

Customized Lifting Beams

Product information



Customized lifting beams are specially manufactured lifting devices, ideal in situations with limited lifting height where compact design and stability are crucial. They can be equipped with fixed or adjustable lifting points and customized with hooks, chain slings, wire rope slings or textile lifting gear to meet the customer's specific lifting requirements. Thanks to the possibility of tailor-made solutions, the customer receives an efficient and safe lifting tool optimized for their unique lifting challenges.

Design

We design, engineer, calculate and manufacture products that comply with the Machinery Directive 2006/42/EC, supported by the standard SS-EN 131 55. Design verification can be carried out through load testing, FEM analysis (Finite Element Method) or extended structural calculations and simulations when required.

We also work according to the following standards and requirements when requested:

DNV 2.22 / DNV 2.7-1 / DNV 2.7-3 / NORSOK R-002 / ASME B30:20 / KTA 3902 / AFS 2023:4 / AFS 2023:11 Chapter 4, among others.

Manufacturing

The lifting beams are produced by experienced personnel, and all welding is carried out by certified welders according to SS-EN-ISO 9606-1:2013. Welding is performed in accordance with EN-ISO 3834, with the specific part selected based on customer requirements.

Testing

Load testing: 2 × maximum load according to SS-EN 131 55.

Accessories

Accessories such as shackles, hooks, wire rope slings, chain slings or synthetic slings are used depending on the application and customer preference. For detailed information about lifting accessories, please refer to other sections of our product range.

Often, customers may also require stands, storage or transport solutions, which can be designed and manufactured on request.

In addition to accessories, all lifting equipment is clearly labeled with vinyl marking, with the option of more durable marking through stamping directly into the material.

- **Marking:** According to the Machinery Directive 2006/42/EC and specific customer requirements.
- **Surface treatment:** Standard yellow protective coating RAL 1003; alternate surface treatments can be quoted.

Additional Safety Control

Beyond the standard lifting beam configuration, we also offer independent third-party certification of technical files, presence during testing and welding inspections using NDT (Non-Destructive Testing). Magnetic particle inspection is the most common method for detecting cracks and other defects. This method generates a magnetic field within the material while iron powder is applied to the surface. If cracks or surface defects are present, the powder accumulates in the flaw and makes it visible.

FAQ – Customized Lifting Beams

- What does it mean that lifting beams are customized?

Customized lifting beams are engineered and manufactured based on the customer's specific needs, load type and lifting situation.

Because lifting situations and load configurations vary, not all designs can be standardized. Therefore, unique solutions, spreader beams, lifting triangles or combinations are developed on request.

- Which standards do you follow when designing customized lifting beams?

We design and verify our custom lifting beams according to the Machinery Directive 2006/42/EC and the SS-EN 131 55 standard. When needed, we also work according to a range of industry-specific standards such as DNV 2.22, DNV 2.7-1, NORSOK R-002, ASME B30:20, KTA 3902, AFS 2023:4 and AFS 2023:11.

- How do you ensure quality and strength of custom lifting beams?

Design verification is carried out through load testing, FEM analysis or advanced strength calculations. During testing, the lifting beams are tested with $2 \times$ maximum load according to SS-EN 131 55. Manufacturing is performed by certified welders in accordance with SS-EN-ISO 9606-1:2013, and welding follows EN-ISO 3834.

- Which accessories and add-ons can be included in a custom lifting beam solution?

Custom lifting beams can be delivered with accessories such as shackles, hooks, wire ropes, chain slings and synthetic lifting gear. We also offer stands, storage and transport solutions upon request. The beams are labeled according to the Machinery Directive, either with vinyl labels or more durable stamped markings.

- Is it possible to get additional safety control for customized lifting beams?

Yes. For customers requiring increased safety verification, we offer independent third-party certification, attendance during testing and extensive NDT inspections. Magnetic particle testing is commonly used to detect cracks and surface defects in the material.

Read more about our [Customized special products](#)