

Radial Matrix Starch Washing Unit

Introduction



Starch washing consists of separating starch particles from soluble and insoluble proteins. Radial matrix starch washing units contain a variable number of cyclonettes (small cyclones) that function as Centrifugal separation devices. Cyclonettes are mounted between two concentric stainless steel cylinder cartridges that form three separate chambers for feed slurry, underflow and overflow streams.

Radial Matrix starch washing unit designed to offer a wide range of operating capacity while using minimal floor space. Stackable stainless steel canisters can be combined in each stage to easily increase system capacity. Patented flow channels deliver steady flow to all regions of the canister. The unique lower piping connector allows stages to be arranged in a staggered pattern that simplifies the piping requirements and minimizes floor space. Rugged outer shells are flanged and bolted to eliminate leaks and improve safety around the system.

Includes the mezzanine support system for (12) stages of Radial Matrix starch washing system units and interconnecting piping which connects each stage to the next and to the pumps. Support structure made of painted carbon steel with 316SS piping.

Includes the following:

Mezzanine support system with one set of stairs and handrails.

Painted carbon steel supports.

Chemical resistant molded fiberglass floor grating.

Flanged Interconnecting piping for underflow, overflow, and feed of each stage

Sample valves (3 per stage for feed, overflow, and underflow)

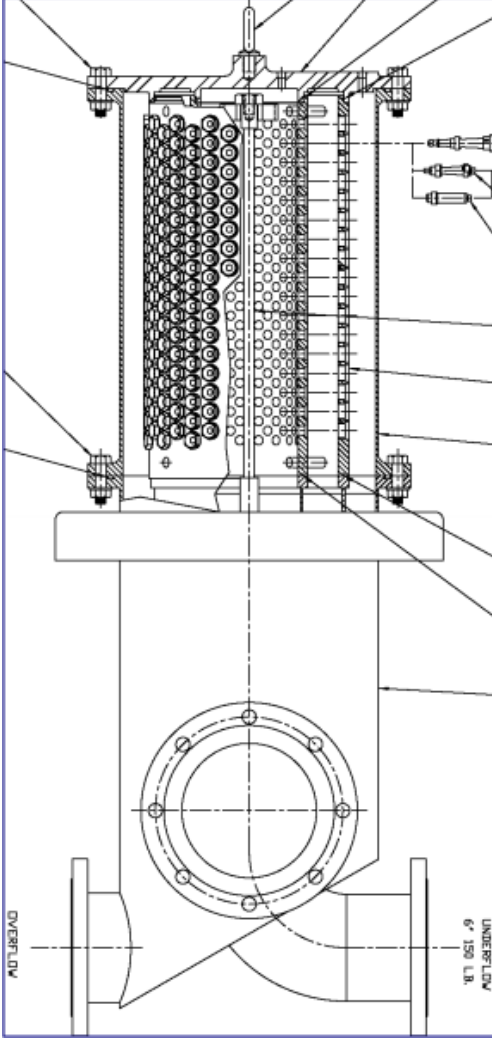
Pressure gauges with diaphragm seals (3 per stage)

Drain valves for each pump suction piping (2" drain valves)

All connection requiring external connection are 150lb flanged connections for wash water, system feed, overflow and underflow.

Does not include pumps, system control valves, flow meters, or pressure transmitters.

Starch Washer Design



The round design of radial matrix starch washing unit concentrates a large number of cyclonettes in minimal floor space. Cyclonettes are mounted between two concentric stainless steel cylinder cartridges that form three separate chambers for feed (middle chamber), underflow (inner chamber) and overflow (outer chamber) streams. O-rings on both ends of the cylinders seal the chambers from one another.