



LOW PRESSURE LOSS FLOW METER IMPROVES COMBUSTION AIR FLOW MEASUREMENT IN LARGE LINES

Customer

Glass Manufacturing Plant in Zhejiang, China

Application

The melting furnace is fueled by natural gas with strict control of the proportion ratio of natural gas and combustion air. This is also the key point to reduce emission, improve combustion efficiency and save cost.

Challenge

Pipe sizes are relatively large for combustion air, even up to DN900 (36 inches), but operation pressure is low. In order to ensure the stability and reliability of flow measurement of the combustion air flow, pressure loss of flow meters has to be minimized.

Solution

Emerson supplied a high precision flow measurement with the Rosemount™ Integral 3051SFA Annubar™ Flow meter. The Annubar flow meter is ideal for large line sizes, even up to 96 inches and is not limited by the shape of the pipeline."

The patented T-shaped sensor is capable of obtaining measurements via a single pipe penetration while maintaining a small profile in the pipe to reduce permanent pressure loss and increase energy savings.

The integrated flow meter design makes field installation very simple, reducing potential leakage points and ensuring the safety of field production.

Results

- Simplify installation and reduce potential leak points
- Ensure the safety of field production
- Integral thermowell of sensor adds process temperature measurement without additional pipe penetrations



Rosemount 3051SFA Annubar Flow Meter

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Integral 3051SFA Annubar Flowmeter solution, with a high precision flow measurement solution, which is inserted into the pipeline to install, not limited to the size or shape of the pipeline, especially suitable for large pipe sizes.

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*Maintenance Manager, Glass
Manufacturing Plant, Zhejiang, China*

For more information, visit
[Emerson.com/DPFlow](https://www.emerson.com/DPFlow)

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