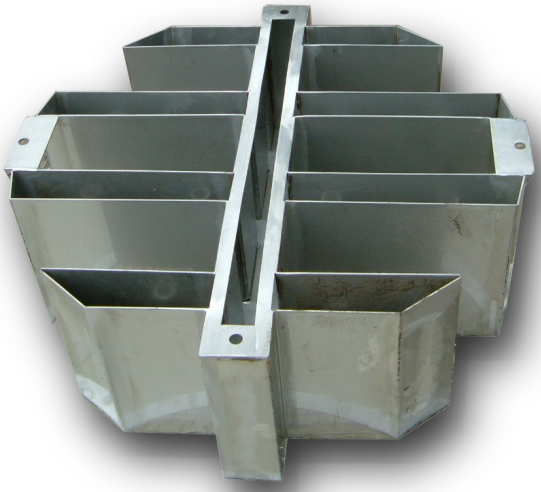
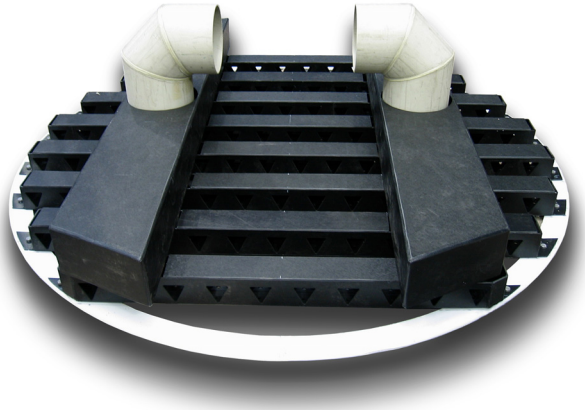
LIQUID DISTRIBUTION SYSTEMS

At **The Pall Ring Company** we are able to provide our customers with an extensive range of **Liquid Distribution Systems**. Using our expertise in metals and plastics fabrication, we can provide a strong, dimensionally accurate product which can be manufactured in a range of different thermoplastics materials or from various metals. These distributors can be designed for tower of almost any diameter.





PRODUCT RANGE:

PAN/TRAY TYPE LIQUID DISTRIBUTION SYSTEMS

A **Pan/Tray/Deck Type Distributor** consists of a simple flat tray or pan with a series of orifices evenly spaced over its entire area. The liquid is fed directly onto the tray by a feed pipe, which then distributes the liquid evenly over the tower's packed bed.

These types of distributors are often fitted with riser tubes to allow the unhindered passage of the gas stream up through the tray, to provide a uniform flow of liquid down through it and to minimise hold-up and prevent over-flowing.

Pan/Tray/Deck Type Distributors are normally considered for towers with a diameter of up to 1.5 metres.

TROUGH TYPE LIQUID DISTRIBUTION SYSTEMS

A **Trough Type Distributor** consists of a pre-distribution parting-box mounted above a number of equally spaced, narrow troughs incorporating weirs or orifices designed by our computer models to suit various flows.

Initially, the liquid is fed into the 'parting-box', which in turn evenly feeds the troughs below. One 'parting-box' is usually sufficient for smaller diameter towers but multiple boxes may be required for larger diameter towers or for high liquid flow rates.

Additional trough support beams should be considered in larger towers to provide the necessary structural support.

Trough Type Distributors can be fabricated and supplied in a range of thermoplastics or stainless steel.

LADDER TYPE LIQUID DISTRIBUTION SYSTEMS

A **Ladder Type Distributor** consists of a main central feed pipe or 'header', with a number of equally spaced 'laterals' projecting horizontal from each side. Here, the liquid distribution is pressure driven, as liquid is delivered onto the tower's packed bed through a series of holes or downcomers in the underside of the lateral pipes.

Ladder Type Distributors are not usually recommended for use with low liquid flow rates or in systems where there may be suspended solids in the liquid, which could lead to the blocking of the distributor's holes.

Ladder Type Distributors can be fabricated and supplied in a range of thermoplastics or stainless steel.

The PALL RING COMPANY