SpringTech
H2 Tank Fastening Systems
286

Reliable Connections

Recommended for the secure fastening of hydrogen tanks

Benefits

- Reliable and safe fastening of cylindrical high-pressure tanks that expand and contract during operation
- Compliant with H2 safety regulation
- Designed for minimal space usage

Minimum space consumption: supports maximum utilization of available space
SpringTech design: to compensate tank expansion and contraction
Torque controlled assembly: monitored assembly with repeatable holding parameters
Engineered solution: to suit customer requirements
Assembly-friendly: ergonomically optimized designs with pre-shaped layouts

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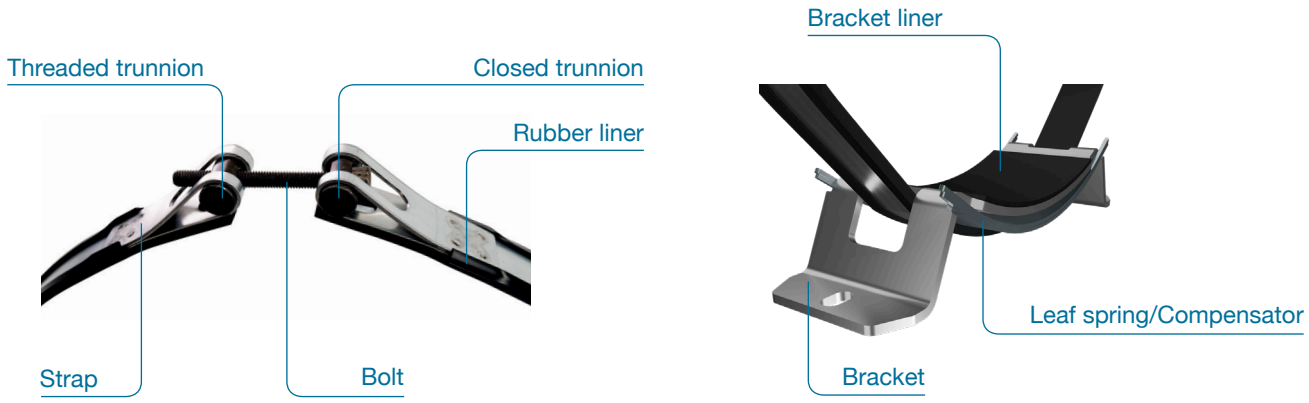
FEATURES



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TECHNICAL DATA OVERVIEW

Materials

Component name	Material	Standard/Grade
Strap	Coated steel	EN 10346-1.0935
Bolt	Coated steel	Class 8.8
Trunnions	Coated steel	SAE1215
In-liner	Nitrile rubber (NBR)	70° Shore A
Leaf spring	Stainless steel	EN 10088-1.4310
Bracket	Stainless steel	EN 10346-1.4301

Series

Size range (mm)	Width of strap (mm)	Width of strap including liner (mm)	Width of bracket (mm)
340-450	30	35	56
other sizes on request			

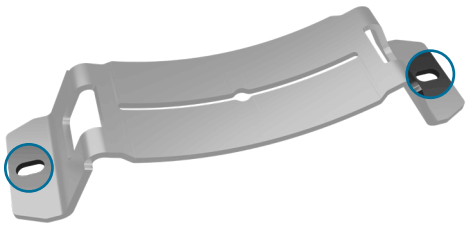
PRODUCT DESCRIPTION

Oetiker's SpringTech H2 Tank Fastening Systems are a unique fastening solution for secure cylindrical high-pressure hydrogen tanks that expand and contract during operation.

H2 safety regulation compliance
To ensure compliance with H2 safety regulations, such as ECE R134, push-out tests have been performed, verifying post-crash fuel system integrity.

Durability test
The durability of the features that compensate for tank expansion and contraction has been verified using a specialized Oetiker Fatigue Test Device.

Positioning fingers securing position of leaf spring during transportation (before assembly). This makes the connection ready for immediate use.



Oval holes to allow the connection to be adjusted during assembly to the frame.

The design of the bracket (slot) and bracket liner (rib) avoids glue or external lips to attach the in-liner.

ASSEMBLY

The H2 Tank Fastening System is delivered as one set ready for installation. Any torque-controlled wrench can be used for the final assembly. The recommended torque and speed values to ensure the most efficient and safe closure are provided by Oetiker and will be outlined on the customer drawing.