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Innovators Of Industrial Ceramic Products

Loading Procedures

ISO

Certified

PROX-SVERS® BALLAST FOR VACUUM-SWING ETHANOL DRIERS

Before any **PROX-SVERS**° inert adsorbent support, known as ballast, is loaded, the vessels should be cleared for personnel entry, thoroughly inspected, and any foreign materials removed.

Grid supports, collectors, or diffusers may be of elephant stool design, or of profile wire or wire mesh/subway grating supported by beams. All of the above should be inspected to make certain they are secured firmly and that there are no gaps, holes, or other bypasses around the perimeter or through the face of the grid. Gaps and holes in the face of the grid must be repaired to prevent leakage of materials. Gaps around the perimeter of profile wire or subway grating should also be filled with braided rope suitable for the temperature and chemical environment of service. Any particles or fines lodged in the grid or support screen can cause an abnormal pressure drop or channeling of the process stream: all such debris should be removed.

Each layer of **PROX-SVERS**° ballast should be a minimum of 3 inches (7.5 cm) in depth. The ballast may be loaded by means of buckets, chutes, socks, or telescopic sleeves, but in all cases to prevent damage to the screens, free-fall of the ballast should be limited to less than two feet (0.6 m), particularly if falling directly onto profile wire screen. As the loading proceeds, the ballast should be periodically leveled, and must always be leveled between size interfaces. The final bottom layer should be closely leveled at the interface presented to the adsorbent above.

It is usually necessary for personnel to enter the vessel during and after loading of support media. Site regulations for confined-space entry must be followed, including breathing apparatus if required. At a minimum, dust masks and gloves should be worn, and a platform support or walking-boards should be used to uniformly distribute the weight of personnel over the ballast.

MAINTENANCE: Routine service or maintenance is not required for **PROX-SVERS**° ballast, other than replacement in full with new **PROX-SVERS**° ballast whenever the molecular sieve desiccant itself requires replacement.

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