Elliott Diaphragm Storage Racks

When compressors or turbine diaphragms are stripped out during an overhaul, there is often not enough space for them on the shop floor. This is most serious when a number of compressors or turbines are being overhauled at the same time, resulting in many diaphragm halves stored on individual pallets. This can create tripping and falling hazards and is problematic when the diaphragms have to be moved around to make room for other equipment, or when they need to be inspected, cleaned, or repaired.

Elliott can provide you with diaphragm storage racks that are not only designed to save space, but that are safer to move and to lift, incorporating modern stress analysis techniques to meet manufacturing and certification requirements.

**Space Saving Benefits**

Elliott diaphragm storage racks use the minimum amount of space when the racks are loaded, when used for storage, and when not in use. The racks are custom designed to meet your storage needs. One rack can stand on top of another when loaded. As many as 18 diaphragms in two racks will take up the same amount of space as one empty rack.

When not in use, such as between shutdowns, the diaphragm storage racks can be stacked inside each other up to 10 or more high. During transportation and storage, all loose parts are stored within the base section of the rack between the rack floor and the floor of the rack above. Up to 12 empty racks in sets of six high can be placed in a standard container.
Ease of Transport

Elliott diaphragm storage racks are safer to move and to lift, and their use helps reduce manual handling of the diaphragms. Whether empty or full, the diaphragm storage racks can be lifted by crane via holes in the arms, or with a forklift using the holes in the base. When lifting with a crane, the load is transferred through the arms to the crane using a spreader bar. The racks are designed to be carried across the back of a standard truck.

Simplified Rack Design

The base section of the rack, which is made of easily replaceable hardwood, supports the rack load when it is on the ground and the rack legs, which point upward, support additional racks loaded onto the first one. The rack's diaphragm separators are constructed of plastic protective tubing that can survive high-pressure jet washing of the diaphragms. The separators are fitted to ensure that no damage is done to the loaded diaphragms and can be moved to allow sufficient room between the diaphragms to properly clean in between them. The diaphragm separator bars use scaffolding clamps, also easily replaceable.

All racks are tested and certified for your load requirements at the time of manufacturing. The racks can be either painted or galvanized to allow for outside storage. Galvanizing also makes the racks more resilient to knocks and scrapes.

To learn more about Elliott diaphragm storage racks or to place an order, contact the EMA Service Parts team at 44-1189-702211 or email rcossu@elliott-turbo.com.