

TECO Technical Solution #2

Accurate Pulp Mill Consistency Measurement Required

Problem / Issue: Pulp Mill Consistency Measurement Requires Accurate Measurement over a Wide Range of Consistency Levels.

TECO Solution: C9700 Fixed Wing Consistency Sensor.

Overview: The overall throughput (TPD) of the fiber line is traditionally calculated from a single consistency measurement device. This measurement must be accurate and repeatable.

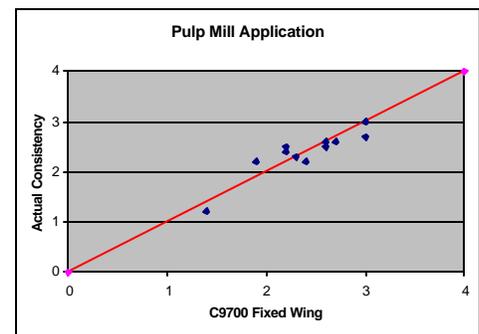
The tonnage rates derived for the pulp mill are used to calculate chemical addition rates (i.e., digester penetrant levels), environmental compliance rates, methanol production allotments, etc. This single consistency measurement is critical to the overall pulp mill production.

How the TECO Solution Solves The Problem...

The TECO C9700 Fixed Wing Consistency Sensor is designed to accurately measure over a wide consistency range, including low consistency swings from variations in blow tank levels. This sensor has proven consistency ranges from 1.5 % to 7.0%, over a wide range of velocity (flow) rates.

As an example, the following graph displays the results from a southern kraft pulp mill application, after the blow tank, prior to the defiberizer.

The graph to the right displays the actual results from lab verification samples taken from the defiberizer.



Benefits

Wide Consistency Range – accurate across a variety of consistency levels

Simple / Reliable Probe Design – no moving parts or maintenance issues

Stable Calibration and Excellent Repeatability – for complete consistency control

Who is it Important to ?

Pulp Mill Superintendent
Bleach Plant Superintendent
Process Control Engineer
Maintenance Manager
Instrument Superintendent