

# APPLICATION NOTE - INSULATION BOARDS KINGSPAN

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## APPLICATION NOTE

### IMPROVED PRODUCTION METHOD FOR INSULATION BOARDS

One of the main activities of Kingspan Insulation is to produce insulation boards for roofs, walls and floors. An essential part of this production process is to control the mainstream very accurate and stable. Besides that, the additives which will be added to the mainstream, need to be dosed with a very high accuracy. To gain the best quality of the end product, Kingspan started a collaboration with Bronkhorst and PROFIBUS.

Kingspan Insulation and Bronkhorst analysed the production process and identified the problems. To gain the best results, replacing the large sensors and pumps (which were controlling at the bottom of their range) was necessary.



#### Coriolis mass flow meter with pump

Using (mini) CORI-FLOW instead of much larger mass flow meters and pumps, resulted in the following benefits:

- Very fast production of a high quality board
- Improve the quality of the boards
- Multiple parameter control over PROFIBUS

By using the (mini) CORI-FLOW sensors, Kingspan Insulation gained a very fast response time of the sensors. This resulted in the possibility to produce (very fast) a high quality board. After introducing the sensors of Bronkhorst, the quality of the end product raised significantly. The amount of the rejected end products has been decreased to the minimum. The communication over PROFIBUS made it possible to monitor multiple parameters like pump-control status, fluid density, alarms, totalizers, etc.

## Recommended Products



**MINI CORI-FLOW™ M12**

Min. flow 0,1...5 g/h  
Max. flow 2...200 g/h  
Pressure rating 200 bar  
Independent of fluid properties  
High accuracy, fast response



**MINI CORI-FLOW™ M15**

Min. flow 0,2...5 kg/h  
Max. flow 3...300 kg/h  
Pressure rating 100 bar  
Independent of fluid properties  
High accuracy, fast response



**CORI-FLOW™ M54**

Min. flow 0,2...5 kg/h  
Max. flow 5...100 kg/h  
Pressure rating 200 bar  
Independent of fluid properties  
High accuracy, fast response



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