



## Model STS 500

STS 500 is a belt driven high speed 3 phase separator or 2 phase clarifier built by STS according to our own designs and specifications. All STS machines are backed by our exceptional performance warranty and are supported by local spare parts inventory and factory trained technicians.

## Proven Performance

### Technical Features

- Valve-type ejection system
- Liquid hermetic seal
- Gentle / Low shear feed design
- Adjustable ejection volume
- Enclosed solids discharge
- Short spindle + Cushioned drive
- Belt drive

### Typical Applications

- Brewing
- Fruit & Vegetable Juices
- Wine
- Citrus
- Dairy

### Benefits

- Precise automatic solids discharge
- Low oxygen pick-up
- Higher clarification efficiency
- Optimized ejection performance for each application
- Lower noise level
- Minimizes vibrational severity
- Low maintenance cost
- Discharge product streams under pressure
- Rendering Oils &Fats
- Coffee & Tea
- Wastewater & Environmental
- Proteins
- Nutraceuticals

## Flow Rates for typical applications\*:

Beer Polishing	95 - 120 m <sup>3</sup> /hr
Hot Wort Separation	70 - 75 m <sup>3</sup> /hr
Cold Wort Separation	50 - 60 m <sup>3</sup> /hr
Protein Recovery	35 - 45 m <sup>3</sup> /hr
Citrus Pulp Clarification	20 - 35 m <sup>3</sup> /hr
Essential Oil Concentration	20–25 m <sup>3</sup> /hr
NFC Top Oil Separation	35 - 45 m <sup>3</sup> /hr
Milk or Whey Skimming	45 - 50 m <sup>3</sup> /hr
Fish Oil Separation	30 - 35 m <sup>3</sup> /hr
Distillers Corn Oil Separation	12 - 25 m <sup>3</sup> /hr

\*Actual capacities are subject to the specific characteristics of the product & installation.

## Specifications

### Monitoring + Control:

- Process dependent ejection control determines time for optimal solids ejection
- Product flow rate auto-control
- Oil flow monitoring + control
- Vibration monitoring + control
- Bowl speed monitoring + control
- Air + Water pressure monitoring + control
- 

### Alternative Designs Available:

- Gravity discharge of light phase. (e.g. fish oil, rendering duties)
- With “Yellowfin” for improved purity. (e.g. Distillers Corn Oil)
- 2-phase clarifier or 3-phase separator design
- 

### General Specifications:

- Bowl material in EN 1.4418
- Other Product contact surfaces in 316 SS or higher
- Painted cast frame as standard (Stainless steel-clad frame optional).
- Bowl speed 4,800 rpm
- 55 - 75 kW main motor
- VFD + Resistance brake
- Allen Bradley CPU\*
- Allen Bradley PanelView Plus Color screen\*
- HMI fully customized to customer requirements included.\*\*

\* Alternatives upon request. \*\* Based on agreed specifications

Width (mm)	Length (mm)	Height (mm)	Weight (kg)
2645	1765	2228	

Dimensions not including control panel.

### Disclaimers:

This information serves as a non-binding description of our products and capabilities and does not constitute a guarantee of performance. The machine described is supplied by Separator Technology Solutions and its approved local representatives. Any resemblance to, or compatibility of parts with, competitor models is of a functional design nature and strictly should not be misconstrued as having further meaning. Machine shown on page 1 is not the STS 500 and is for illustration purposes only.