

## **Short Abstract**

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### **A compact horizontally configured vertical tube continuous pan for high grade beet and cane sugar**

The most common and successful continuous vacuum pans (CVPs) for high grade sugar massecuites are vertical tube units, either horizontally configured or a stacked series of stirred batch pans. Horizontally configured CVPs are widely preferred in the cane industry because of their better crystal uniformity, lower maintenance and lower energy usage (no pumping or mechanical stirrers), but beet factories have opted largely for stirred stacked pans – possibly because of their smaller footprint and/or facility of partial on-line cleaning.

To meet these demands, Bosch Projects has now developed a stacked arrangement of horizontally configured split CVPs. This paper describes their new twin stacked CVP, which offers a small footprint and limited massecuite pumping requirement while retaining the unique advantages of their well proven horizontally configured design. The compact arrangement enables sets of four (of sixteen) compartments to be taken off line for boiling out while continuing to operate with good plug flow through the other twelve.

Results are quoted of evaporation rates, exhaustions and sugar quality achieved in existing twin (split) pans of this type. These results give confidence that a stacked pair of such pans will meet all the requirements for both high and low grade boilings in the beet industry.