

FCB Preheater



High efficiency preheater cyclones

- Low Pressure Drop
- Slope at the inlet to avoid build-up
- Large cone outlet for smooth material flow
- Upper cyclones designed for a high efficiency
- Diameter up to 9.0m

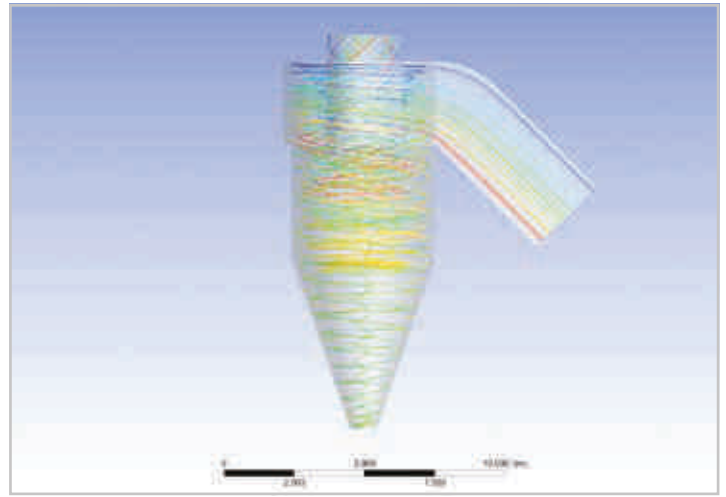
The latest innovations in preheater cyclones design

LATEST DEVELOPMENT

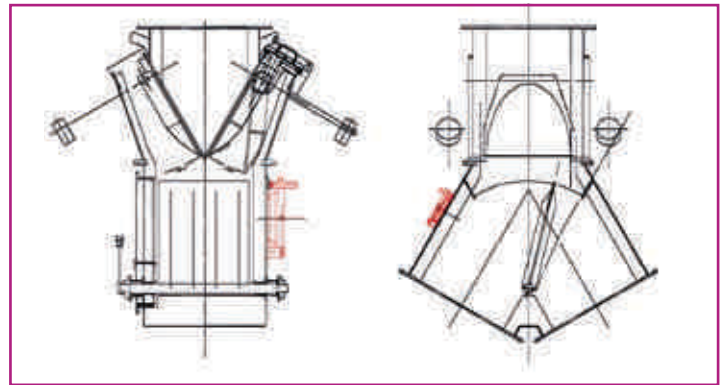
- Modern design for an improved efficiency:
 - slope at the inlet to avoid build-ups
 - large cone outlets for smooth materials flow
- Low pressure drop cyclones allow to lower the total preheater pressure drop
- Top cyclones can reach 97% settling efficiency
- Lower cyclones are equipped with segmented dip tubes better resisting to chemical wear at high temperatures
- Efficient splash boxes and tilt valves participate to the stable behavior of FCB Preheater

Less than
50 g/Nm³ | dust in preheater fumes

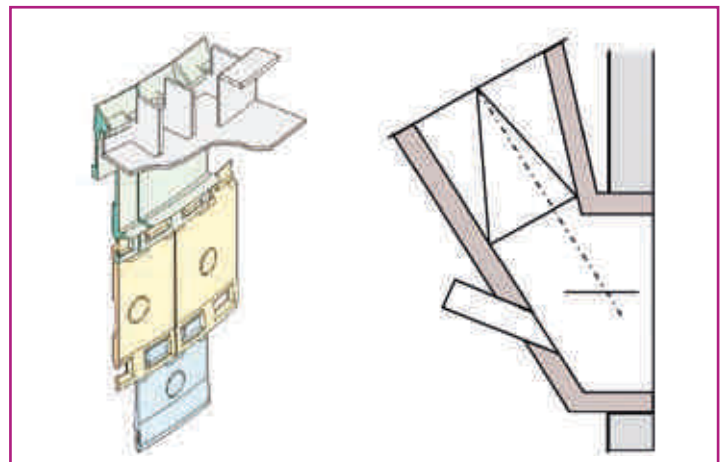
Less than
-450 daPa | pressure drop over a 5-stage preheater



CFD calculations are used to optimize flows and efficiency



Meal splitter gate under double flap valve



Dip tube

Splash box

- Overall design to achieve a very low pressure drop
- High heat transfer efficiency
- Very stable operation
- Fan power reduction
- Minimized heat and energy consumptions
- Reduction of dust load to filter