

Fine Mesh Resin

DESCRIPTION

Fine mesh resin generally refers to any resin with a particle distribution smaller than the standard 16-50 mesh size. Most fine mesh resins are 40-60 mesh size, although some extra fine mesh resins (80-100 mesh) are used in limited applications.

USES

Fine mesh resins have slightly better kinetics and more favorable apparent selectivities than standard mesh resin. They can be used to improve chemical efficiency in clean water applications in equipment that is designed specifically for fine mesh resin. Fine mesh resins are not suitable for high flow rate applications or for use with water supplies that contain high levels of turbidity.

ADVANTAGES	DISADVANTAGES
Smaller beads are stronger than big beads	Small beads are much more prone to plugging
Better filtration efficiency	Small beads expand more during backwash, making it more likely to lose resin
More favorable "apparent selectivity" can lead to a higher operating capacity	Due to a lower backwash flow rate, it is more difficult to remove trapped dirt
More favorable kinetics can lead to improved water quality	Large surface area makes small beads more susceptible to some kinds of fouling
Smaller beads are easier to regenerate	Small beads have higher pressure loss than big beads and may limit the maximum flow rate

