

7010-40

Classifying Tank



Main Tank and Collecting Flume

- Main tank - 1/4" (sides, ends, overflow launder & feed box) and 3/8" (bottom plate) welded plate steel construction
- Integral feed box with 1/4" AR curved liner and nominal 2' x 6' feed opening
- 74' of adjustable weir boards
- Integral overflow launder with 18" dia. discharge
- Ladder rungs located near the feed end of the tank for internal tank access
- Self-support tank design with external stiffeners only - no internal stiffeners
- Three-cell collecting flume - 3/16" welded plate construction (unlined)
- Center discharge box - 3/16" and 1/4" welded plate construction (unlined)

Walkway and Mechanism Support

- 24" wide diamond deck walkway across the feed end and down the center of the tank
- 1-1/2" O.D. posts, top and intermediate handrails
- 4" toeboards
- Removable/hinged door sections at each station
- Walkway support structure also houses and supports the electric/hydraulic operating mechanism

Valves, Valve Seats, Downpipes and Discharge Elbows

- Self-aligning urethane dart valves
- "Snap-in" urethane valve seats
- 6" schedule 40 UV rated PVC downpipes
- Urethane discharge elbows with rectangular discharge

Operating Mechanism

- 3hp electric/hydraulic power pack with nominal 3 micron filtration
- 750-psi (adjustable to 1,000-psi) hydraulic system
- 10-gal. hydraulic reservoir
- Accumulator
- Eleven (11) settling stations each including:
 - One (1) 24-volt DC adjustable height sensing paddle assembly
 - Three (3) discharge valves with adjustable down rods operated by hydraulic cylinders
 - Hydraulic manifold block with cartridge valves and 24-volt DC coils
 - Individual ball and check valves
 - Stainless steel hydraulic plumbing with o-ring face seal fittings
- All stations prewired to a bridge mounted NEMA 4 junction box which also houses the PLC (programmable logic controller)
- All wiring in the form of "plug and receptacle" type cords
- Controller: Standard Dell PC HMI (human-machine interface) including CPU, monitor, keyboard, optical mouse and Windows™ based programming. An optional industrial PC HMI with touch screen housed in a NEMA 4 enclosure is available for outdoor installations

Optional Equipment

- Three-cell rising current classifier (includes external manifold, individual flow control valves and internal baffling at the first three stations within the classifying tank)
- 8" flanged, pressure reducing/check valve
- Recirculating pump
- AR or urethane liners for the three-cell collecting flume and center discharge box
- Tank-to-screw flumes with AR or urethane liners
- Tank supports - stationary, skid (semi-portable) or portable
- Access - ladder or stairs depending on support configuration
- Flume level walkway (stationary support structure configuration only)
- Model #7208-32: Astec exclusive system monitoring components that monitor the mechanical, hydraulic and electrical functions of the classifying tank and alert the operator, both locally and remotely, of potentially failed components and/or operational conditions that are outside the normal operating parameters

Physical/Operating Characteristics

Dimension	Standard	Metric
Feed Material Size	- 3/8"	- 9.5mm
Capacity is dependent on water requirements for proper feed material dilution and desired material retention		
Water Requirements Up To	5,900 GPM	22,334 LPM
Operational Length*	42' 2"	12.9m
Operational Width*	13' 8"	4.2m
Operational Height*	32' 4"	9.9m
Approx. Dead Load*	52,700lb	23,904kg
Approx Live Load*	204,000lb	92,533kg
Approx Tank Volume	11,422 G	43,237 Liter

Overflow Capacities

Size	Overflow Capacity			Discharge Stations
	#100 Mesh	#150 Mesh	#200 Mesh	
8' x 32'	3,500	1,800	950	9
10' x 40'	5,900	3,000	1,550	11
12' x 48'	8,100	4,200	2,150	11

