IPRO
Braunschweig, Germany

IPROINDIA
Chandigarh, India

Condenser plus Curtain Condenser

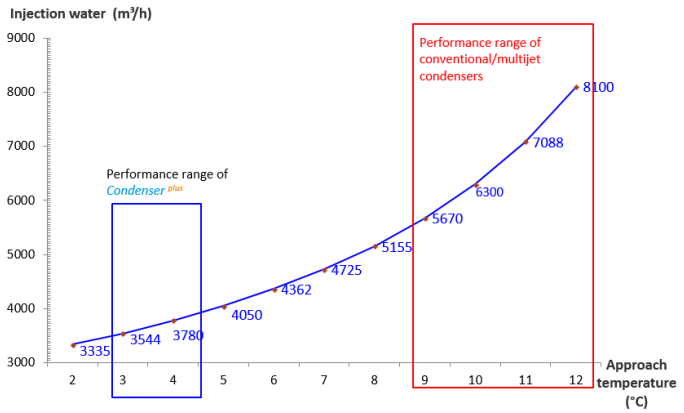
Condensers are essential for the sugar industry to carry out the crystallization process under low pressure conditions. Therefore, apart from creating vacuum in the pans, condensers can play significant role to optimize the pan station.

IPROINDIA offers counter-current curtain condensers - *Condenser* plus for efficient vacuum generation. *Condenser* plus are designed to work at an approach (vapour – tail pipe) temperature of 3-4 °C. They provide stable vacuum throughout the pan operation which is essential for an efficient crystallization process to avoid development of fines and crystal dilution. The absence of nozzles inside makes them maintenance free and the condensers can be operated throughout the season without any cleaning.

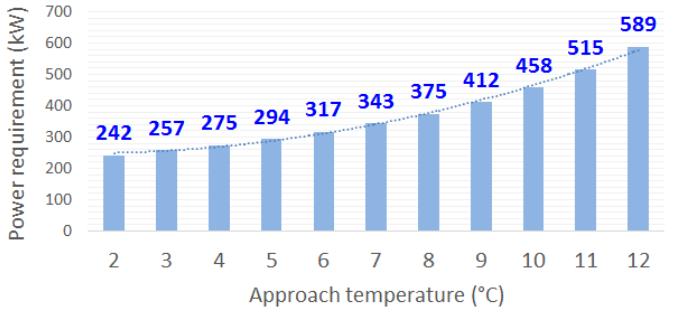
The *Condenser* plus condensers are employed for pans and evaporators. The condensers ensure good control on injection water, achieve stable vacuum and reduce the amount of injection water and required power considerably.

Some additional water will be required in the air ejectors or alternatively additional power for vacuum pumps will be required.

Injection water requirement to condense 100 t/h vapour at different approach temperatures



Power requirement at different approach temperatures



Design features and advantages

- Designed according to ASME standards for operational safety and longer life
- Operates at low approach temperature of 3-4 °C
- 40-60 % less injection water required
- Hot tail water leaving the condenser can be utilized for steam saving
- Maintains constant vacuum all the time
- High operational flexibility
- Fully automated
- Almost no maintenance required
- Substantial power saving at injection and cooling stations
- Saving on equipment structure & piping
- Less investment on cooling tower/ spray ponds
- Single or central condenser arrangement possible

consultation • project work • engineering design • supervision