Optech

measurement at the speed of light

PRODUCT APPLICATION NOTE
SN0202

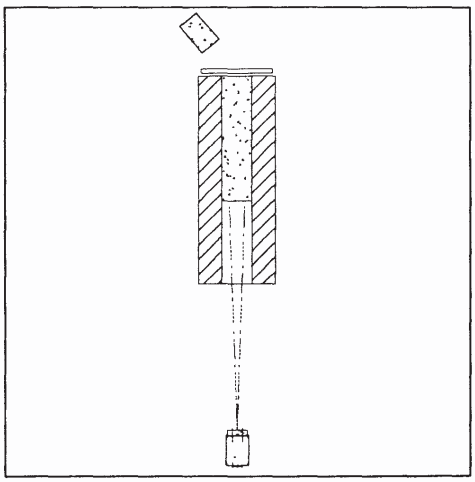
Industry:	Pulp, Paper and Wood Mills
Application:	Log length measurement
Optech Equipment:	SENTINEL 3100
Application Description:	The customer required a sensor to measure the length of rough logs before further processing.

Optech installed its SENTINEL 3100, a NEMA 4 laser level monitor, at a large pulp and paper company. The company wanted an accurate, non-contact method of measuring the length of rough logs before they are cut and processed in a sawmill. In the past, a combination of human judgement and tape measurement was used to determine overall log length, resulting in a crude measurement. Since the wood being processed has an extremely high log value, every inch of optimized log length is critical.

The SENTINEL 3100 is installed 60 feet from the blade cut-off saw, which is set at a reference of 0.00 feet. The unit is positioned to sense down to the log trough at approximately 6 inches from the base of the trough. When a log is rolled into the trough, the analog value of the distance to the log is measured. This value is subtracted from the distance to the saw blade and scaled, and the log length is displayed. Readings are calculated only when the leading edge of the log is at the blade or zero position. The unit is operational in an outdoor environment and is exposed to rain, fog, snow and temperature variations. The accurate measurement of the log length has resulted in high cost savings and more efficient operation.

KEY ADVANTAGES OF LASER TECHNOLOGY IN PROCESS CONTROL

- Measurements unaffected by temperature variations
- Measurements can be made in rain, snow or fog
- Measurements can be made to virtually any type of material
- Non-contact measurements
- Highly accurate measurements
- Short setup time with no calibration required



300 Interchange Way • Vaughan, ON • Canada L4K 5Z8
Tel: [905] 660-0808 • Fax: [905] 660-0829
Web: www.optech.ca • Email: inquiries@optech.ca