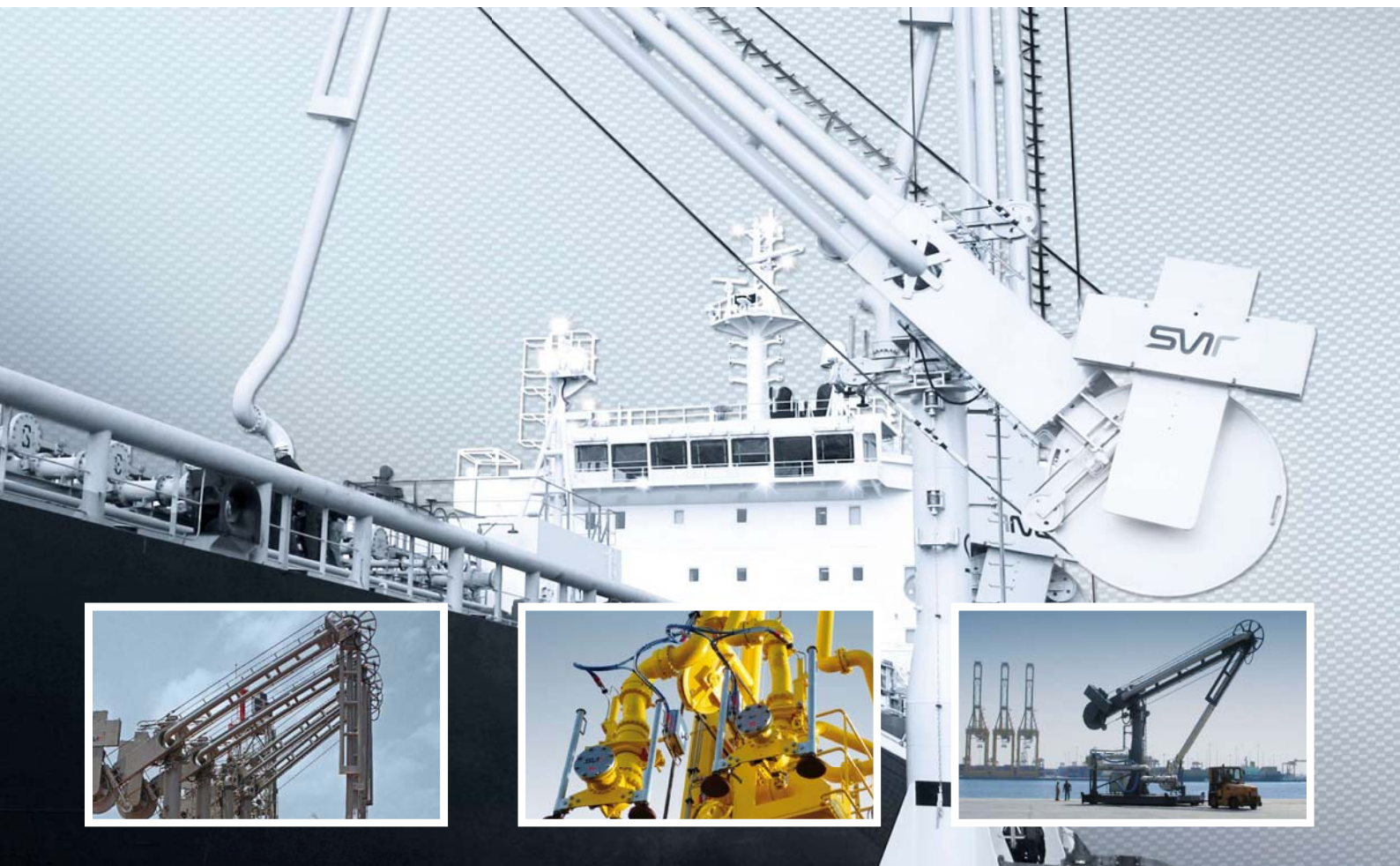


SVR

Transfer complete



ATLANTIC MARINE LOADING ARM



Designed and Built for a Long Operating Reach

The SVT ATLANTIC Marine Loading Arm is specifically designed for long operating reach applications requiring the transfer of critical substances.

With nominal bores from 4" to 20" and temperatures ranging from -196°C to $+250^{\circ}\text{C}$, various hazardous substances can be transported. Different materials of construction and seal selections are offered, guaranteeing that the product being transferred, be it toxic, abrasive, or explosive, can be safely handled. The scope of products transferred can be increased with the option of lining and/or heating the loading arm.

Of course the SVT ATLANTIC Marine Loading Arm is also suited for high-pressure services.



Double Counterweight System

The SVT ATLANTIC Marine Loading Arm is equipped with a double counterweight system that allows independent balancing of the inboard and outboard arms through separate counterweights.

The balancing of the outboard arms is achieved by means of force and acts as a very effective shock absorber/vibration dampener. The cables' absorbing attributes result in extremely smooth and steady arm movements. The cables are impregnated with a special lifetime coating and carry a safety factor of five.



Separate Supporting Structure

The separate support construction and large mechanical bearings carry the external forces and momentums, effectively damping these loads.

The swivel joints, the integral parts of any loading arm, are not exposed to external forces and momentums.

The transfer pipe has a constant diameter so that optimal flow and minimal pressure loss are achieved. Since all product lines have the same diameter, identical swivel joints can be used, thereby effectively reducing spare parts storage.



ROTAFLEX Swivel Joints

The SVT ROTAFLEX Swivel Joints used have hardened ball raceways; therefore separate raceway rings are not needed, avoiding associated problems.

The joints have a double dynamic sealing system with the packing faces made of stainless steel for maximal reliability. Different sealing systems and different materials (e.g. FPM, PTFE, CSM, EPDM, PE) allow for the perfect adjustment to various substances and temperatures.



- Suitable for temperatures ranging from -196°C to $+250^{\circ}\text{C}$; suitable for all substances
- Fully balanced in all positions by means of separate counterweights for inboard and outboard arms
- Electrohydraulically operated, optionally from the ship by remote pendant or radio control
- Fulfills the highest safety standards with the SVT Emergency Release Coupler (ERC) and the SVT Quick Connect/Disconnect Couplers (QCDC)
- Optimized flow with minimal pressure loss
- Reduced spare part storage and costs through the use of identical SVT ROTAFLEX Swivel Joints
- Constructed, manufactured, assembled, and tested in Germany under the strict supervision of our quality control management
- Test run on SVT premises with the corresponding hydraulic power unit and control system
- Saving time and money through fast installation and an initial operation of the completely preassembled loader on the jetty
- Worldwide guidance and assistance for installation and initial operation by highly experienced SVT engineers
- High reliability and low maintenance requirements – a regular overhaul is not required
- Construction according to the OCIMF and other international standards



All-Purpose Equipment

The SVT ATLANTIC Marine Loading Arm can be equipped with various additional accessories:

A second product line making the loader into a real tandem loading arm or mounted vapor return lines can be customized. For special purposes, vacuum breakers, nitrogen purge and residue draining systems, as well as process monitoring sensors and valves are also available.

SVT Emergency Release Couplers are integral components of most loading systems. Through self-monitoring of the actual loading position (Pre-Alarm, ESD 1, ESD 2), looming emergency situations due to a tanker drifting off are quickly detected. In this case, the coupling will automatically be released.

SVT Quick Connect/Disconnect Couplers rapidly and safely connect the arm with the corresponding tanker flange.

A pendant cable or a radio remote control supplemental to the operating panel allows the movement of the loading arm from the ship. The optional 3-D Constant Position Monitoring System displays the position of one or several loading arms in real time.



Easy Routine Maintenance

An expensive setup of scaffold or a crane basket is not needed. In most cases, the maintenance ladders and platforms will do.

In stand-by, all hydraulic drive cylinders are in an absolutely horizontal position so that they can be vented in the simplest manner.

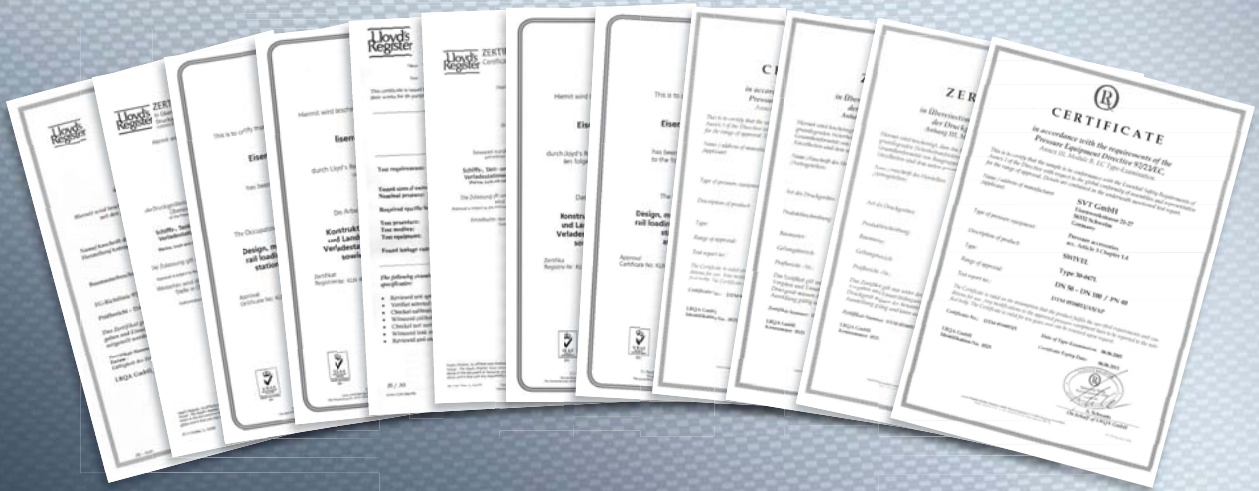
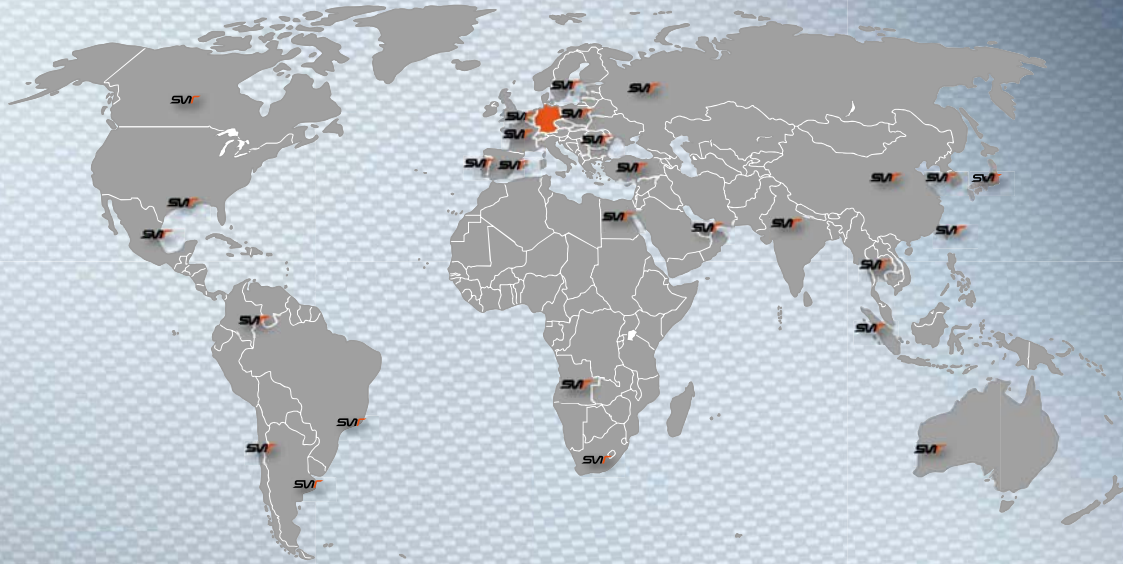
All SVT ROTAFLEX Swivel Joints are flanged on both sides – ideal for easy inspection and maintenance. Because of the long-lasting lubrication, ROTAFLEX Swivel Joints practically don't need to be maintained; they run smoothly throughout their entire product lives, even when continuously moving.

The SVT ATLANTIC Marine Loading Arm does not need regular overhauls – an important aspect in the total cost of ownership.



Fast Installation

The SVT ATLANTIC Marine Loading Arm is delivered and installed as a whole, i.e. with its complete hydraulics and electronics. The installation on the jetty can be performed on land or from the water. This normally takes one or two days.



As a member of the GESCO group, SVT GmbH is one of the leading global manufacturers of loading equipment for liquid and gaseous products. SVT has more than 40 years of experience in the design, construction, and production of loading arms. Worldwide installations of loading systems also add to SVT's reputation as a reliable and innovative partner for its clients.

Still today, SVT manufactures and assembles all of its key components exclusively in Germany. Swivel Joints, Emergency Release Couplers, Control Systems, Quick Connect/Disconnect Couplers, among others, are developed, produced, and tested by SVT. This is German engineering at its best. More than 180 loading arms sold to a single customer is convincing proof of our strong belief in quality.

Regional salespeople as well as the right international contact ensure excellent service and extremely rapid response times. A team of highly qualified technicians and engineers set up, test and maintain all of SVT's installations.

Furthermore, SVT is the only company worldwide that is in possession of the technical drawings and know-how of the former Wiese GmbH and Connex GmbH.

