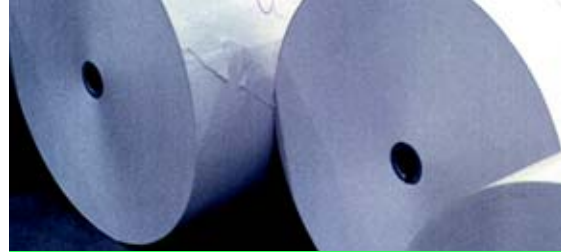


# Pulp and Paper Mill Saves on Installation Costs

## RESULTS

- Saved 80-90% on wiring costs
- Improved integrity of critical temperature measurements
- Reduced maintenance costs and commissioning time



## APPLICATION

Bearing and Winding Temperature Measurement

## CUSTOMER

Pulp & Paper Mill in India

## CHALLENGE

A major supplier of coated paper board and copier paper to the Indian market was installing a new cogeneration boiler. As part of the project they needed to monitor 80 bearing and winding temperatures in motors. In the past they had used 12-point scanning devices with local indicators, but with 80 points to monitor on the new boiler they preferred to display and monitor them at the control system.

The cost of running the 80 resistance temperature detectors' leads all the way to the control room or using locally mounted individual temperature transmitters with 4-20mA two wire signals, however, was prohibitive. Multiplexors were an option, but the integrity of the signals was paramount - they were critical to the operation of the motors, the boiler and, ultimately, the plant itself.

## SOLUTION

Emerson Process Management provided an answer with the Rosemount 848T Eight Input Temperature transmitter with FOUNDATION™ fieldbus output.

The engineers at the pulp and paper plant had never used fieldbus and were apprehensive. Emerson engineers demonstrated that with the H1 board in the control system, fieldbus could reliably carry the temperature data to the control room. As a bonus, they would have significant savings on installation, configuration and commissioning. The diagnostic functions would also reduce maintenance costs.

*The diagnostic information made it possible to remotely determine a field device problem, saving costly trips to the field.*



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The Rosemount 848T accepts eight independently configurable sensor inputs and outputs the values on fieldbus. At this pulp and paper mill, the ten 848Ts, locally mounted, converted all eighty RTD temperature sensors to the fieldbus protocol so that just one fieldbus cable had to be run to the control room.

Fieldbus has proven that it can have dramatic benefits for end users. Wiring cost savings of 80-90% over conventional installations are being realized. The configuration and diagnostic information available in fieldbus devices greatly reduced commissioning time. The diagnostic information makes it possible to remotely determine a field device problem, saving costly trips to the field. For example, the Rosemount 848T provides continuous measurement status (good, bad or uncertain) as well as sensor failure indication.

The pulp and paper mill engineers were impressed by the advantages of fieldbus and the success of the project. They have since installed three more 848T transmitters and recommended the system on other projects within their company.

## RESOURCES

### Rosemount 848T

<http://www.emersonprocess.com/rosemount/products/temperature/m848t.html>

### Emerson Process Management's Pulp & Paper Industry Web Page

<http://www.emersonprocess.com/solutions/paper/>

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#### Emerson Process Management

Rosemount Division  
8200 Market Boulevard  
Chanhausen, MN 55317 USA  
T (U.S.) 1-800-999-9307  
T (International) (952) 906-8888  
F (952) 949-7001  
[www.rosemount.com](http://www.rosemount.com)

#### Emerson Process Management

Heath Place  
Bognor Regis  
West Sussex PO22 9SH  
England  
T (44) 1243 863 121  
F (44) 1243 867 554

#### Emerson Process Management

Emerson Process Management Asia Pacific  
Private Limited  
1 Pandan Crescent  
Singapore 128461  
T (65) 6777 8211  
F (65) 6777 0947  
Enquiries@AP.EmersonProcess.com

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[www.rosemount.com](http://www.rosemount.com)

  
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