

Sterile Liquid Transfer System

Sterile Liquid Transfer Port (Beta) Used with Clean Rapid Transfer Port (Alpha)

CRL Sterile Liquid Transfer Port (SLTP) (patent pending) enables efficient aseptic liquid transfer for pharmaceutical manufacturing.

The SLTP has been engineered to utilize standard Steam In Place (SIP) processes and CRL's proven Rapid Transfer Port (RTP) technology to enable efficient aseptic transfer of liquids from sterile product devices through a barrier wall into a clean room or isolator.

- Multiple use product for low lifecycle cost
- Minimal disposables adding to your GREEN footprint
- SIP sterilize with product tank in one cycle

Available in sizes (mm): **105 / 190**



SLTP Beta

CRTP Alpha

Application Solutions: **LIFE SCIENCE**



ASEPTIC



POTENT



ASEPTIC/POTENT

Features & Benefits

- Alpha flange equipped with mechanical interlocks to prevent improper port operation.
- Product connection tube inner surfaces polished to 15 micro inch finish and sloped to maximize drainage.
- SIP docking plate provided for proper SLTP Beta flange placement during sterilization.
- Extended polypropylene Alpha port door to accommodate SLTP Beta product connection tubes.
- SLTP Beta flange available with single or multi product connections and single condensate drain connection.
- Hydrostatic pressure tested to 3.4 bar (50 psig)
- SLTP Beta and Alpha flange constructed from 316L stainless steel material.
- Tri-clover fittings used on product tubes for reusable, validateable aseptic rapid hose connect/disconnect.

RH_SLTP-F_0118_US

Sterile Liquid Transfer



ASEPTIC

Efficient Aseptic Liquid Transfer for Pharmaceutical Manufacturing

Operating Sequence:

Step 1: Product Tank, tubing, and SLTP Beta with internal connections are all Steam In Place (SIP) sterilized together. SIP docking plate with SLTP Beta is secured to tank or other safe process location.

Step 2: Liquid product is filter sterilized into the tank, where it is now ready to transfer to the filling area.

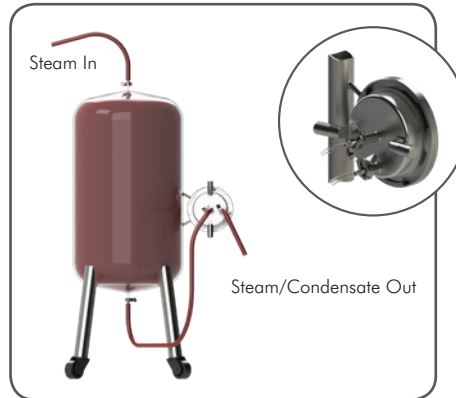
Step 3: The fill head, tubing, and other product contact parts are sterilized in an autoclavable Beta container. A hydrophobic filter is used on the container's vent to disallow entry of spores after sterilization. When autoclaved, terminal sterilization is achieved and is maintained within the container during transfer and connection to the filling line isolator or RABS.

Step 4: SLTP Beta is connected to CRTP Alpha on containment wall, e.g., isolator or RABS.

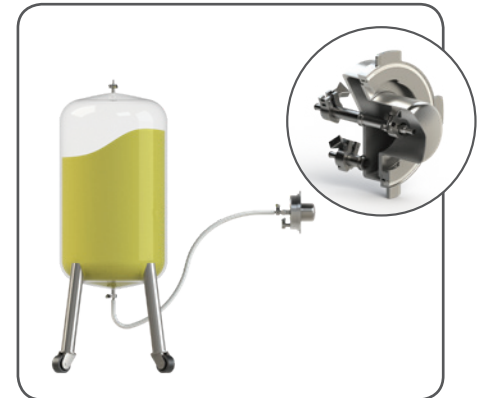
Step 5: The double doors are opened inside the aseptic containment, exposing the sterile product tube for connection to the sterile fill head via pre-sterilized tubing and fittings from Step 3.

Step 6: Tubing can be routed through pumps inside or outside of containment prior to the start of filling. Internal aseptic connections are made to the fill head using pre-sterilized Tri-clamp or barbed fittings.

Step 1: Tank & SLTP Steamed in Place.



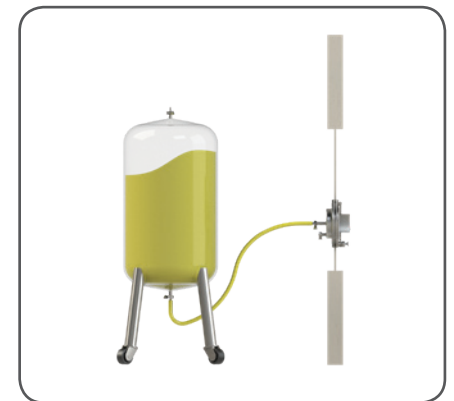
Step 2: Product Sterile Filtered.



Step 3: Autoclave Sterilization.



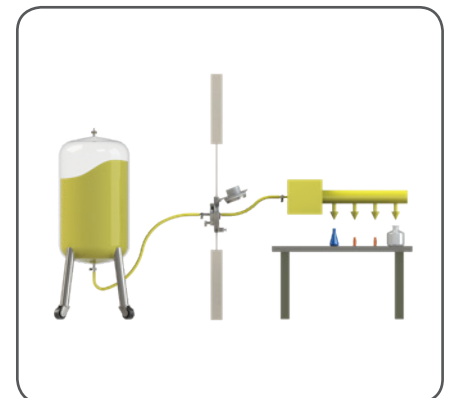
Step 4: SLTP to CRTP Connection.



Step 5: Double Doors Open.



Step 6: Aseptic Filling Starts.



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