

Efficient and Cost-effective Clarification in the Brewing Industry







Efficient and cost-effective clarification

Current and evolving customer needs always come first at Seital Separation Technology. Via close collaboration with our customers, along with an innovative approach and cutting-edge R&D, we design, develop and deliver best-in-class separation solutions for the brewing industry that deliver superior quality and efficiency at the lowest possible cost.

Beer and beer wort clarification

SPX FLOW Seital brand hermetic separators remove residual yeast and other non-soluble solids quickly and efficiently without impacting the flavor and aroma of the beer.

Through extensive testing and numerous installations, SPX FLOW offers a wide range of experience and separation technology specifically designed for the needs of the beer processing industry. Optimization of design standards in addition to rugged material construction and strict quality control procedures ensure our customers receive the clarifier that is best suited for their demanding applications.

Benefits

- Short installation time
- All bowl main parts in DUPLEX and SUPERDUPLEX stainless steel; bowl and solids catcher in ambient stainless steel
- Special disk stack design for enhanced separation and longer processing time
- High reliability and safety
- Effective process control
- Lower maintenance requirement
- Lower investment requirement

Main characteristics of SPX FLOW beer clarifiers

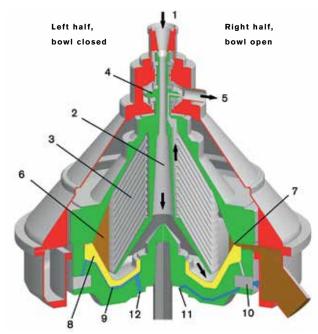
Product quality

- Hermetic separator achieves minimal oxygen pick-up, typically less than 10ppb
- Soft product feeding and discharging
- **Efficiency**
- High ratio between machine size and equivalent area of separation in order to achieve desired clarification efficiency at the highest flow rates
- Fast and precise discharge minimizes product losses and maximizes solids content at the discharge
- Time-based or turbidity measured automatic solids discharge option available

- Product recirculation device to minimize outlet turbidity at clarifier discharge
- Electro-magnetic flow meter for accurate flow measuring and for setting desired batch to be processed

Hygiene

- Higher hygienic conditions achieved through use of an additional set of Clean-In-Place (CIP) spray nozzles affixed to the cover of the bowl
- Frame covered by stainless steel to assure better clean ability and long-life
- All ambient stainless steel around the bowl to assure efficient cleanability



- 1. Product inlet
- 2. Distributor
- 3. Disk stack
- 4. Centrifugal pump
- 5. Clarified product outlet
- 6. Sludge chamber
- 7. Ejecting ports
- 8. Sliding piston
- Closing chamber
- 10. Bowl valve
- 11. Opening water inlet
- 12. Closing water inlet





BEER CLARIFIERS

Capacities up to, according to different clarification steps gal/h (hl/h) (*)

MODELS	HOT WORT g/h (hl/h)	TRUB WORT g/h (hl/h)	GREEN BEER g/h (hl/h)	BEFORE FILTRATION g/h (hI/h)	BEER RECOVERY g/h (hl/h)	SPECIAL POLISHING g/h (hl/h)
SE101	396 (15)	79 (3)	660 (25)	660 (25)	26 (1)	
SE111	1,188 (45)	132 (5)	1,320 (50)	1,320 (50)	53 (2)	
SE161	1,320 (50)	132 (5)	1,849 (70)	1,849 (70)	53 (2)	528 (20)
SE201	3,698 (140)	396 (15)	3,698 (140)	3,698 (140)	158 (6)	1,056 (40)
SE301	5,283 (200)	1,056 (40)	5,283 (200)	5,283 (200)	264 (10)	
SE401	6,604 (250)	1,056 (40)	6,604 (250)	6,604 (250)	264 (10)	
SE451	7,660 (290)	1,320 (50)	7,660 (290)	7,660 (290)	317 (12)	2,372 (90)
SE501	8,717 (330)	2,642 (100)	13,208 (500)	13,208 (500)	660 (25)	
SE601	10,566 (400)	3,170 (120)	15,850 (600)	15,850 (600)	792 (30)	2,905 (110)
SE701	14,001 (530)		19,812 (750)	19,812 (750)		

	INLET	OUTLET	
HOT WORT	< 1.5% v/v	<0.05% v/v	
TRUB WORT	< 15% v/v	< 0.2% v/v	
GREEN BEER	< 20 million yeast cells/ml	< 1 million yeast cells/ml	
BEFORE FILTRATION	< 10 million yeast cells/ml	< 0.5 million yeast cells/ml	
BEER RECOVERY (CM³)	< 30% v/v	< 1% v/v	

Safety and workplace environment

- Vibration monitoring and fast braking system (pneumatic or electric) for unattended operation
- Low operational noise level created by optimization of aerodynamic bowl design

Quality engineering and control

- Optimization of structural and dynamic design using advanced design technology
- Optimization of product fluid-dynamic with new vertical disk stack design
- Cutting-edge manufacturing and quality control systems



Service and expertise

Service and support for maximum output

- Maintenance and troubleshooting
 to avoid costly downtime
- Rapid delivery of original spare parts
 reliability for longer service life
- Remote monitoring fast problem solving

Knowledge partnership to keep you ahead

- Application testing and process optimization – higher revenues at lower cost
- R&D expertise new product development addressing evolving demand
- Operator training greater efficiency, minimum human error





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SPXFLOW



Based in Charlotte, North Carolina, SPX FLOW, Inc. (NYSE: FLOW) is a multi-industry manufacturing leader. For more information, please visit www.spxflow.com

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