

Dryer^{plus} Rotary Drum Dryer & Cooler

Storing sugar at the right sugar temperature and humidity is very important to avoid sugar caking. Therefore, the sugar temperature should be reduced to less than 6 K above ambient temperature and the sugar moisture kept below 0.04 %. In many sugar mills the final temperature of sugar usually remains above 40 °C causing constant caking problems. In general, a lot of caked sugar is reprocessed which requires additional energy & efforts causing loss of revenues.

I PRO INDIA's rotary drum dryer & cooler is designed for optimum sugar residence time and a drum diameter to preserve the final quality of sugar with good brightness and less opacity. The semi-circular fins ensure that the whole cross section of the drum is covered by a sugar curtain, which improves contact of sugar with the air flows, again improving the heat exchange efficiency. The breakage of crystals during the drying/cooling process is minimized.

Besides the traditional chain drive arrangement, Dryer^{plus} alternatively comes with friction drives to reduce the annual maintenance cost as well as flexing and torsion of the drum body.

Design features and advantages

- High operational flexibility
- Sugar drying up to 0.03-0.04% of moisture
- Sugar cooling < 6 K above ambient temperature
- Curved fins of optimum size to ensure uniform spreading and efficient forward movement of the sugar
- Optimum residence time in order to achieve the desired results
- Minimum breakage and opacity of crystals
- Low maintenance cost
- Customised design as per environmental conditions
- Hardened tires and wheels for longer operational life
- Designed according to ASME standards for operational safety and longer life
- Manufacturing under the supervision of highly skilled German & Indian engineers
- Fully automatic operation



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