CoAguLite™

Cutting Time Control Technology

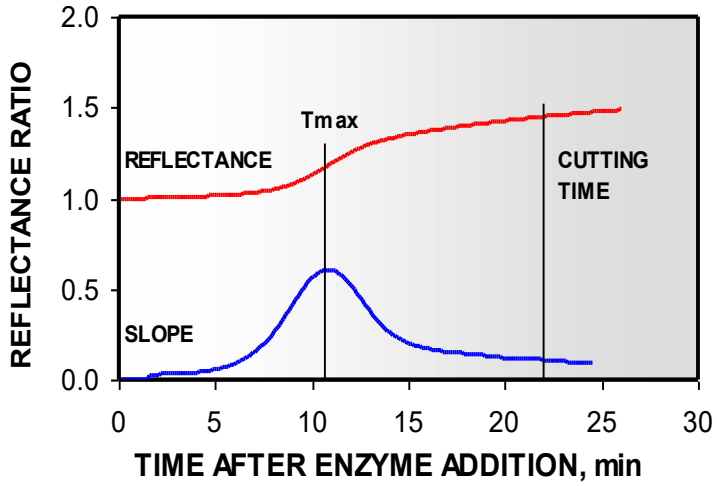
Revised: April 9, 2024

- **Replicates the cheesemaker's cutting time selection**
- **Reduces whey fat losses**
- **Improves moisture control**
- **Reduces fines losses**
- **Provides enzyme addition confirmation**
- **Provides consistent selection of cutting time**
- **Alerts of non-standard vats**
- **3-A Compliant Design**

The CoAguLite Cutting Time Control Technology provides consistent cutting times, reduces whey fat losses, reduces fines losses, and improves moisture control. This CoAguLite sensor determines the enzymatic reaction rate of the coagulating milk, providing the ability to adjust for changes in temperature, pH, added calcium, enzyme concentration, and milk reactivity. CoAguLite sensor and PLC software are used to implement this technology and analyze the measured response to determine the time-parameter, *Tmax*.
Tmax is a direct measure of enzyme kinetics and is used to predict cutting time as follows:

*Predicted Cutting Time = BETA * Tmax*

BETA is a setpoint selected by the cheesemaker to control cutting time to the desired gel firmness. A cutting time prediction model that corrects for protein variation is included.

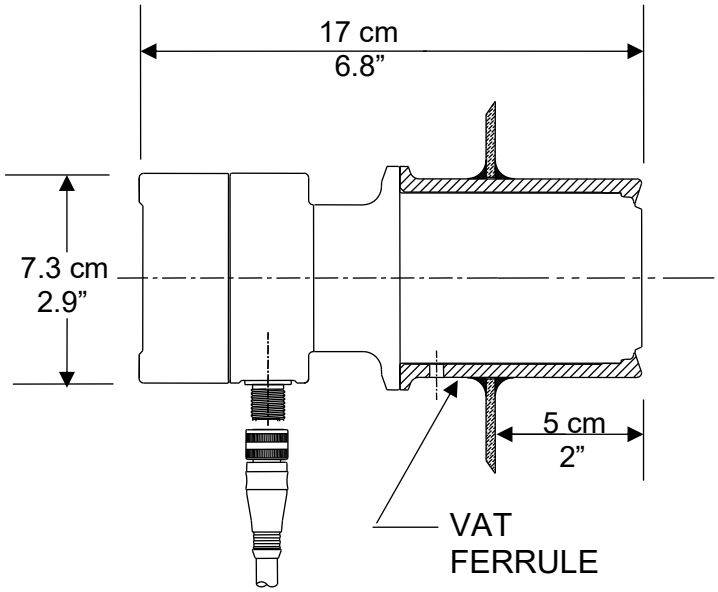


Reflectance profile measured during coagulation

CoAguLite Model 7 sensor with a vat ferrule and 2.5" Tri-Clamp connector

CoAguLite Technical Specifications

❖ Standard Compliance	NEMA 4X (watertight, corrosion resistant) CE Mark Verified Class A under EN 61326-1 CE Mark Safety EN 61010-1 3A Sanitary Standard 46-04
❖ Probe O-Ring	Viton
❖ Distal Tip O-Ring	Viton
❖ Sensor housing and ferrule	316 SS
❖ Plastic probe	Ertalyte
❖ Optical Window	Sapphire and Grade 2 Titanium
❖ Output signal	4-20 mA
❖ Cable	M12 shielded 5 pole with SS nut
❖ Operating Temperature Limits	Head, 60 °C; Probe, 100 °C
❖ Connections	2.5” Tri-Clamp to a proprietary port
❖ Required Power Supply	24 VDC, 100 mA max, grounded common
❖ Serial Number	Etched onto SS (S/N plus mfg. date: year-month-day)



Vat mounted configuration of the CoAguLite Model 7 sensor

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