Cricketfilter®

FILTRATION OF CANE SUGAR AFTER CARBONATION

The Cricketfilter® was successfully launched in 1990 and has since been installed in over 1,000 industrial and food applications globally. Its proven technology is well established in beet sugar and cane sugar applications.

The Cricketfilter® was developed to combine the advantages of pressure leaf filters and cartridge/candle filters whilst avoiding their drawbacks.

The Cricketfilter® is especially suited for separating fine solids from fluids, widely deployed in applications such as edible oil, gelatine, cocoa butter, sugar, sweeteners, oleo chemicals, mining and amine cleaning. The Cricketfilter® offers versatility for a wide range of applications while providing confidence in critical environments.

It is available as a standard in Stainless Steel 316L. Carbon steel and other special alloy materials, design pressures/ temperatures and design codes can be provided upon request.

The Cricketfilter® is used for direct filtration during carbonation and sulphitation steps and for precoat / body-aid filtration during thick juice, remelt and standard liquor steps (sugar end liquids). The Cricketfilter® is proven in beet sugar and cane sugar applications.

FEATURES AND BENEFITS

- Up to 40% larger filtration area than traditional pulse tube filter systems
- Large filtration area within a small footprint
- Hermetically closed system and can be fully automated
- Suitable for direct cloth filtration or precoat/body-aid filtration
- High filtrate quality
- The Cricketfilter® is simple to clean. It uses air or gas pulses for cleaning the elements section by section, without requiring a vibrator
- Low maintenance
- Suitable for a wide range of applications
- The Cricketfilter® can be used with filter cloths of various pore sizes and materials. This reduces and at times eliminates the amount of extrapre-coating needed, making filtration more economical.
- Cricketfilter® automation. It is possible to automate, therefore ensuring low necessary maintenance.

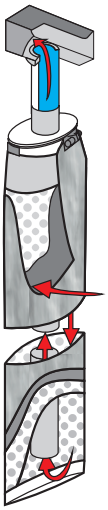
CHARACTERISTICS

- No internal manifolds, therefore no spray nozzle or height indication needed. This results in a lower investment and less maintenance.
- Side outlet, ensuring a completely drainable septum.
- Improve safety by reducing the use of bag filters. The risk when opening bag filter housings is eliminated.
- Improved cloth mounting because of the use of the proven Cricketfilter® type element construction.
- Easy to connect several filters, saving on space and investment.
- Easy to automate, therefore low maintenance required.
- Very high cleanability due to less parts.

PROCESS ADVANTAGES CRICKETFILTER®

- High sugar quality
- Short regeneration times
- Higher outputs
- Advanced slurry discharge

Cleaner filtrate brings tremendous benefits to the sugar-making process, from decreased evaporator scaling and lowered strain on thick juice filters to less filter aid consumption. The result is a longer cycle time for thick juice filtering – plus higher solids capacity sludge filters due to an increase in concentration cake slurry which reduces liquid recycled back into liming or first carbonation - freeing up more raw juice plant intake capability.



STANDARD DESIGN DATA

Criteria	Detail
Tank Material	Stainless Steel, others upon request.
Filter Elements Material	Stainless Steel
Design Pressure	-1/6 bar(g)
Design Temperature	-10/150 °C (depending on filter cloth)
Design	ASME VIII Div.1,others upon request
Approval	PED 2014/68/EU, SELO 02257 (China) , TR CU (EACU), U Stamp

Model	Filter area	Cake volume	Tank volume	Feed/Drain	Filtrate	Vent	Slurry Disch.	Weight	Height
	m^2	dm^3	dm^3	DN	DN	DN	DN	kg	mm
1200S-56-68	58	690	4010	100	4 x 65	80	200	1660	4655
1400S-78-68	78	1170	5600	150	5 x 80	100	200	2170	4955
1600S-108-68	108	1610	7500	150	6 x 80	100	250	3530	5200
1800S-139-68	139	2090	9700	200	6 x 100	150	250	3400	5495
2000S-180-68	180	2710	12300	200	7 x 100	150	300	5450	5845
2200S-272-68	222	3340	15100	200	9 x 100	150	300	6250	6080
2400S-272-68	272	4080	18500	250	9 x 100	150	300	7840	6420

Dimensions are for reference only. Subject to technical alteration without prior notice. Other sizes and models upon request.