

## Pakcol Column Packings

### HIGH THROUGHPUT & LOW PRESSURE DROP

**PAKCOL is a column packing which is primarily used when a moderate to large number of theoretical stages have to be accommodated in a limited height of the tower.**

### Operational

The formation of the knitting, crimping and the stitching employed to form each layer of the column packing with filaments leaves an open structure to the packing allowing liquids to combine, split up and once again combine which results in intimate mixing and good contact with the vapor passing upward.

This high surface area of interaction between the liquid and vapor results in high mass transfer rates while maintaining low resistance to flow (low pressure drops).

### Materials of Construction

The most common material used for this type of column packing is SS 304L and SS 316L. However HAST manufactures this solely based on our customers' requirements and can also be made from other materials based on special requests.

### Uniform Liquid Distribution

In order to achieve even liquid distribution over the packing it is a must to have a good liquid distributor to maximize the interaction of the liquid and vapor. However if the packing height exceeds 3 meters we recommend using an intermediate liquid distributor as well for even flow.

### Fixing and Installation

It is a very basic and simple procedure. Once we have optimized the dimensions of the packing we must ensure that the inside of the column is clean and has no weld joints or bulges to obstruct the installation. The supporting structure can be made of two cross bars at 90 degrees to each other and in larger columns the same construction must be repeated at a pitch of 150mm.

Once the support is in place, successive modules of Pakcol must be inserted from the top – down. Normally a wooden disc (having a slightly small diameter than the packing) is mounted on a pole and used to push each module down to their position due to the very narrow diameter of the column.

### Benefits

- The high efficiencies achieved through this packing allow us smaller diameter columns and reduces expenses on structure, foundation, installation, insulation and piping.
- Due to its capillary movement of the liquids on the wire filaments it operates at a very high efficiency even with decreasing loading hence allowing the operation to run at multiple capabilities
- Can easily replace existing columns with their old form of packing. It not only increases efficiencies but also reduces costs by increasing product quality, increasing production capacity and reducing pressure drop.

Our design team shall be more than happy to help you with your requirements as long as we are furnished with all the required data on this subject.

