Perfection in Separation

HYDROCARBON PROCESSING

Apollo Screens; a company established in 2013 by the APOLLO GROUP, a renowned engineering house combining its engineering expertise with long term vision, ethical business approach and a global team of experts in design and manufacture of wedge wire screens for a wide range of applications.

Apollo Screen manufacturing facility : The plant & critical equipment for Apollo screens has been designed and built by the Apollo group's designers and engineers. The plant is equipped with state of the art screen fabrication technology to produce finest quality wedge wire screens with accuracy of wire drawing facility to achieve the highest product quality.

Applications :

- Catalyst Retention
- Gas Dehydrators
- Desulphurization
- Hydrotreating, Hydrocracking
- PTA
- Ion Exchange
- Catalytic Reforming
- Ammonia Converting
- Sulphur Treatment

Advantages :

The all welded construction offers unmatched benefits :

- Maximum open area
- Flexibility in design
- Smooth Working surface
- Non- clogging openings
- Optimised collection and distribution
- Low pressure drop
- High Mechanical strength

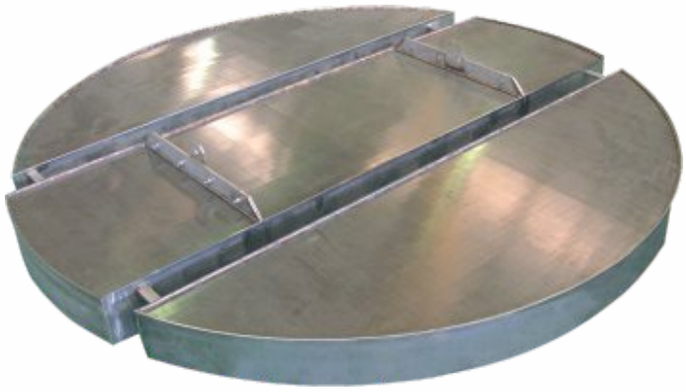
Industry Segments :

- Oil Refineries
- Chemical Processing
- Petrochemical Plants
- Gas Processing

Outlet Collectors : are typically used in down flow applications to prevent loss of media from the vessel. Apollo Screens can design and supply outlet collectors to suit loads and temperatures of each application. Outlet collectors can be built as a single unit or segmented to fit through the vessel manway.

Outlet collectors can be manufactured from wedge wire, mesh or perforated plate. Apollo Screens will ensure that your outlet collector is designed with the optimum diameter to height ratio and side to top ratio to optimize the performance of your system. This will ensure:

- optimized basket dimensions
- more room left for bed
- stable interface at screen surface
- uniformed flow collection throughout operation cycle
- superior strength for high operating pressures and temperatures



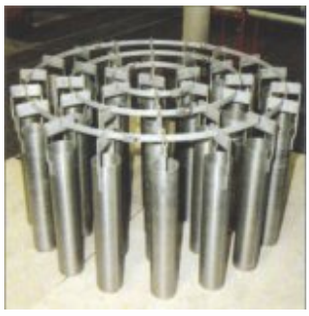
Support Grids : are typically made from wedge wire screens to retain media or catalyst allowing liquid or vapour to pass unhindered through the catalyst. This creates direct retention of media, removing the requirement for an intermediate layer of inert balls. Apollo Screens designs grids to handle the operating conditions of each application, taking the material requirements, load and temperature as well as the process licensor specifications into consideration.

Support grids supplied by Apollo Screens are widely used in up or down flow systems such as gas driers, hydrotreaters, and desulphurization units. Grids are designed in one or multiple pieces making sure that they fit easily through the vessel manway. *Apollo Screens will provide calculations verifying the suitability of each support grid design on receipt of order.*

Scale Traps : are designed to maintain the efficiency of the catalyst bed should there be an increase of contaminants or scale in the system. The scale traps from Apollo Screens achieve this by effectively increasing the open area of the catalyst bed by distributing contaminants over a wider area, which extends the operational life of the catalyst bed. This can be accomplished by installing an array of cylindrical wedge wire screens at the top of the catalyst bed where, if designed and placed correctly, the effective bed area can be increased by more than 300% by capturing most of the scale present in the flow.

The Apollo Screens scale traps are designed to handle very high loads and their strength allows them to be easily cleaned by wire brushing or high pressure blasting, neither of which will cause damage to the screen surface.

Scale traps from Apollo Screens are typically made from 304, 316 or 321 Stainless Steel.



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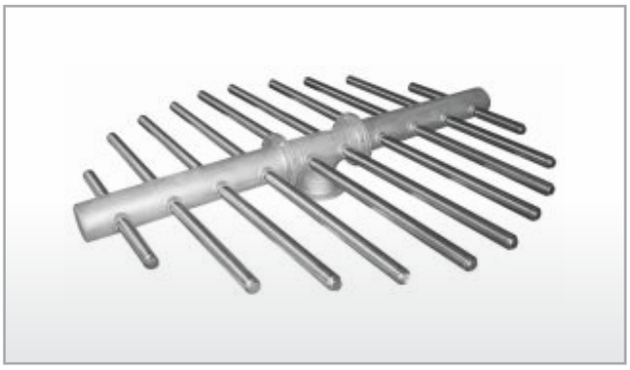


Header Laterals : are made from a series of screen laterals fitted to either a central header or hub, providing uniform flow through catalyst. Apollo Screens supply laterals and header laterals for Ion Exchange units, Sand Filters, Salt filters, PTA, jet fuel/kerosene sweetening units and many other processes requiring catalyst retention.

The Apollo Screens headers and laterals are designed for a wide range of flow rates and operating conditions. Our header laterals are designed for each and every application by optimising the lateral size and spacing to create the most economical system for a variety of vessel diameters and can be used in collection or distribution. Replacement laterals are also available to suit existing systems.

Scallops : Perforated scallops have been for over 30 years the standard method for catalyst retention in radial flow reactors. The main function of the perforated scallop is to protect the centre pipe from deformation during temperature spikes, sudden increases in pressure and coke build-up. The scallop has a twofold function:

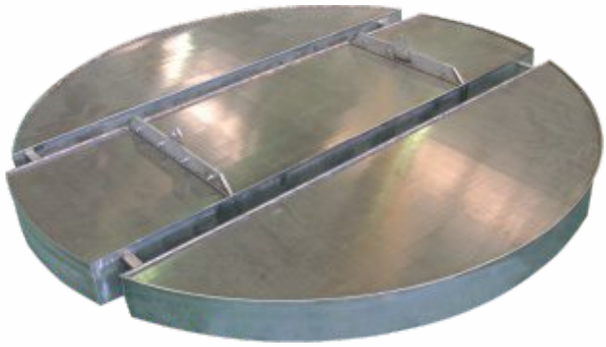
- to ensure even distribution of feed
- to act as a safety mechanism protecting the centrepipe from damage by deforming and relieving the stress on the centre pipe from compressive catalyst loads.

Scallops supplied by Apollo Screens are fabricated to the highest tolerances, using 1.2mm (18 gauge) or 1.5mm (16 gauge) sheet with slots and spacing formed to the required specifications to retain the catalyst.

Apollo Screens can supply scallops to suit emergency or planned shut-downs.

Other Internals : Apollo Screens supply a variety of other screen and non-screen vessel internals for petrochemical and refining applications. These include :

- Screens for centrepipes, outer baskets and regenerators.
- Distributor Trays
- Transfer pipes
- Mixing assemblies
- Inlet Distributors
- Quench Pipes
- Demisters
- Mesh for a variety of applications



Apollo screens

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