



Single-stage separation by use of packed mass media is generally used for hydrocarbons of lighter specific gravities and process streams where the removal of water and solids is of vital importance.

Separation is first started when the liquid enters the vessel. Due to the substantially reduced velocity, free water starts to fall out by gravity. As it progresses through the mass packed media, further separation occurs by impingement of the water droplets on the media. At the same time, solids tend to fall out as the liquid enters the vessel at reduced velocity but are further removed by filtration as the flow continues through the mass media.

Settling zones permit a natural separation of water due to the difference in the specific gravities of the two phases.

Mass packed coalescing media are available in various styles and materials. Selection is based on the condition of the liquid as to temperature, acidity and specific gravity. A second criterion is the efficiency of water and solids removal desired. Heavy solids or certain types of solids will tend

to either blind off the surface of the media and/or compress them to the point that they will no longer function as a coalescer.

In the event solids are expected to be moderate to heavy (in excess of 5 ppm), consideration should be given to using the wafer type. This type permits change out of the first or second upstream wafers, which may contain a heavy load of solids, while the third and successive downstream wafers are relatively free of solids and still effective coalescers.

The outside diameter of all repacks is sized to the inside diameter of the vessel. Thus, each repack is personalized to the vessel. Further, densities will vary depending upon the media used.

### CYLINDRICAL REPACKS

This cylindrically packed cartridge is for use as a coalescer medium for light hydrocarbons or as strainers on most petroleum products. They are available in selected Aspen wood excelsior, glass fibers, carbon steel or Type 430 steel wool.

### WAFER REPACKS

The wafer packed cartridge is for use as a coalescer or as a strainer where heavy solids loads are expected or where solids tend to blind off the face without affecting the remaining 75% — 80% of the cartridge. They are available in selected Aspen wood excelsior, glass fibers, carbon steel or Type 430 steel wool.

### COMBINATION REPACKS

Combination repacks are for use in process streams where the following conditions may be found; sulfuric acid concentrations as high as 80% — 90%, aqueous solutions with pH from 1 to 9 and temperatures up to 350°F. They are available with alternate layers of glass fiber bat material and Type 430 metal mesh spacers to prevent excessive compression due to high solids loads.

*Due to our continuing program of improvement, specifications are subject to change without notice.*