

5054-34S

Fine Material Washer



Main Tank

- 1/4" (sides & bottom) and 3/8" (rear end plate) welded plate steel construction
- Curved bottom with integral rising current manifold (6" dia. inlet)
- Large undisturbed pool area
- 26' of adjustable weir boards
- 1-1/2" chase water line connection
- Overflow flume with 12" dia. outlet
- 4" dia. tank drain

Spiral Assembly

- Spiral pipe - heavy wall 18" dia.
- Double pitch, solid flight spiral
- 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
- TEFC motor, horsepower dependent upon spiral speed - see "Raking and Overflow Capacity Table"
- Dodge® TA-II double reduction shaft mount reducer

Center Feed Box

- 14 1/2" dia. feed inlet
- Internally and externally baffled

Discharge Chute (Optional)

- Tapered discharge chute set at 45° angle to grade

Support Assembly (Optional)

- Independent mid and head end support weldments with 6" wide flange columns

Rising Current Accessories (Optional)

- Externally mounted manifold with 6" butterfly flow control valve, 6" swing check valve, 0-100 psi pressure gauge and 1-1/2" gate valve and plumbing to the chase water connection

Physical/Operating Characteristics

Dimension	Standard	Metric
Feed Material Size	-3/8"	-9.53mm
Angle of Operation	18.5°	18.5°
Capacity Up To	250 TPH	227 MTPH
Shaft Speed Up To	14 RPM	0.23 Hz
Water Requirements Up To	1,800 GPM	409 m ³ /h
Operational Length	37' 10"	11.53m
Operational Width	14' 1"	4.29m
Operational Height	16' 9"	5.11m
Approximate Dead Load	23,500lb	10,659kg
Approximate Live Load	66,200lb	30,028kg
Approximate Total Load	89,700lb	40,687kg

Physical/Operating Characteristics

100 Mesh	150 Mesh	200 Mesh
1,800 GPM	900 GPM	525 GPM

Raking and Overflow Capacity Table

Capacity	Screw Speed	Spiral Speed	Minimum Motor HP Required
250 TPH	100%	14 RPM	30
185 TPH	75%	11 RPM	25
125 TPH	50%	7 RPM	15
60 TPH	25%	4 RPM	10

Percent Screw Speed Vs. Percent Fines In Product

Screw Speed	% Passing (50 Mesh)	% Passing (100 Mesh)	% Passing (200 Mesh)
100%	15	2	0
75%	20	5	0
50%	30	10	3
25%	50	25	8