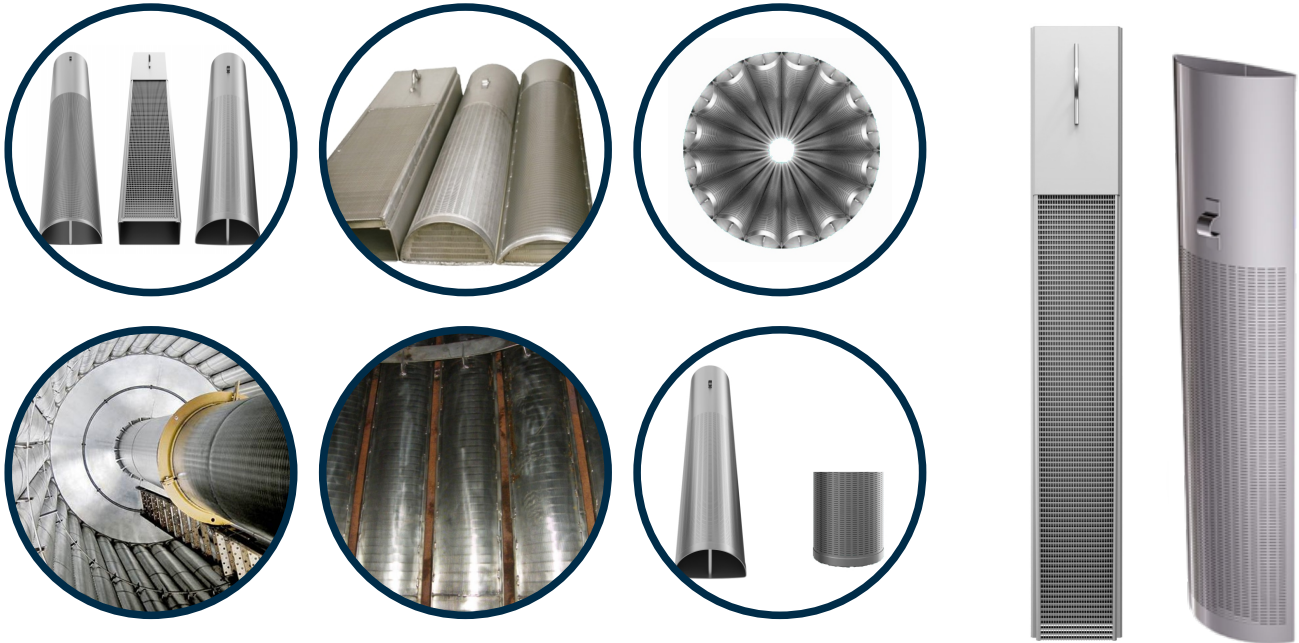


SCALLOPS

Customized



OPERATING PRINCIPLE

The scallops assembly forms the outer screen component of a radial flow system. Its general shape extends parallel to the inner vessel wall using the wall as support. The inner surface delimits the outer side of the catalyst bed. Its purpose is to distribute and collect the flow.

PROCESS AND FEATURES

The cover deck closes the gap between the inner screen component and the scallops. The flow direction can be outwards or inwards. Scallops are usually introduced through the manhole in the top of the vessel. They rest on a support ring attached to the vessel wall. Scallops are hollow conduits arranged along the inner surface of the vessel. They collect and distribute the gas flowing through them. The scallops are positioned adjacent to one another in a set. Each scallop cross section conducts a flow running parallel to the scallop's axis with a flow capacity limited to the cross section area. The total reactor capacity is the sum of the flow rate of each individual scallop. During high-temperature operations, some refractory or liner material may be applied to the vessel shell in order to prevent hot spots from forming.

Application: Platforming, Reforming, Ammonia synthesis