

# CLAROMETER



**B-R Controls Pty Ltd**

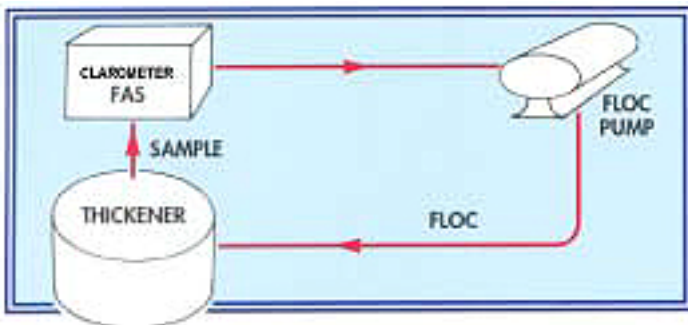
**OSCILLATION**

OSCILLATION PTY



The CLAROMETER<sup>®</sup> family of products provide a means of directly sampling the effect of flocculant dosing levels in a thickeners infeed. The CLAROMETER<sup>®</sup> draws a sample from the centre well of a thickener, under vacuum, into a special cylinder. With the intake complete, the sample will start to settle. As the interface falls, it passes a specially positioned optical sensor. By comparing this real time value with a pre-set reference time, it is possible to accurately control the floc dosing. The CLAROMETER<sup>®</sup> Has no moving parts other than solenoid operations, with manual testing of all operations an integral feature.

The CLAROMETER<sup>®</sup> - FLOCCULANT ADDITION SYSTEM, is a fully stand alone, automatic control system. It generates analog signals to control both anionic and cationic floc pumps. It also produces settling time values for recording or display. All system variables are accessed through a message display unit.

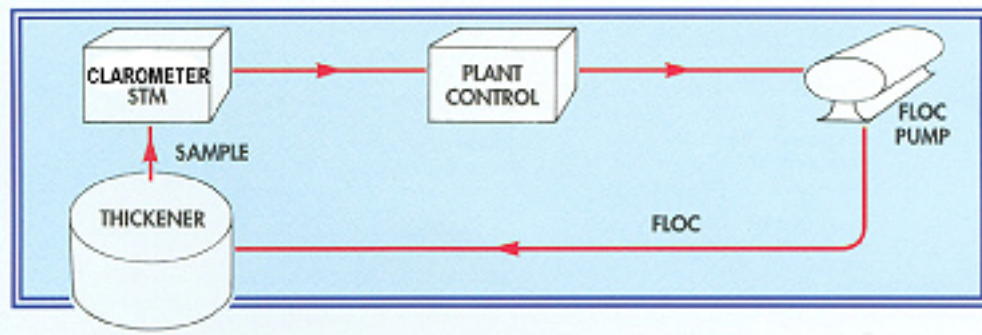


# CLAROMETER

OSCILLATION

OSCILLATION PTY LTD

The CLAROMETER® —  
SETTLING TIME MONITOR, has  
an identical sampling method to  
the Floc Addition System. It has  
no pump controlling capabilities.  
Its function is to provide raw  
settling data, in digital or analog  
format, to the plant control  
system, which will in turn control  
the floc pumps.



The CLAROMETER® -  
CLEAN SERVICES unit, is a  
316 stainless cabinet,  
housing an air regulator /  
filter, and water filter. It  
removes impurities from low  
quality services. This  
recommended option  
complements the  
CLAROMETER®, and will  
simplify the site installation.



### Additional Features of the CLAROMETER® are:

- Comprehensive Manuals
- Optional Panel Heater
- Optional S—tube for those applications with aerated or excessive fines
- Photo Cell Sensing Option
- Turbidity Probe Sensing Option

### SPECIFICATIONS:

#### CLAROMETER® - FAS

Dimensions— 900W x 650H x 330D  
36in x 26in x 13in

Weight—70kg / 154 lbs  
Material—316 Stainless Steel  
Rating—IP65 / NEMA 4

#### CLAROMETER® - STM

Dimensions— 900W x 650H x 330D  
36in x 26in x 13in

Weight—65kg / 143 lbs  
Material—316 Stainless Steel  
Rating—IP65 / NEMA 4

#### CLAROMETER® - CLEAN SERVICES

Dimensions - 430W x 490H x 220D  
17in x 19in x 9in

Weight—20kg / 40 lbs  
Material—316 Stainless Steel  
Rating—IP65 / NEMA 4

### REQUIRED SERVICES

Electrical—110VAC, 6amp, 50/60Hz  
Air—550kpa / 80psi, peak demand 12cfm  
Water (typically) - 275kpa / 40psi

### CLAROMETER® SAMPLE

Max vertical lifting height—5.5m / 18ft  
Cylinder volume—4 litres / 1 US gallon  
Typical sample time—1 min to 3 min

### OUTPUT SIGNALS

**CLAROMETER® - FAS:** 4-20mA for anionic pump control  
4-20mA for cationic pump control  
4-20mA for settling time display

**CLAROMETER® - STM:** 4-20mA for turbidity data  
voltage free interlock for PE sensor  
voltage free interlock for fresh sample  
voltage free interlock for alarms

**ENVIRONMENTAL:** Temperature 0°C to 50°C (32° to 120°F)  
Humidity 5% to 95% non condensing