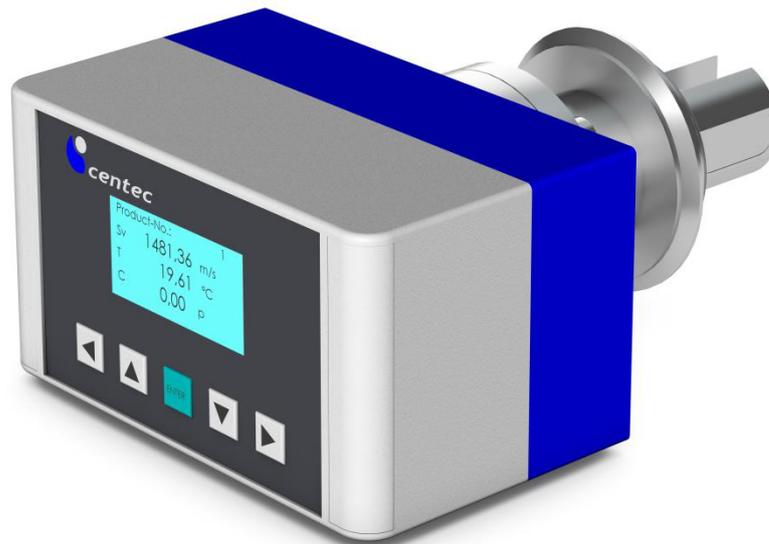


## Plato Measurement by Sound Velocity

PLATO MONITOR



### The Principle

PLATO MONITOR is a variant of SONATEC and allows measuring original gravity of beer in the brewing process. Typically, original gravity is determined during beer filtration and in front of the filler. The instrument is designed for applications requiring maximum sensitivity and highest accuracy. It is easy to operate and maintenance-free. For sound velocity measurement a sound pulse is created by a piezo-element in a sonic transmitter. It moves perpendicular to the product flow towards a sonic receiver where it is detected. Since the distance between transmitter and receiver is known, the sound velocity can easily be calculated by measuring the travel time of the sonic signal. As a specific property of each liquid, the correlation between concentration and sound velocity can be described by a mathematical polynomial. With decades of experience and our own laboratory facilities, Centec know the polynomials for a large number of products. Any temperature drifts of the measured signal are automatically compensated for.

## Technical Data

Measuring Range	0 - 25 °Plato
Accuracy	± 0,05 °Plato
Temperature of Product during the Measurement	-3 - +25 °C
Response Time	≤ 1 s
Pressure of Operation	max. 16 bar
Temperature of Operation	- 25 - + 125 °C (Pt1000)
Material	1.4404/1.4435/AISI 316L; Hastelloy; Tantalum; etc.
Input	6 x digital (24 VDC)
Output	3 x digital (24 VDC) & 2 x analog (4 - 20 mA)
Profibus DP	option
Enclosure Rating	IP65
Power Supply	24 VDC

## Highlights

Very accurate determination of original gravity in the brewing process  
Patented compact design with local display available  
Hygienic execution; various materials and flange connections

## The Centec Group

Centec offer fully automated, skid-mounted process units and high precision measurement technology from a single source. Our systems and sensors are engineered to perfectly meet the most demanding requirements of the brewery, beverage, food and pharmaceutical industries. With a team of experienced engineers, we aim to create quantifiable added value for our customers. We are your partner from planning and design through to commissioning of your plant.



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