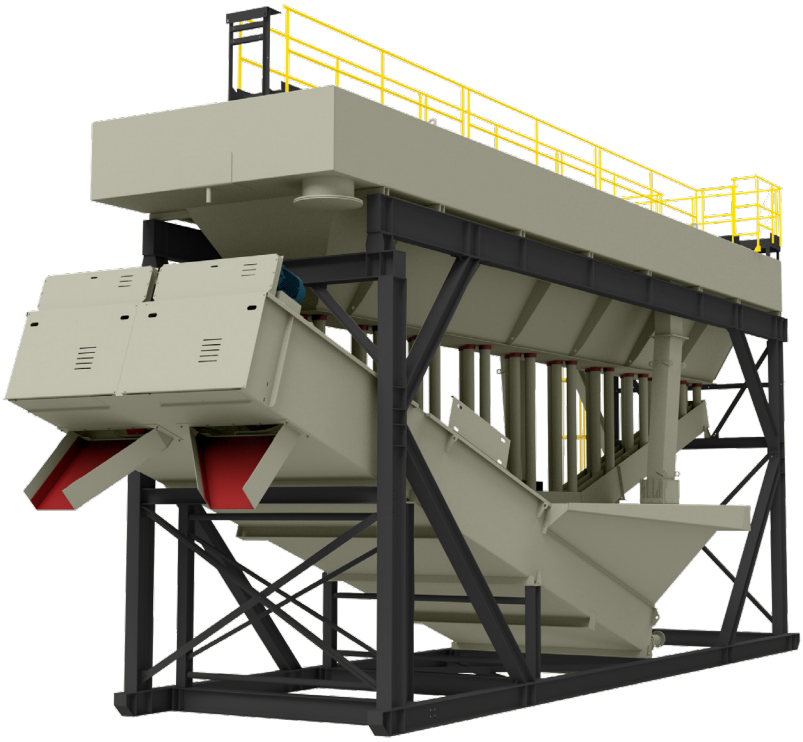
7012-48S54T

Skid-Mounted/Portable Classifying Tank



Model 7112-48 Classifying Tank
Main Tank and Collecting Flume

- Main tank - 5/16" (sides, ends, overflow launder and 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
- 80' of adjustable weir boards
- Integral overflow launder with dual discharge outlets
- 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)

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

Operating Mechanism continued on next page

Operating Mechanism

- 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

Note: See Model #7010-40 specification sheet for additional information

Model #5044-32T Dewatering Screw:
Main Tank

- 1/4" (sides & bottom) and 3/8" (rear end plate) welded plate steel construction
- Curved bottom with integral rising current manifold (4" dia. inlets)
- Large undisturbed pool area
- 31' of adjustable weir boards
- 1-1/2" chase water line connection
- Integral overflow flume

Spiral Assembly

- Spiral pipe - heavy wall 18" dia.
- Double pitch, solid flight spiral (one right hand, one left hand)
- Standard AR steel inner wear shoes
- Standard urethane outer wear shoes (cast Ni-Hard outer wear shoes are optional)
- Greaseable, externally mounted Dodge® Imperial E tail end flange bearing
- Greaseable Dodge® Type E pillow block head end bearing
- Lower end seal - chrome plated stainless steel wear sleeve, water tight bellows type rubber seal and secondary grease seal

Drive Assembly (One Drive Assembly Per Spiral)

- High efficiency v-belt drive assembly
- 30hp TEFC motor
- Dodge® TA-II double reduction shaft mount reducer

Discharge Chutes

- Independent/reversible tapered discharge chutes set at 45° angle to grade

Rising Current Accessories

- Externally mounted manifold with 4" butterfly flow control valve, 4" swing check valve, 0-100 psi pressure gauge and 1" gate valve and plumbing to the chase water connection

Note: See Model #5054-34T specification sheet for additional information

Plant Structural Support

- 12" wide flange skid runners
- Classifying Tank - 8" wide flange structural columns with horizontal and vertical bracing
- Dewatering Screw - 6" wide flange structural columns with horizontal and vertical bracing
- Ladder access to the bridge of the classifying tank (stair access is optional)

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
- Model #7212-48S54T: 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"	-9.53mm
Water Requirements Up To	8,100 gpm	1,840 m^3/h
Operating Length	58' 3"	17.75m
Operating Width	20'	6.10m
Operating Height	29' 1"	8.86m
Approx. Dead Load	117,600lb	53,342kg
Approx. Live Load	356,500lb	161,706kg