

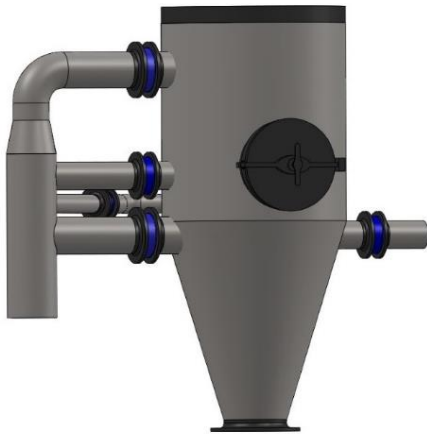
Condenser^{pro} Open Nozzle Condenser

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

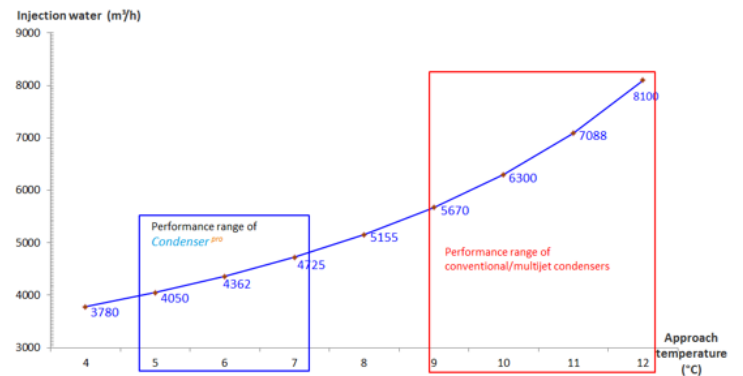
IPROINDIA offers direct contact multiple entry spray condensers *Condenser^{pro}* for efficient vacuum generation with open nozzles. *Condenser^{pro}* are designed to work at an approach (vapour – tail pipe) temperature of 5-7 °C. It provides stable vacuum throughout the pan operation which is essential for the efficient crystallization process to avoid development of fines and crystal dilution. Open nozzle design without any nozzle governing system makes them maintenance free and can be operated throughout the season.

The *Condenser^{pro}* is provided with multiple injection water inlets for precise control of injection water according to the vapours entering to the condensers.

Condenser^{pro} can be installed individually for each pan or evaporator or it can be also installed as common condenser for multiple pans and evaporators.



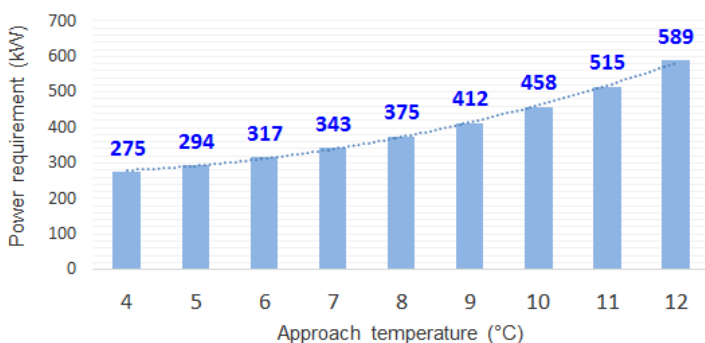
Injection water requirement to condense 100 t/h vapour at different approach temperatures



Design features and advantages

- Designed according to ASME standards for operational safety and longer life
- Operates at low temperature approach of 5-7 °C
- 30-40 % less injection water required
- Maintains constant vacuum all the time
- High operational flexibility
- Fully automated
- Almost no maintenance required
- Substantial power saving at injection and cooling stations
- Less investment in cooling tower/ spray ponds
- Without any nozzle governing system. All the controls are external, thus easy to maintain.

Power requirement for vapour condensation at different approach temperatures for 100 t/h vapour



consultation • project work • engineering design • supervision

