

**Ambani**  
METALS

RELIABLE FOUNDATION, REMARKABLE FUTURES!

**DISTILLATION TRAYS**

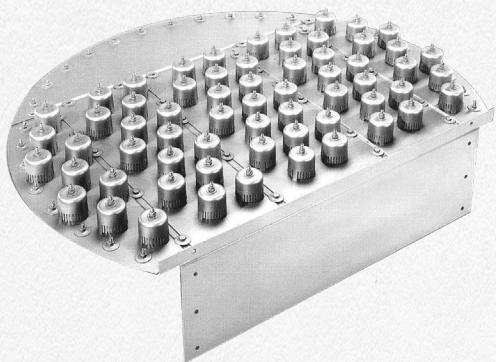
## Distillation Trays

Ambani Metals presents a selection of Distillation Trays designed for diverse separation purposes, accommodating different column dimensions. These trays are easily deployable and require minimal regular maintenance. Crafted from various metallic materials using punching and bending processes, we manufacture trays tailored for applications in industries such as hydrocarbon processing, chemical, desalination, petrochemical, and gas-liquid absorption units. Our specialized Column Internals encompass Floating Valve Tray, Bubble Cap Tray, Fixed Valve Tray, Grid tray, and Sieve Tray, catering to the varied needs of different sectors.

Collaborating with our skilled process engineers, we assist you in choosing the most suitable trays for your specific requirements. Furthermore, our proficient team is ready for prompt installation upon your request. Irrespective of the application, Ambani Metals offers random packing in diverse sizes and materials for distillation trays to ensure optimal performance. We provide a comprehensive array of tray sizes in common materials, all available for shipping at competitive prices.

### Bubble Cap Tray [AMB TRAY 1]

Bubble Cap Trays stand as the initial type of trays utilized in distillation procedures. Termed as "liquid sealed" trays, these trays incorporate vapor ascending through brief pipes called risers, each capped with a serrated edge or slots. Irrespective of the vapor flow rates, these trays sustain a steady liquid level, providing the benefit of accommodating a wide range of liquid flow rates.



Material of Construction

SS 304/L, SS 316/L, 904L, 254SMO, Duplex, Super Duplex, Titanium, Hastelloy, Monel, Inconel, Copper or any metal/alloy as per customer request

Key Characteristics

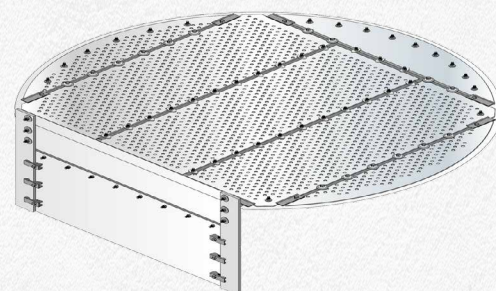
Bubble Cap Tray used for low liquid loads. Very wide turndown ratio

Available Size

Bubble Cap Trays are available up to upto 6m with 50 - 100 mm caps

### Sieve Tray [AMB TRAY 2]

A Sieve Tray is a variant of the cross-flow tray design, consisting of metal plates with perforations. Vapor ascends through these openings in the plate, while the liquid is held on the tray due to the flow of vapor. The configuration, quantity, and dimensions of the holes serve as key design parameters.



Material of Construction

SS 304/L, SS 316/L, 904L, 254SMO, Duplex, Super Duplex, Titanium, Hastelloy, Monel, Inconel, Copper or any metal/alloy as per customer request

Key Characteristics

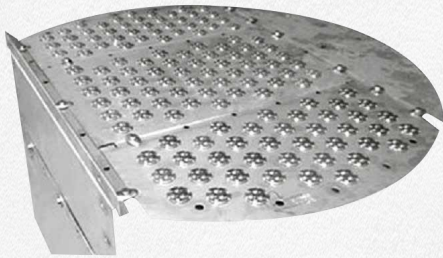
Low cost. Not flexible for wide range of turndown ratio. High capacity and efficiency, low pressure drop, ease of cleaning, and low capital cost

Available Size

Sieve Trays are available up to 6m diameter

## Floating Valve Tray [AMB TRAY 3]

Float valves demonstrate high efficiency in handling varying flow rates. The inclusion of legs serves the purpose of ensuring continuous valve opening to prevent weeping and enhance mass transfer, particularly under low flow conditions. In specific situations, both light and heavy valves may be employed. The floating valve tray features an adjustable opening area that automatically adapts to vapor flow rates, providing a broad range of operational flexibility.



Material of Construction

SS 304/L, SS 316/L, 904L, 254SMO, Duplex, Super Duplex, Titanium, Hastelloy, Monel, Inconel, Copper or any metal/alloy as per customer request

Available Size

Floating Valve Trays available up to 6m diameter

## Fixed Valve Tray [AMB TRAY 4]

A valve is a non-moving part that is cut out from trays at a set distance. Fixed valve trays have a big advantage because the fast horizontal vapor speed through a narrow area mixes well with liquids flowing across and pushes any carried particles to the side before they go up. This helps with a quick transfer of substances. The high vapor speed also stops solids from settling or causing problems. Since it doesn't have parts that move, it works well with substances that can corrode.



Material of Construction

SS 304/L, SS 316/L, 904L, 254SMO, Duplex, Super Duplex, Titanium, Hastelloy, Monel, Inconel, Copper or any metal/alloy as per customer request

Key Characteristics

Fixed valve tray used for wider turndown ratio and better resistance to fouling compared to Sieve Tray.

Available Size

Fixed Valve Trays are available up to 6m diameter

## Contact Us



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