

**CONNEX SVT**  
**Design and Equipment Specification**  
**SVT Marine Loading Arms**

**Type of operation :**

Manual Hydraulic

Power Supply \_\_\_\_\_ Hz \_\_\_\_\_ Phase \_\_\_\_\_

Are there any special codes required?      Yes No

If "yes", please specify:

Climatic conditions:

- ambient temperature: min \_\_\_\_\_ max. \_\_\_\_\_
- Design wind velocity \_\_\_\_\_ m/s
- Operating wind speed \_\_\_\_\_ m/s
- Maneuvering wind speed \_\_\_\_\_ m/s

Location of installation:

**Required Accessories**

Vapor Return Line (Piggyback): Size: _____	Yes No
Maintenance Ladders	Yes No
Insulating Flanges	Yes No
Audio-Visual Alarm Overtravel System	Yes No
Emergency Release Coupler (ERC)	Yes No
Shut-Off Valve at Triple Swivel Assembly: Type Operation: Manual Hydraulic	Yes No
Manual Quick Connect Disconnect Coupler (QCDC)	Yes No
Vacuum Breaker	Yes No
Nitrogen Purge System	Yes No
Heating System: If Yes, Heating Medium: _____	Yes No
Other: _____ _____	

Vapor Return Line: Normally hard-piped with swivel joints for articulation. Final connection from the end of the arm at the triple swivel to the vessel manifold is via a lightweight hose.

Maintenance Ladders: Safety ladders utilizing an umbilical personnel safety harness that prevents falls. A maintenance platform may also be included at the apex of the arm if required.

Insulation Flanges: SVT utilizes an insulation flange that is integral to the middle horizontal swivel joint in the triple swivel assembly to electrically isolate the ship from the loading arm as required OCIMF standards.

Audio-Visual Alarm Overtravel System: This system uses proximity switches to monitor the maximum reach angles of the arm movements and provide the appropriate alarms; normally a single stage alarm.

Emergency Release Coupler (ERC): This safety system combines a two stage audio-visual alarm that also automatically disconnects the loading arm from the vessel at the triple swivel assembly. SVT uses two ball valves & collar release. Manual disconnection from the control console is also possible. Output signals can be given at the first alarm stage to initiate valve closures and pump shutdowns.

Shut Off Valve at Triple Assembly: Care must be taken when specifying a valve on manual arms as loading arms are normally balanced only in the empty condition. Arms must be completely drained prior to disconnection.

Manual Quick Connect Disconnect Coupler (QCDC): Used in lieu of a flange for the connection to the

vessel to save time, the SVT QCDC incorporates a ratchet cam locking design that cannot back off or loosen.

**Vacuum Breaker:** A ball valve/check valve combination is placed at the Apex of the loading arm to break the vacuum and allow drainage of the arm. Remote control of the vacuum is at ship end of arm.

**Nitrogen Purge System:** In order to eliminate the use of hoses, purging systems are now located at the riser. The gas rises to the apex and provides a gas cushion which purges both the inner & outer arms.

Enclosure to Specification		Tanker Size in DWT: Min _____ Max _____
	(A) Distance Jetty Face to Center Line of Riser	_____ m
	(B) Distance Jetty Face to Berthing Line	_____ m
	(C) Minimum Distance of Manifold	_____ m
	(D) Maximum Distance to Ships Side	_____ m
	(E) Drift (perpendicular to dock face)	_____ m
	(E*) Surge (parallel to dock face)	_____ m
	(F) Dock to Highest Water Level (HHW)	_____ m
	(G) Diff. between Highest & Lowest Water Level (LLW)	_____ m
	(H) LLW Level to Ship's Manifold (Smallest Vessel Laden)	_____ m
	(I) HHW Level to Ship's Manifold (Largest Vessel Light)	_____ m
	(K) Distance between Center Line of Risers	_____ m
	(L) Top of Jetty to Flange	_____ m
	(M) Minimum Manifold Spacing	_____ m
	(N) Maximum Manifold Spacing	_____ m

- NOTES:** 1) If dimensions A, E, K, L are not available, this data will be assumed by SVT based on experience.  
 2) If available, please furnish Operating Envelope and General Assembly Drawing of existing marine arm.

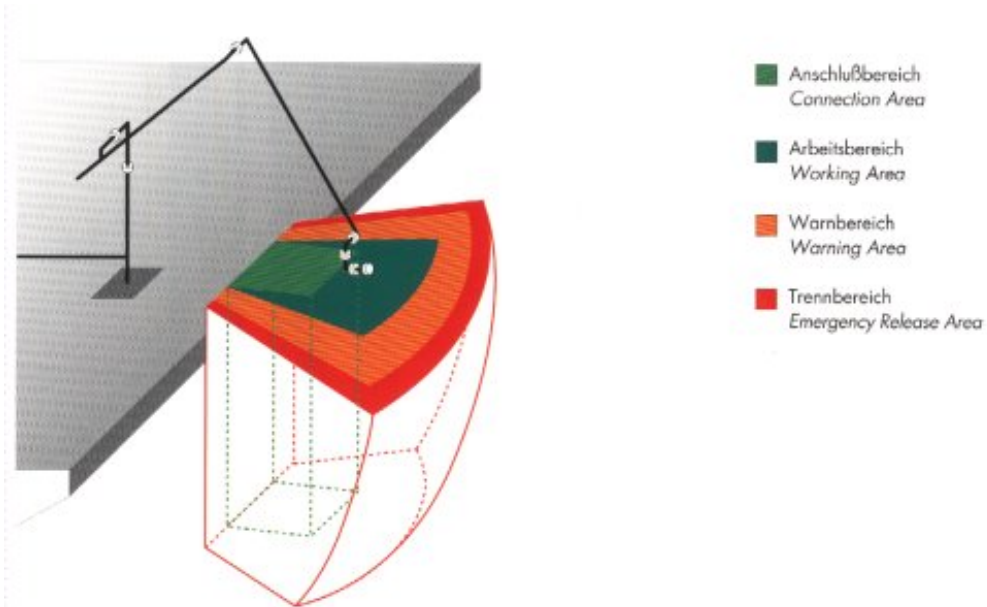
**Basic Arm & Cargo Data**

Required Quantity	_____
Arm Size	_____
Product	_____
Req. Material of Product Line	_____
Flow Rate (m <sup>3</sup> /H)	_____
Operating Temperature (°C)	_____
Design Temperature (°C)	_____
Design Pressure (barg)	_____
Viscosity (cSt or cP)	_____
Specific Gravity (kg/m <sup>3</sup> )	_____

The following fields are required:

Name: \_\_\_\_\_  
Company: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
E-Mail Address: \_\_\_\_\_

Fill out the above form with as much information as possible and fax back to us at (281) 578-8364



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Ó CONNEX SVT Inc.