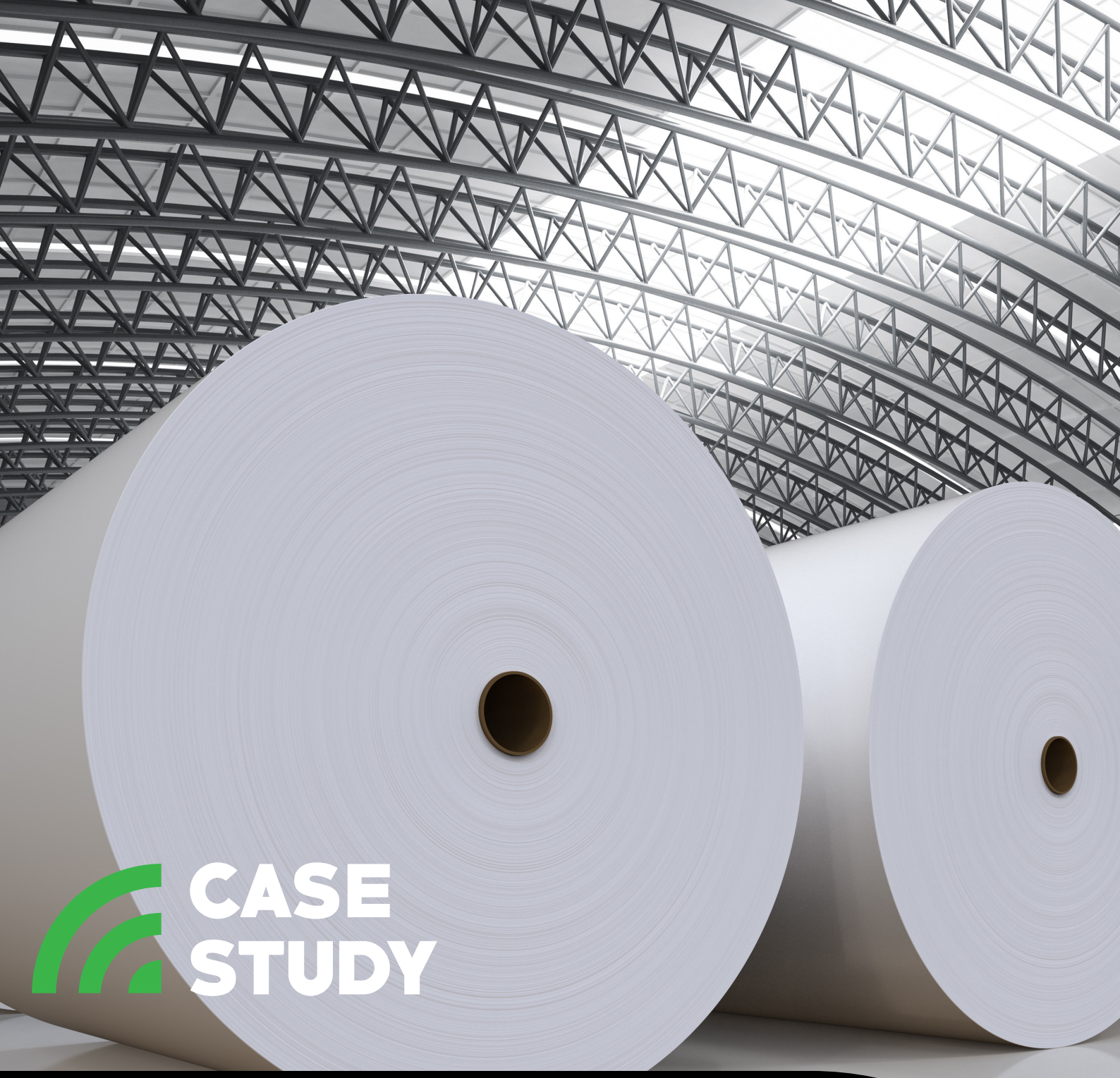


CASE STUDY

After a month of testing the **customer** was **very satisfied** with the density measurements of the **Rhosonics CDM**.

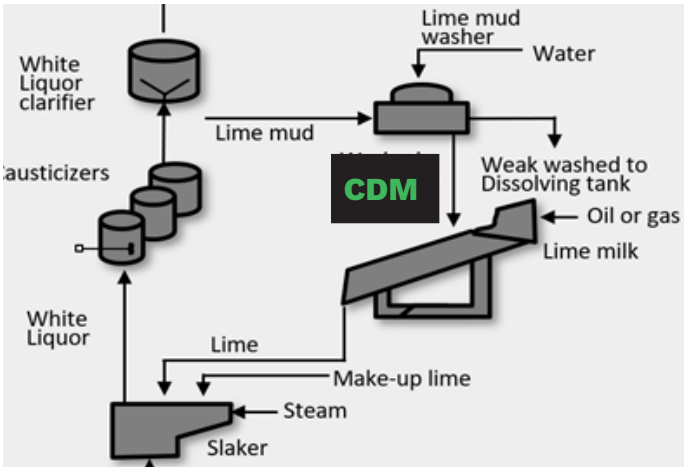
Case Study - Paper Mill In Canada

Introduction

At our costumer's paper mill, they want to measure and control the density of lime mud before the rotary kiln. The customer was always using radiation-based density meters in the past but wanted to look for sustainable alternatives. They decided to start a trial with the Rhosonics non-nuclear Chemical Density Meter (CDM) for one month.

Challenges

The density is a critical parameter at this point of the process, because when correctly managed, it could prevent maintenance and downtime due to material that is sticking inside the rotary kiln. The customer wants to keep the density at a steady point, which means not too high or too low, close to the target value.



The CDM installation point in an example process flow diagram

Measuring tasks

Measuring density and suspended solids content in lime mud before entering the rotary kiln.

Pipe diameter:	62 mm (three inches)
Pipe material:	Stainless steel
Density range:	1350 – 1450 g/l

Our solution

The CDM is a great choice to determine the density and suspended solids content of chemical slurries. The measurement enables the customer to monitor the density in real-time and without using hazardous radioactive materials (RAM), which gives the instrument a lower total cost of ownership (TOC).

Instrument used

Non-nuclear Chemical Density Meter (CDM 9670) installed with a UFTW wafer cell.

Results

After a month of testing the customer was very satisfied with the density measurements of the Rhosonics CDM. The CDM gives the same density measurements as the nuclear device and on top of that, with the CDM they can measure the suspended solid content through a second analogue output.

Application

The CDM installed in the same line as to where the radiation-based density meter is measuring density

Benefits

- Real-time in-line solids and density monitoring
- Wide range of measuring parameters
- The advantages of non-nuclear technology such as:
  - No license needed
  - No radiation safety officer (RSO)
  - No administrative paperwork
  - No area restrictions or limited access

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