

## SPECIAL TUBE EXPANDERS

### STEP ROLLING EXPANDER (BAFFLE PLATE EXPANDERS)



Ideally suited for faster tube rolling in tube sheets that are 10" (250 mm) and thicker without removing the tube expander from the tube. Tube expander cage has grooves spaced 1" apart and is fitted with a spring loaded, quick spacing thrust collar that permits fast step rolling in 1" increments throughout the full thickness of the tube sheet. These expanders can be made for use in upto 236" (6000 mm) reaches.

#### DIESEL ENGINE EXPANDER



A special series of tube expanders designed for rolling the injection sleeves into the head of diesel engines. These tube expanders are made to order for each application, and a detailed drawing of the injector sleeve and the engine head must accompany the order to ensure proper tube expander design.

#### SR EXPANDER



The rapid taper on the mandrel of this tube expander allows full expansion of the tube with minimum travel of the mandrel. The mandrel is retained at the rear of the tube expander to shorten the length of the tube expander and to allow the tube expander to be used near sharp tube bends.

## HYDRAULIC THRUST TUBE EXPANDERS

FOR USE WITH VMH HYDRAULIC EXPANSION SYSTEM FOR HEAT EXCHANGERS.



#### *Features :*

- This system uses high speed steel tube expanders to expand very thick wall and exotic harder tubes, where conventional expanders would fail.
- Axis of the roll slot in tool is parallel to the cage axis.
- Internal cylindricity of the expanded tube.
- Reduction of tube stretching.
- Better quality of tube to tube sheet contact.
- Reduction in tube internal stress.
- Hydraulic Thrust tube expanders are interchangeable and can be used with 'Vernon' hydraulic tube expanding systems.

TOOLS FOR USE WITH VMH HYDRAULIC EXPANSION SYSTEM.



'S' Series

For Tube Sizes	1/2" - 2" O.D.
Roller Length	1.1/2" - 2.1/2"
For Tube Sheets	1.1/4" - 5.1/2"



'A' Series

For Tube Sizes	1/2" - 1.1/4" O.D.
Roller Length	2.5/16" - 3.1/2"
For Tube Sheets	2.3/16" - 3.3/8"

**Note :** Please ask for catalog number HTTE/038/1 for detailed selection of Hydraulic Thrust tube expanders.

## LUBE-A-TUBE

For expander rolling tube ends into tube sheets.

**Application :** Apply directly to the inside of the tube ends by hand.

**Removal :** Any excess of Lube-A-Tube is removed by wiping or the residue will be completely removed during hydrotest / boil-out operations.

#### *Features :*

- Being a soft, paste lubricant, Tube-A-Tube is easy to apply and "stays put" in the tube prior to the actual rolling operation - it will not run like oil.
- No chance of entering between the tube sheet and tube end OD.
- Will not carbonize under the heat and pressure encountered during the tube rolling operation.
- Lube-A-Tube is its own indicator serving to show the operator what tubes are still to be expanded, eliminating the possibility of missed tubes.
- Lube-A-Tube keeps the expanding tool cool and prolongs tool life.
- Equally effective for rolling condenser tubes, boiler tubes and heavy wall cracking still tubes in refining equipment.



Sold in 100 ml tubes or 2 kg cans.