

STRAIGHT TUBE HEAT EXCHANGER  
(WITHOUT COVERS)

## HISH SAVES YOUR PROCESS HEAT

HISH designs and manufactures custom designed shell and tube heat exchangers in Carbon and Stainless Steels as well as Titanium and other specialized metals

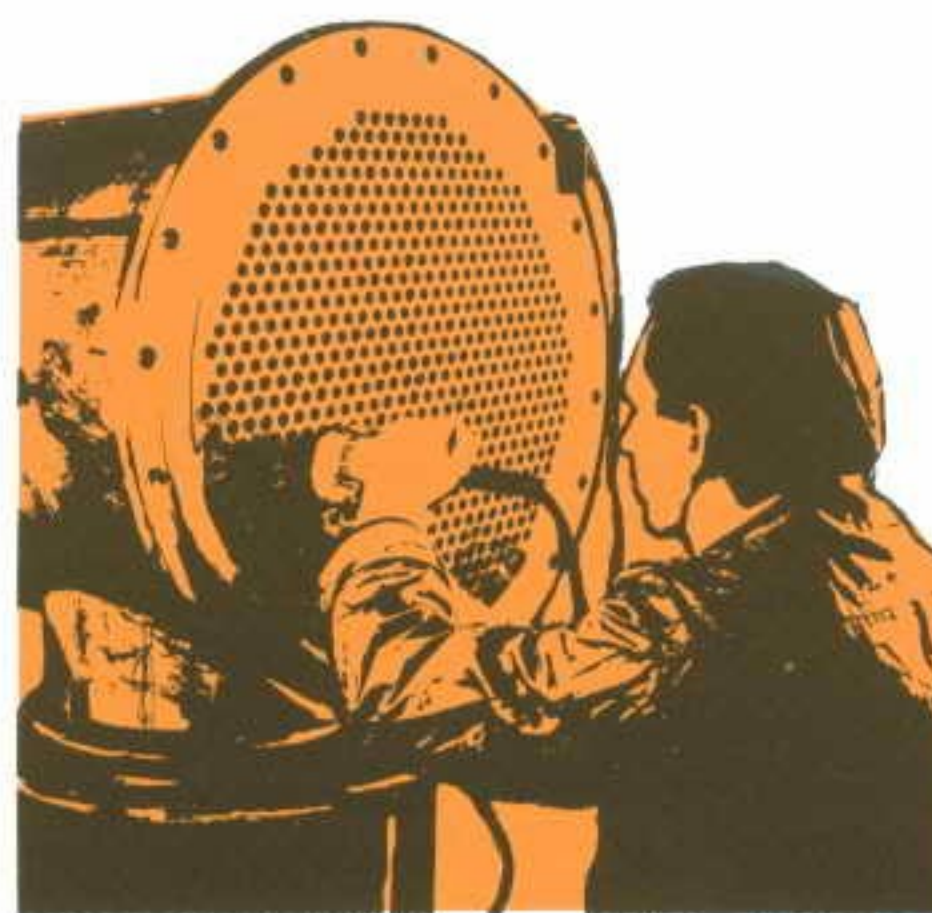
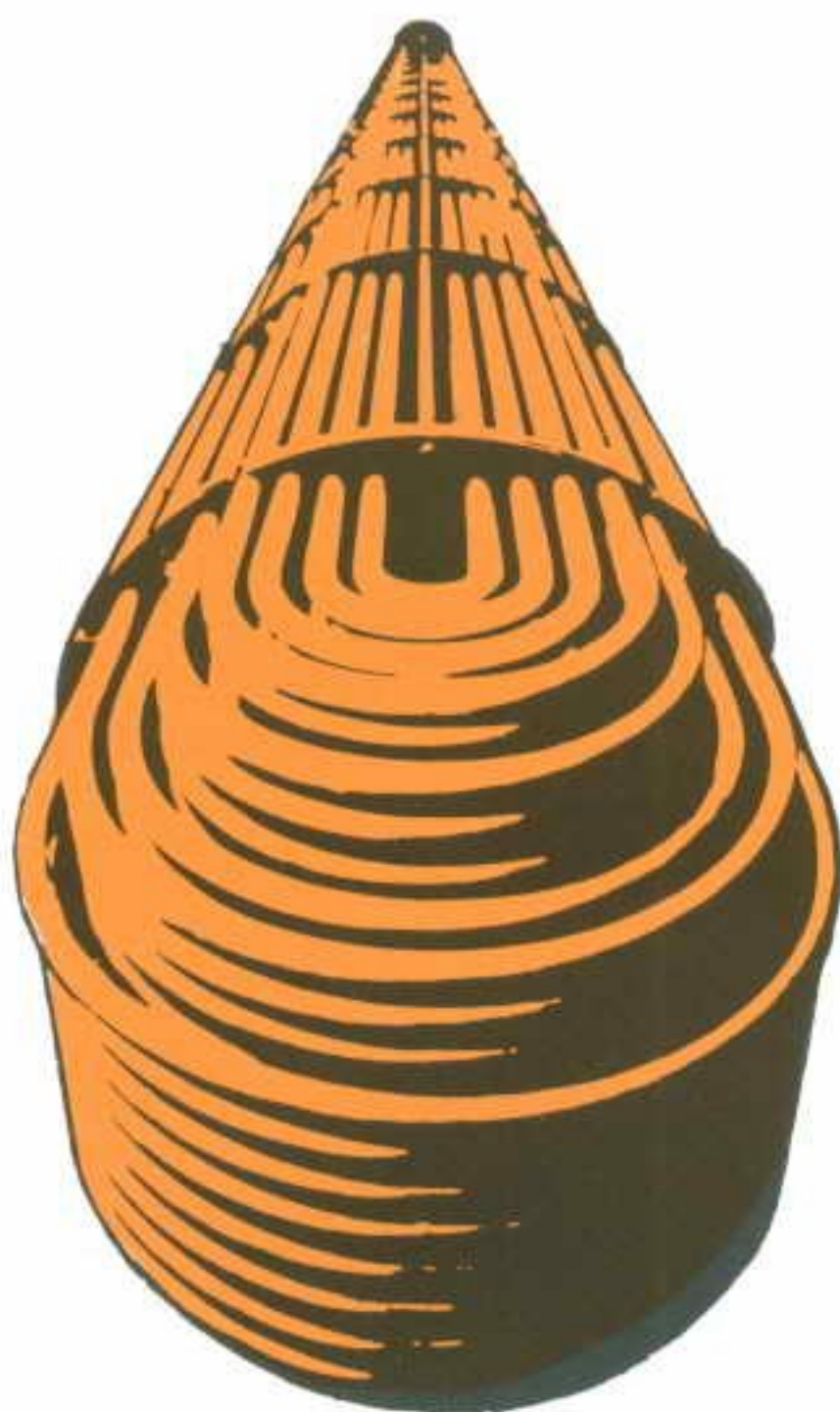
Our engineering is reknowned for:

- economy of design
- efficiency of operation
- low pressure drop with high flow rates
- quality of manufacture
- exceptionally long working life

Just send us your requirements and our engineers will provide the ideal solution.

**AT HISH WE HAVE THE ANSWERS**

**HISH**  
**Shell & Tube**  
**Heat**  
**Exchangers**



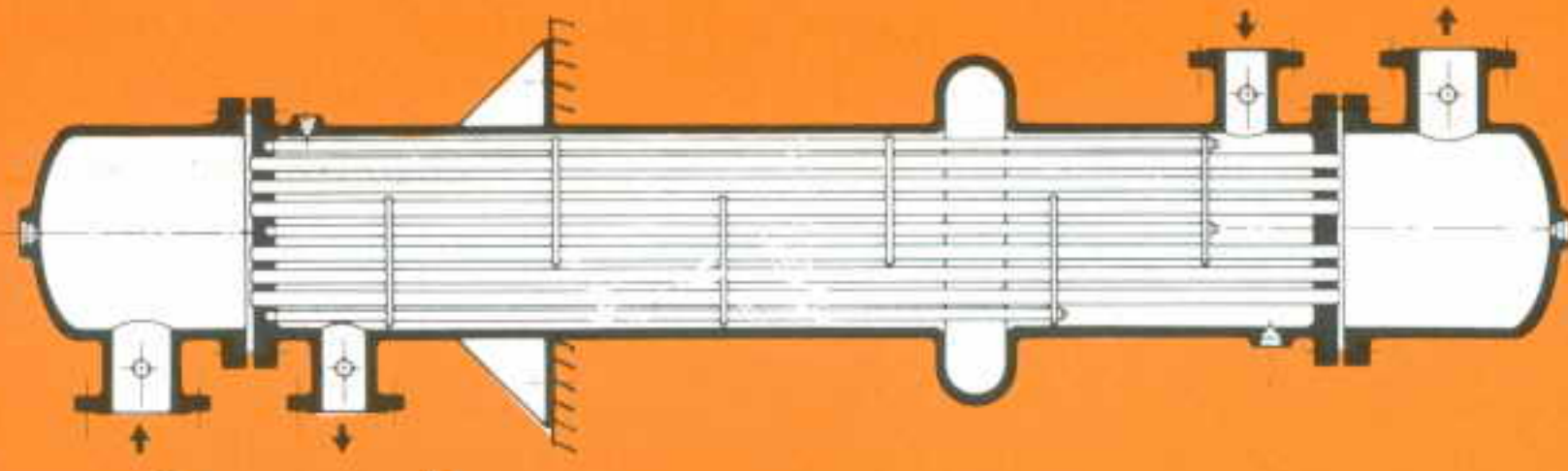
COMPUTERISED WELDING

U TUBE BUNDLE

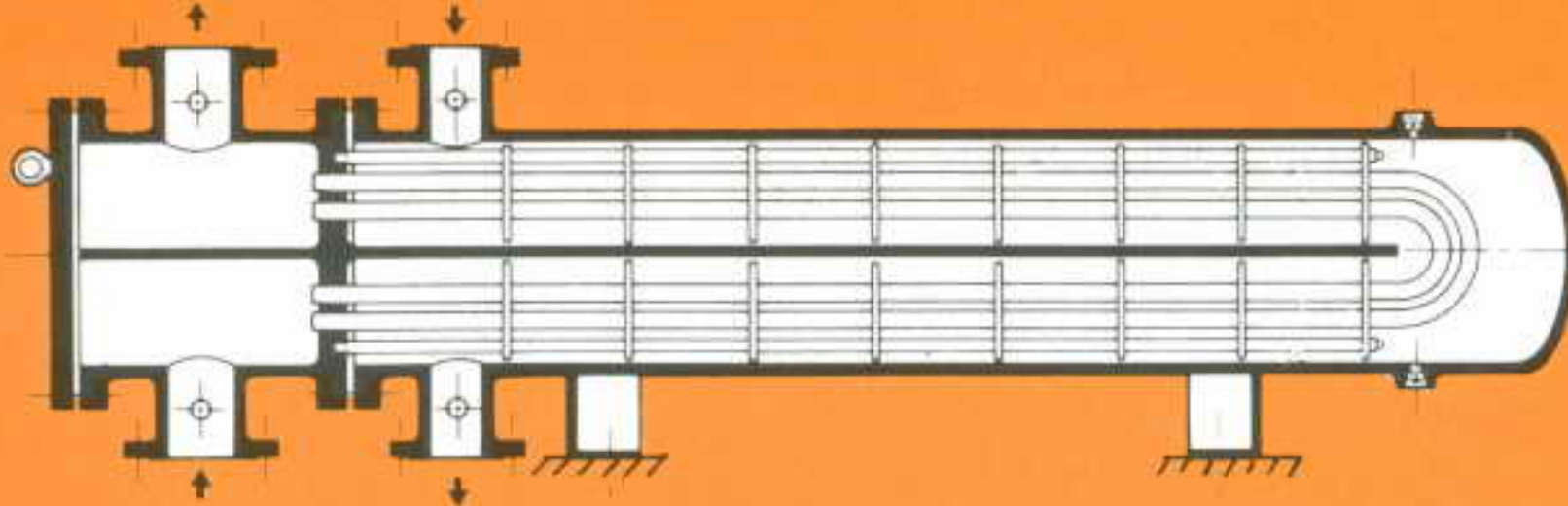


# GENERAL DATA

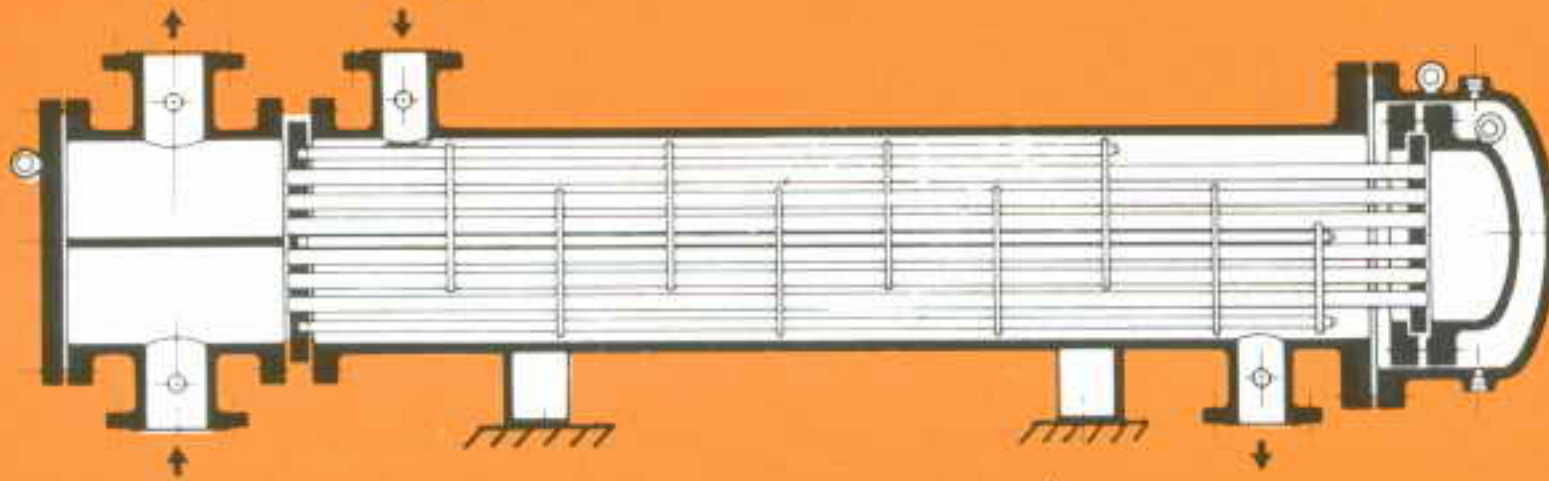
## TYPICAL LAYOUT ARRANGEMENTS



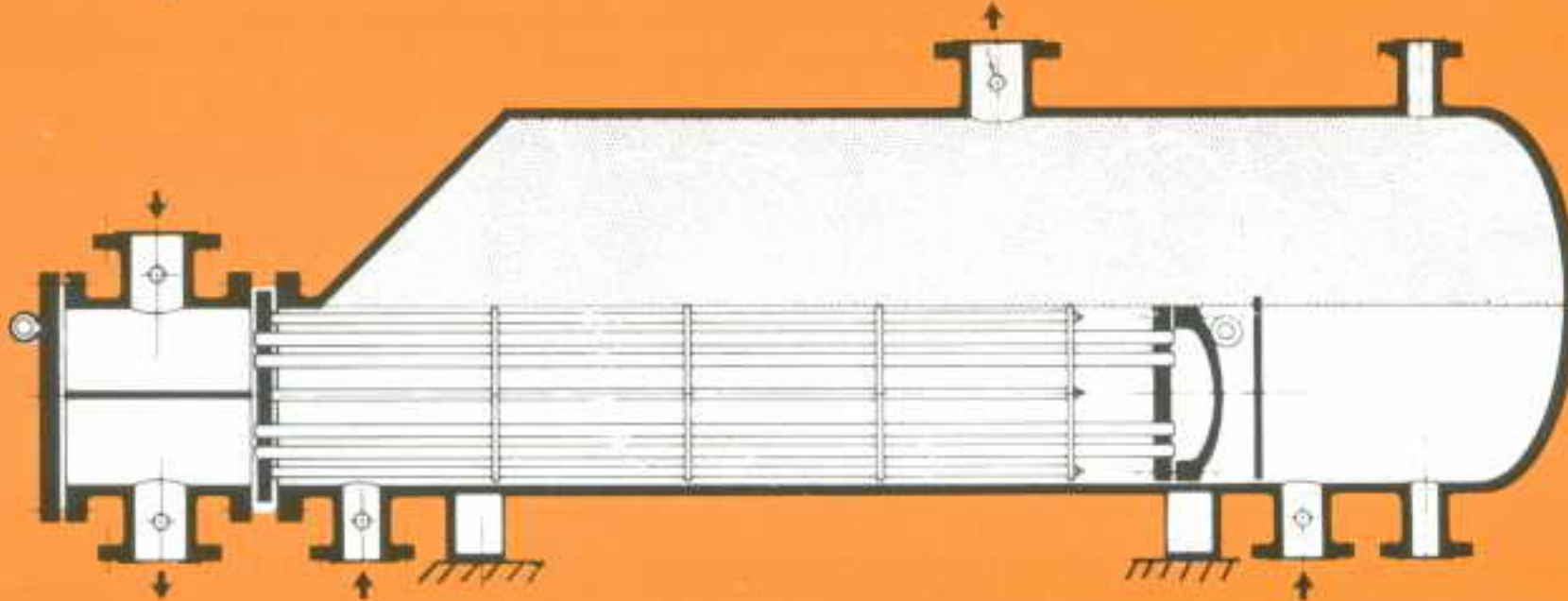
- BEM type with straight tubes
- Suitable for regular liquids
- Option of expansion joint for hot liquids in the shell side
- Vertical support arrangement shown



- AEU type with U-tubes
- suitable for contaminating liquids in shell side
- Easy to clean
- Expansion for hot liquids in tubes



- AES type with Floating Head
- Ideal for extreme expansion
- Ease of access for cleaning



- AKT type kettle configuration
- Specially for evaporation uses
- Essential in refining processes
- Special applications in energy conservation

### FEATURES

- Computerised thermal and mechanical designing, based on 50 years in-house accumulated experience in the chemical and petrochemical industries.
- Designed and tested to ASME VIII Div I and TEMA standards
- Components manufactured on latest CNC machining equipment
- Automatic computerised orbital welding of tubes for Stainless, Titanium and other specialized steels.
- Cost effective design
- Supports suitable for any position

### DIMENSIONS

tube sizes from ½" to 2"  
Shell diameters 4" to 60"  
Tube length 2' to 40'  
Special dimensions upon request

### OPTIONAL DESIGN FEATURES

Innovative integrally grooved tube sheet machining provides:

- Total elimination of leakage contamination between fluids
- On-line monitoring of possible leaks
- Facilitates hydro-testing of tube to tube sheet joints.

Especially recommended where the process liquids are dangerous, or highly reactive to each other.