request.
Bobtail® lockbolt systems – pintail-less

Flanged collar

Material

Carbon steel 10.9, black

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Other designs available on request.
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All technical specifications contained in this brochure are approximate and no guarantee is given as to their accuracy. Designs are subject to change.
About us
Titgemeyer Group is a leading fastening technology and transport technology group of companies with 15 sites across Europe. Steeped in tradition, the company develops, manufactures and sells more than 30,000 fastening elements, tools and vehicle components – in series and to customer specification.

Headquarters
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