

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 bestin-class separation solutions for the brewing industry that deliver superior quality and efficiency at the lowest possible cost.

Beer and beer wort clarification

SPX Seital 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 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 beer clarifiers

Product quality

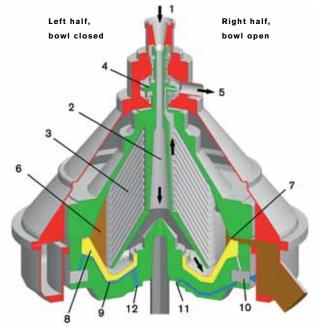
- Hermetic separator achieves minimal oxygen pick-up, typically less than 10ppb
- Soft product feeding and discharging
- Product recirculation device to minimize outlet turbidity at clarifier discharge
- Electro-magnetic flow meter for accurate flow measuring and for setting desired batch to be processed

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

Hygiene

- Higher hygienic conditions achieved through use of an additional set of 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
- 9. Closing chamber
- 10. Bowl valve
- 11. Opening water inlet 12. Closing water inlet

Beer Clarifiers

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

MODELS	HOT WORT hI/h (Gal/h)	TRUB WORT hi/h (Gai/h)	GREEN BEER hl/h (Gal/h)	BEFORE FILTRATION hI/h (Gal/h)	BEER RECOVERY hI/h (Gal/h)	SPECIAL POLISHING hi/h (Gai/h)
SE101	15 (396)	3 (79)	25 (660)	25 (660)	1 (26)	
SE111	45 (1188)	5 (132)	50 (1320)	50 (1320)	2 (53)	
SE161	50 (1320)	5 (132)	70 (1849)	70 (1849)	2 (53)	20 (528)
SE201	140 (3698)	15 (396)	140 (3698)	140 (3698)	6 (158)	40 (1056)
SE301	200 (5283)	40 (1056)	200 (5283)	200 (5283)	10 (264)	
SE401	250 (6604)	40 (1056)	250 (6604)	250 (6604)	10 (264)	
SE451	290 (7660)	50 (1320)	290 (7660)	290 (7660)	12 (317)	90 (2372)
SE501	330 (8717)	100 (264)	500 (13208)	500 (13208)	25 (660)	
SE601	400 (10566)	120 (3170)	600 (15850)	600 (15850)	30 (792)	110 (2905)
SE701	530 (14001)		750 (19812)	750 (19812)		

(*) The real clarifier capacity depends on the product characteristics and on the requested degree of clarification

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	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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ABOUT SPX

Based in Charlotte, North Carolina, SPX Corporation (NYSE: SPW) is a global multi-industry manufacturing leader. For more information, please visit www.spx.com

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SST-104-01-10-2013-US Version: 07/2014 Issued: 07/2014