

## Air Blowdown / Evenfill Manifold

M.W. Watermark's standard air blowdown / evenfill manifold consists of piping and valves which control the slurry inlet and connect the four corner filtrate discharge ports into a common discharge pipe.

Valves are provided to accommodate typical filter press operation.

Custom configurations are also available.

## Operation

Even Fill: The even fill manifold design provides the ability to close the lower two filtrate discharge ports and force the filtrate to exit the upper ports. This ensures that the filter press fills with fluid evenly during the initial stages of the filtration cycle which encourages the filter cake to build evenly on the cloths.

Air Blowdown: The air blowdown feature allows compressed air to be introduced into one or both of the upper filtrate ports in order to purge free liquid from the filter press prior to opening the press.

Following the filtration cycle, the feed port is closed and the appropriate valves are closed to force the discharge to the diagonal lower port from the compressed air inlet. This minimizes fluid discharge from the filter press when the plate stack is opened, improves overall cake dryness, and aids in cake release.

Pre-coat Option: (not shown) Pre-coat refers to the process of applying diatomaceous earth or perlite "filter aid" on the face of the filter cloths prior to initiating the filtration cycle.

A slurry is prepared in an M.W. Watermark pre-coat skid and pumped through the press until the tank is clear. This applies a thin layer of filter aid to the cloths within the press to improve filtrate clarity in critical applications, aid in cake release and minimize solids breakthrough during the filtration cycle.

Available Materials: PVC, CPVC, Polypropylene, 304SS, 316SS – other materials available per application.

## **Automatic Valves**



## Manual Valves



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