CASE STUDY • PULP & PAPER



PAPER MILL REACHES RECORD HIGH PRODUCTION OUTPUT WITH ROSEMOUNT ANNUBAR FLOW METER

Customer

Pulp and paper company in Germany

Application

Steam flow metering

Challenge

The customer was looking to upgrade the efficiency of the plant and increase paper production with minimal investment costs. According to the customer's calculations an increase in the steam pressure at the inlet of the dryer section to the paper machine would result in a significant increase of production output.

The steam is coming from the power house to the dryers. By measuring steam flow, condensate return, and the amount of energy supplied, the customer can calculate the efficiency of the paper machine and of the heat recovery system. They can also determine if there are any steam losses in the system. Additionally, by measuring the steam flow, the customer can determine the proper amount of specific energy applied for paper production.

The plant was previously using old orifice plates for measuring the steam flow to three of their paper machines.

Solution

In order to increase the line pressure and upgrade the flow measurement, Emerson provided the customer with the Rosemount[™] Annubar[™] Flow Meter solution. The choice of flow meter was based upon the following main criteria:

- Calculations showing low permanent pressure loss versus the existing flow meter
- · Minimal modification to the existing piping

Results

- High production output with
 increased return on investment
- Lowered permanent pressure
 loss
- Improved installation with fully pressure and temperature compensated compact flow solution



Installation of the Rosemount Annubar Flow Meter



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• A fully pressure and temperature compensated measurement in one complete package

After installing the Rosemount Annubar Flow Meter, the customer had record high paper production and one of the main reasons for this was due to the increased pressure in the paper machine steam heads. Just by replacing an old flow meter, the customer achieved higher production rates and efficiencies. The increase in line pressure was achieved with a cost effective solution as compared to other alternatives. Emerson is committed to helping customers keep the competitive edge in their industry by allowing them to save costs with innovative solutions.



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Mass flow measurement provides cost saving

For more information,visit Emerson.com/PulpandPaper Emerson.com/DPFlow

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