

Clarification of cacao butter with Cricketfilter

1. Introduction

The Cricketfilter® is a pressure filter with a large specific filtration area due to the shape of the filter elements. The Cricketfilter® is unique because of its patented filter elements, which allow discharge of the filter cake by back pulsing.

The Cricketfilter® was introduced successfully into the cacao industry in 1988. The Cricketfilter® is used for clarification of cacao butter, directly after the cacao press. The Cricketfilter® is a proven filter system in this industry and successfully in use at many major cacao producers.

Clarification of cacao butter is thickening filtration. The Cricketfilter® is fed by a top feed. At the end of the filtration cycle the filter cake is back pulsed and sediments into the filter cone. The cylindrical part of the filter is emptied via the partial drain. Thereafter the cake slurry is drained through the bottom valve. The cake slurry is sent back to the feed tank before the cacao press, avoiding any product loss.



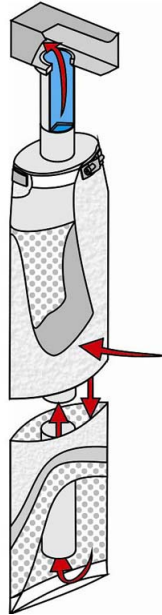
2. Description

The Cricketfilter®, which operates fully automated, produces a high filtrate clarity after a short recirculation time.

Elements are mounted on internal filtrate manifolds. Cake release by backpulsing with air is done for manifolds individually, which results in an effective backpulse. During the short regeneration time the filter medium is cleaned intensively, this results in a long life time of the filter cloth. The filter element spacing and the filter cloth are selected to suit the filtration needs of the application.

The filters are as standard equipped with a cover lift assembly.

A steam jacketed cone is standard. The Cricketfilter® itself has no rotating parts, keeping maintenance to a minimum.



3. Standard design data

Material tank	: carbon steel or stainless steel
Material filter elements	: stainless steel
Design pressure	: -1 / 6 bar(g)
Design temperature	: -10 / 150 °C (depending on filter cloth)
Max. allowable pressure drop	: 4.5 bar
Design	: AD-2000 and others on request
Approval	: PED 97/23/EC SELO 02257 (China) GOST R (Russia) and others upon request

4. Cricketfilter of cacao butter with Cricketfilter

Model	Filter area [m ²]	Element length [mm]	Element spacing [mm]	Cake volume [dm ³]	Filter volume [m ³]	Feed DN	Top feed DN	Filtrate outlet DN	Vent DN	Partial Drain DN	Slurry Drain DN	Steam jacket nozzle DN
800C-11/500-80	11	1500	80	220	1.1	50	50	2 x 50	50	50	150	25
1000C-19/1500-80	19	1500	80	370	1.8	65	50	3 x 50	65	50	150	25
1200C-35/1500-90	35	2000	90	690	3.4	80	50	3 x 65	80	50	200	25
1400C-50/2000-90	50	2000	90	1090	4.8	150	50	4 x 65	100	50	200	25
1600C-64/2000-90	64	2000	90	1420	6	150	80	5 x 80	100	50	250	25
1800C-84/2000-90	84	2000	90	1850	8	150	80	5 x 100	150	100	250	25
2000C-110/2000-90	110	2000	90	2420	14	150	80	6 x 100	150	150	300	25

Other models on request

Notes: Dimensions are for reference only. Subject to technical alteration without prior notice.

Please also ask for our polishing and safety filter for cacao butter.

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