



**Ravi Industries**  
Pressure Vessels & Skids

## HEAT TRANSFER EQUIPMENT



### Salient Features

- In-house design capability as per construction code ASME and TEMA
- Complete assembled solution for ACC
- Specializes in Shell and Tube type heat exchangers

## VENT CONDENSER

When the pressure of saturated condensate is reduced, a portion of the liquid “flashes” to low-pressure steam. Depending on the pressures involved, the flash steam contains approximately 10 to 40 percent of the energy content of the original condensate. In most cases, including condensate receivers and Deaerators, the flashing steam is vented and its energy content is lost. However, a heat exchanger can be placed in the vent to recover this energy. We have a shell and tube type heat exchanger that goes with our Deaerator on customer requirement to help recover this otherwise wasted energy. The material of construction can be carbon steel, stainless steel or combination of both.

## SURFACE CONDENSER

Condensers are device used to condense the gaseous substance in to liquid one. This is a water cooled shell and tube type Heat Exchanger. Generally these are installed on the exhaust of the steam. In thermal power plants, the primary purpose of a surface condenser is to condense the exhaust steam from a steam turbine to obtain maximum efficiency and also to convert the turbine exhaust steam into pure water. We have manufactured up to 1000m<sup>2</sup> Heat Transfer Area; with 50mm OD and 12000mm long tube. The Shell was constructed in SA516GR70 and the tubes were SS304 welded tubes.

## EVAPORATORS

Evaporator is a device used to turn (or allow to turn) the liquid form of media in to its gaseous form. This is a shell and tube type Heat Exchanger. In short Evaporators are used in order to reduce product volume, remove water prior to drying, and to improve product storage life. Evaporators find wide application generally in industries like, Food, Dairy, Pharmaceuticals and chemical.

We have manufactured up to 1000m<sup>2</sup> Heat Transfer Area; with 50mm OD and 12000mm long tube. The Shell was constructed in SA516GR70 and the tubes were SS304 welded tubes.

## AIR COOLED CONDENSERS

This is also a heat transfer device; which carries the small fins on the plain tubes to increase the required heat transfer area directly reducing the required number of tubes. We manufacture ASME U-stamp finned tube Air cooled condensers and supply as a complete assembled unit inclusive of accessories like electric fans, motors and associated supports, if required.

## AIR PREHEATERS

The purpose of the Air Preheater is to recover the heat from the boiler flue gas which increases the thermal efficiency of the boiler by reducing the useful heat lost in the flue gas. As a consequence, the flue gases are also sent to the flue gas stack or chimney at a lower temperature, allowing simplified design of the ducting and the flue gas stack.

We have manufactured a regenerator type Air Preheater with 11000 diameter and 2700mm height; weighing almost 75MT. The Material of Construction was IS2062, SA516GR70 and Alloy carbon Steel.

### Clientele

- Thermax Limited
- ONGC Mangalore Petrochemical Ltd. (through Thermax)
- Essar Matrix (through Thermax)
- EnmassAndritz India
- ABC Paper Ltd
- L & T
- Himadri Chemicals

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Plants 2: Gat No. 1556, Plot No. 1419, Dehu-Alandi Road, Near Shelar Vasti, Chikhali, Pune - 412 114. Telefax: +91 20 6630 6634, 6630 6632.

Plants 3: Gat No. 171, Rupee nagar, Off. Talwade Road, Behind Huma Bakery, Talwade, Pune - 412 114.

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