

Seebeck® Towing Equipment



TSU GmbH

Stahl-, Maschinen- und Anlagenbau

Seebeck® Towing Equipment

Fundamental Advantages and Function

The outstanding advantage of the Seebeck® Towing Equipment is the high quality and safety. The safety factor of 5 against breaking together with the easy operation of the tripping mechanisms provides a sound and safe system.

A wide range of hook sizes up to 75 metric tons are offered. Larger hooks are available on specified demand.

There are two different release mechanisms for the towing hooks:

- mechanical release; which can also be combined with a release device operated by an electro-pneumatic push button and
- hydraulic release.

The manual release force at safe working load amounts to less than 150 N. Therefore every hook is load tested with twice the safe working load before delivery. A works test certificate is kept for each hook.

Numerous alternatives of connections for mechanical and hydraulic-type towing hooks and towing gears ensure a unique towing system.

The Seebeck® Towing Equipment corresponds to the current national and international safety regulations and obtains a Certificate of Conformity (CE).

In addition: We offer reconditioning and repair for a wide range of quick release towing hooks as well as spare parts for all types of Seebeck® Towing Hooks.

Since 2000 the TSU GmbH continues the longstanding production of the Seebeck® Towing Equipment. The Seebeck® Towing Hooks have proven their outstanding performance for decades on tugs all over the world. These gears for harbour vessels are in use on more than 2,000 towboats today.

TSU GmbH is a proof tested welding company according to the German Industrial Standard DIN 18800-7, Klasse E and DIN 15018 (Großer Eignungsnachweis) and is certified according to DIN EN ISO 9001:2008. Further examples of our quality seals are the Germanischer Lloyd Certificate about Approval For Welding and the GOST-R Certificate of Conformity.

You may find further information on our company and the complete catalogue of Seebeck® Mooring Equipment as PDF-format on our homepage

www.tsu-gmbh.de

Should you require any further information please do not hesitate to contact us.

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Mechanically Operated Quick Release Towing Hook

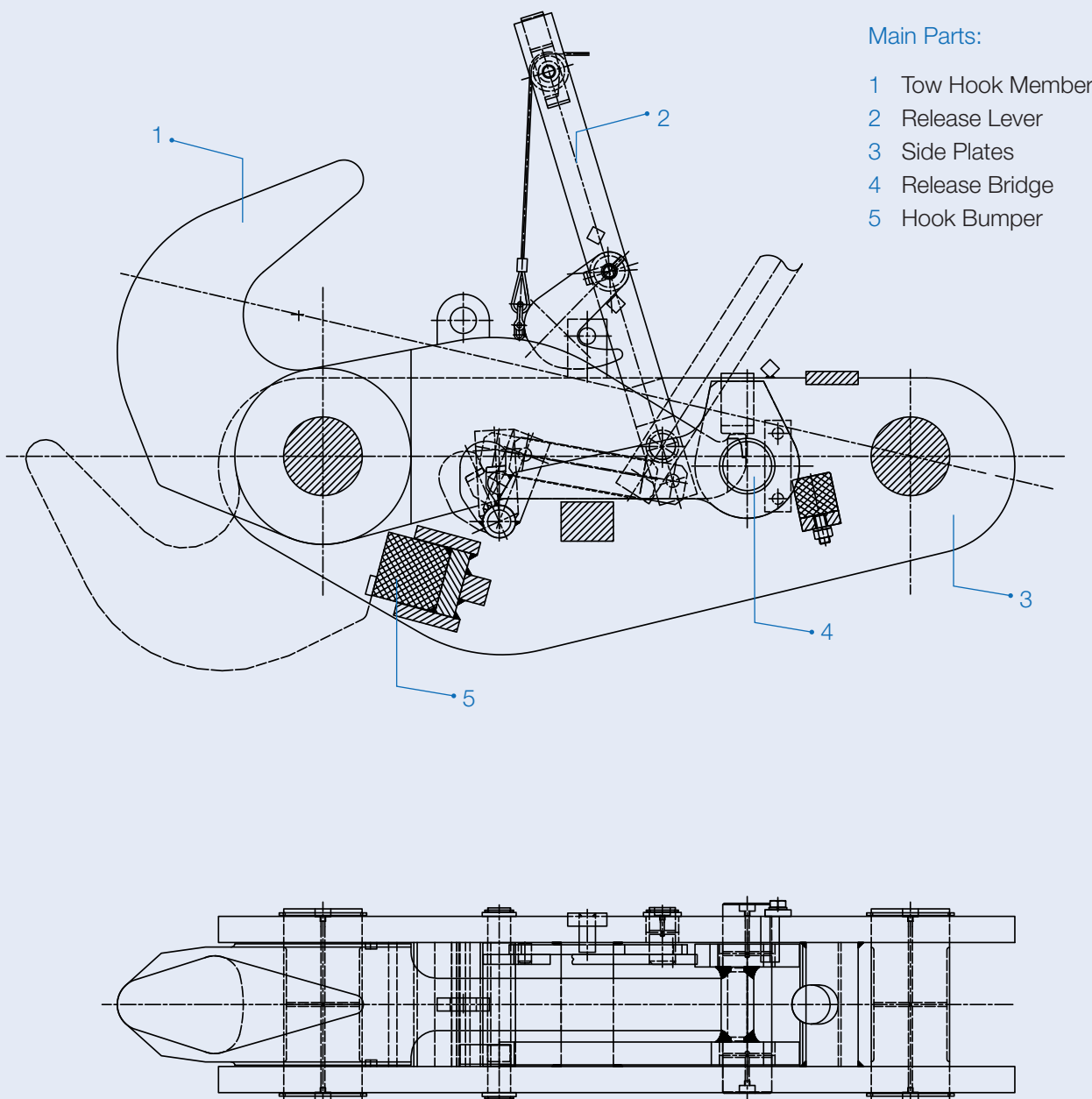
Type: HM

A special reason for using a Seebeck® Quick Release Towing Hook is the high mechanical advantage of the tripping mechanism. Even while under twice the Safe Working Load (SWL) the effort required to release the Seebeck® Towing Hook manually by means of a tripping wire is less than 15 kg at the hook.

At any angle, in every critical situation and regardless of the load acting on the hook (full load or the least possible load) there is no difficulty in disengaging the tripping gear which is simple and effective, reliable and safe. However there is no element of risk.

When the quick release device is operated the towing hook will trip immediately and can never get stuck. Due to the well-balanced towing hook member it is easy to put the hook back into the operating position. This can be done by one man.

When released under full load, the hook itself or any other part of the towing equipment will not get damaged as the impact of the tripped hook is cushioned by a special bumper.



Hydraulically Operated Quick Release Towing Hook

Type: HH

The Seebeck® Quick Release Hydraulic Type Towing Hook incorporates the following extra features:

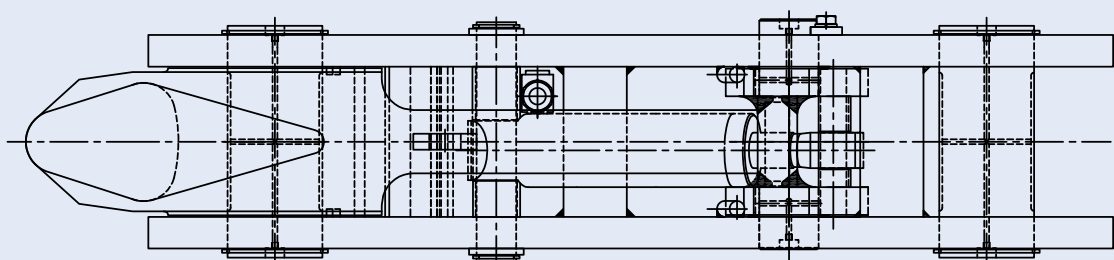
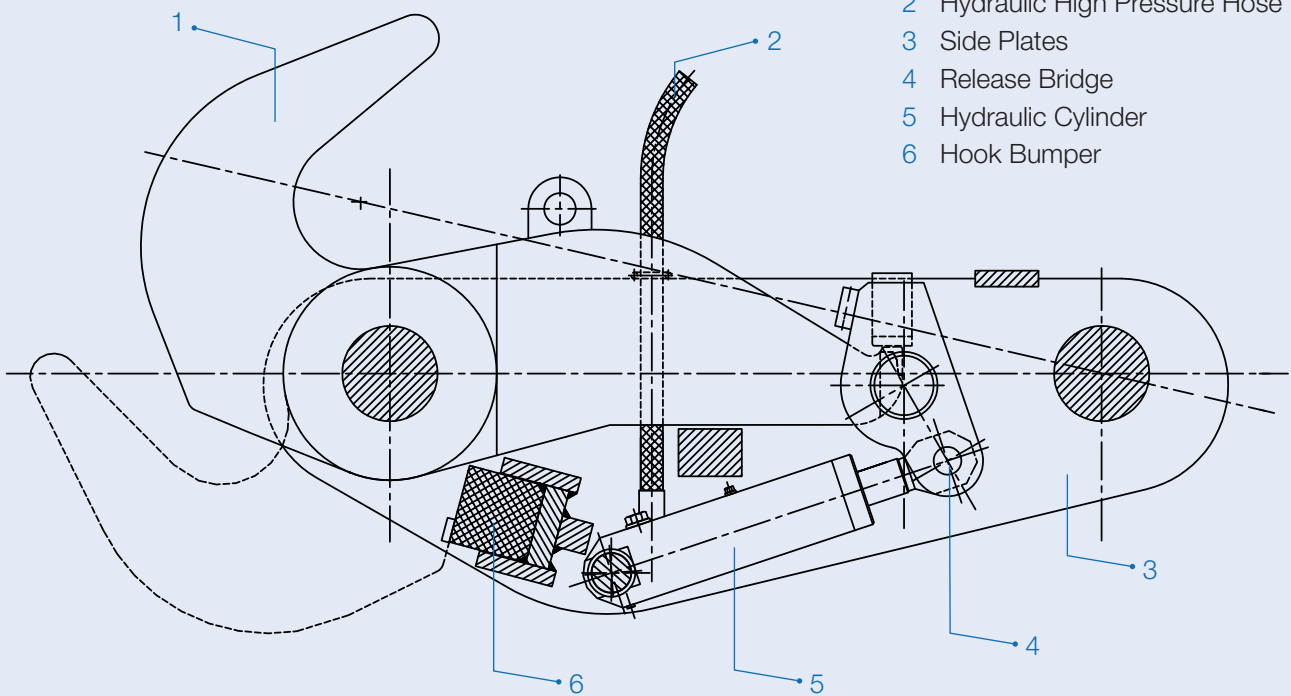
- The Hook trips immediately by the remote operation of an integrated maintenance-free hydraulic cylinder.
- This unique instantaneous tripping arrangement also ensures a minimum of wear to the rope.
- Conventional hydraulic towing hooks are usually kept in the working position by a hydraulic piston pressing against the hook member.
- The towing hook is tripped by opening a valve which

permits the hook to push back this piston and force the hydraulic oil onto the reservoir tank.

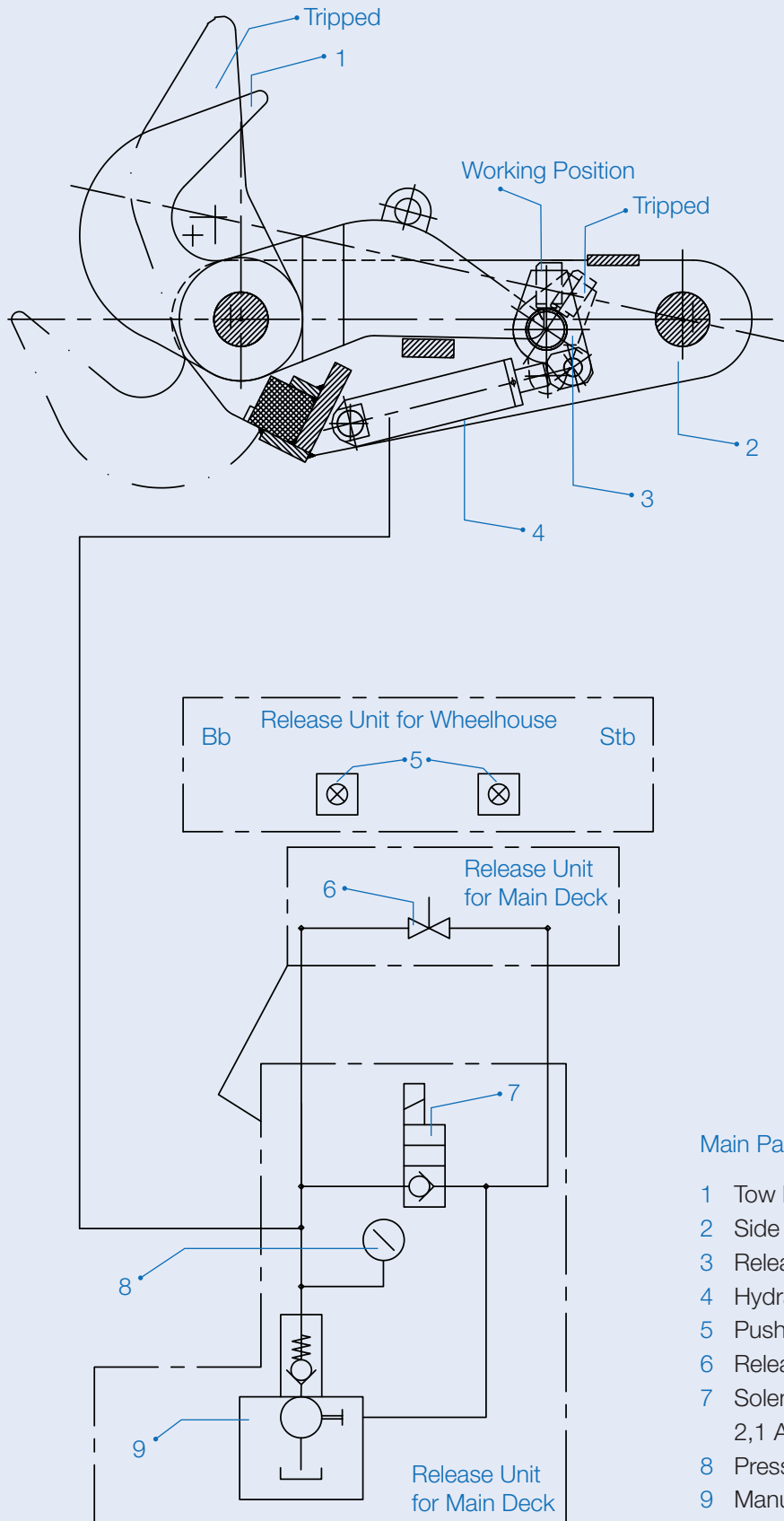
- Depending on the load, this operation is subject to a noticeable time lag and also subjects the tow rope to severe wear and rear when chafing over the hook's surface.

Main Parts:

- 1 Tow Hook Member
- 2 Hydraulic High Pressure Hose
- 3 Side Plates
- 4 Release Bridge
- 5 Hydraulic Cylinder
- 6 Hook Bumper



Manual/Electro-hydraulic Release Devices



Main Parts:

- 1 Tow Hook Member
- 2 Side Plate
- 3 Release Bridge
- 4 Hydraulic Cylinder
- 5 Push Button (optional)
- 6 Release Unit
- 7 Solenoid Valve (24 V; DC; 2,1 A; 50 W (optional))
- 8 Pressure Gauge
- 9 Manual Pump

Load Monitoring System (LMS)

Each Seebeck Towing Hook can be equipped with a Load Monitoring System (LMS) to measure and record loads applied to the towing gear.

Contact

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