

# NCFC Improves Safety and Measurement Accuracy with Rosemount™ 5708 3D Solids Scanner

## RESULTS

- Real-time knowledge of the material surface levels
- Personnel safety increased
- Quicker, easier commissioning and maintenance



## APPLICATION

Cellulose fiber measurement in large silos

## CUSTOMER

Nantong Cellulose Fibers Co., Ltd. (NCFC)

## CHALLENGE

NCFC is an integrated production complex for chemical, fiber and thermal power. The company produces, processes and sells cellulose fiber and has a production capacity of 100,000 tons.

NCFC stores the cellulose in a large silo, 11.5 meters (38 feet) in diameter and 24 m (79 ft) high, with an effective measurement range of about 18 m (59 ft). The material is fed and discharged continuously into the large silo and the cellulose sheets become unevenly piled. The company used a heavy hammer level indicator and phase measuring instrument to measure the level. That measurement was inaccurate because it was unable to reflect the true material level in the silo.

The installation of the heavy hammer level indicator was also very complex. Calibration was difficult because the material in the silo had to be emptied each time, which was a very time-consuming activity. There were also safety issues because it was necessary for maintenance personnel to climb to the top of the silo to make visual inspections. In addition, the investment and maintenance cost of the phase measuring instrument was very high.

## SOLUTION

To address these challenges, NCFC installed a Rosemount 5708 3D Solids Scanner. Installation was easy; the existing 8-in. flange connection from the malfunctioning heavy hammer level indicator was reused, along with the existing 24V dc power supply. Once installed, Emerson™ service engineers configured the instrument at the site.

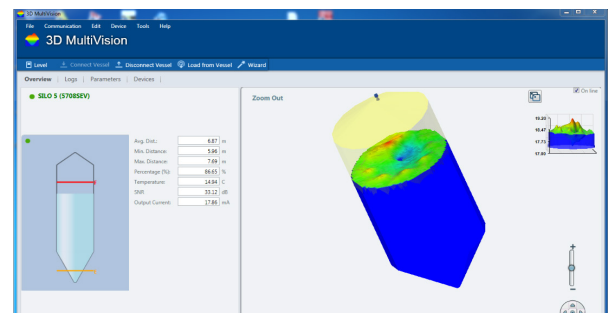
The Rosemount 5708 provided accurate average level measurements of the silo contents with visual indication of the changes in the material surface. Operators are no longer required to climb the silos to check the contents, resulting in improved personnel safety.

*“The Rosemount Solids Scanner truly reflects the geographic features of the material in the silo.”*

**Wei Zhuchun**  
System Engineer  
Nantong Cellulose Fibers Co., Ltd.



*The scanner is installed using the existing connection*



*Visualization of the silo contents*

## RESOURCES






### Rosemount 5708 3D Solids Scanner

[EmersonProcess.com/Rosemount/3D-Solids-Scanners](http://EmersonProcess.com/Rosemount/3D-Solids-Scanners)




### Emerson Process Management Chemical Industry

[EmersonProcess.com/Industries/Chemical](http://EmersonProcess.com/Industries/Chemical)

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#### Global Headquarters Emerson Process Management

6021 Innovation Blvd  
Shakopee, MN 55379 USA  
 +1 800 999 9307 or +1 952 906 8888  
 +1 952 949 7001  
 [RFQ.RMD-RCC@EmersonProcess.com](mailto:RFQ.RMD-RCC@EmersonProcess.com)




#### Europe Regional Office Emerson Process Management Europe GmbH

Neuhofstrasse 19a P.O. Box 1046,  
CH 6340 Baar, Switzerland  
 +41 (0) 41 768 6111  
 +41 (0) 41 768 6300  
 [RFQ.RMD-RCC@EmersonProcess.com](mailto:RFQ.RMD-RCC@EmersonProcess.com)

#### Middle East & Africa Regional Office Emerson Process Management

Emerson FZE P.O. Box 17033  
Jebel Ali Free Zone - South 2  
Dubai, United Arab Emirates  
 +971 4 811 8100  
 +971 4 886 5465  
 [RFQ.RMDMEA@EmersonProcess.com](mailto:RFQ.RMDMEA@EmersonProcess.com)

#### Asia Pacific Regional Office Emerson Process Management Asia Pacific Pte Ltd

1 Pandan Crescent  
Singapore 128461  
 +65 6777 8211  
 +65 6777 0947  
 [Enquiries@AP.EmersonProcess.com](mailto:Enquiries@AP.EmersonProcess.com)

00830-0300-4570, Rev AA

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