IPRO
Braunschweig, Germany

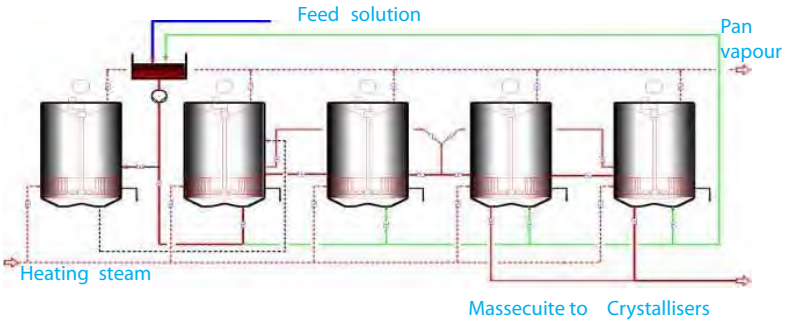
IPROINDIA
Chandigarh, India

Cascade^{plus} Continuous Pan

Being the largest vapour consumer in the sugar factory, the pan station is one of the most important areas to work on for plant optimization and to improve the energy economy.

IPROINDIA offers Cascade ^{plus} continuous pans which overcome the limitations of conventional horizontal continuous pans i.e. improved circulation by stirrers in each compartment, very low steam temperature and improved energy economy because of operation on 3rd to 5th vapour, what is a pre-requisite to achieve less than 30 % steam on cane.

A set of 5-6 pan compartments make a Cascade ^{plus} continuous pan. Each pan is equipped with a high performance mechanical circulator providing efficient massecuite circulation in the pans, thus a high crystal content can be handled easily to optimize the centrifugal performance and improve the sugar yield.



Schematic arrangement of *Cascade*^{plus}

Cascade^{plus} in operation at Almoiz Industries Ltd ., Pakistan

Design features and advantages

- High operational flexibility
- Produces high quality sugar with very low percentage of fines and conglomerates
- Improved sugar recovery due to the higher crystal content in the massecuite
- Small hydrostatic head over the calandria
- Operates with low pressure steam thus lower colour formation and low sugar losses
- Follows very good energy economy by using 3rd to 5th vapour
- Easy to bypass any of the compartments for cleaning. Therefore *Cascade* ^{plus} remains in operation throughout the season
- Equipped with *Pan* ^{plus} automation system providing very good control separately for each compartment
- Almost no dilution water requirement hence steam saving and capacity optimization
- Designed on ASME standards for operational safety and longer life
- Existing pans can be also retrofitted to convert them to *Cascade* ^{plus} depending on the design and quality of the pans

consultation • project work • engineering design • supervision