

# 5044-32S

## 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 (4" dia. inlet)
- Large undisturbed pool area
- 22' 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 14" 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 4" butterfly flow control valve, 4" 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	175 TPH	159 MTPH
Shaft Speed Up To	17 RPM	0.28 Hz
Water Requirements Up To	1,500 GPM	341 m <sup>3</sup> /h
Operational Length	35' 7"	10.85m
Operational Width	12' 2"	3.71m
Operational Height	15' 3"	4.65m
Approximate Dead Load	14,700lb	6,6687kg
Approximate Live Load	44,800lb	20,321kg
Approximate Total Load	59,500lb	26,989kg

## Physical/Operating Characteristics

100 Mesh	150 Mesh	200 Mesh
1,500 GPM	750 GPM	400 GPM

## Raking and Overflow Capacity Table

Capacity	Screw Speed	Spiral Speed	Minimum Motor HP Required
175 TPH	100%	17 RPM	20
130 TPH	75%	13 RPM	15
85 TPH	50%	9 RPM	10
45 TPH	25%	5 RPM	7.5

## 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