



Model 8500 Pressurized Foam Rheometer Datasheet

Cement Testing/ Viscometers and Rheometers Equipment





Model 8500

PRESSURIZED FOAM RHEOMETER

An Advanced Tool for Well Completions

The Model 8500 Pressurized Foam Rheometer is designed specifically to measure the rheological properties of foamed systems under extended pressure and temperature conditions. The Model 8500 is a fully automated closed loop system that includes both hardware and software for the study of foam rheology over a wide range of foam qualities, shear rates and shear stresses.

An integrated high pressure view window allows visual determination of foam quality, stability and bubble distribution. An optional CCD camera and image acquisition system is available for video capture and image analysis of the foam through the view cell. The system incorporates a pulse free positive displacement Quizix pump for injection of the base fluid and volume determination. Differential pressure transducers are provided to cover a wide range of shear stress measurements. Flow rate and shear rate of the foamed fluids are measured using a Coriolis mass flow meter. The shear loop is contained within a convection oven housing enabling uniform temperature control of all components within the loop.

The Model 8500 is a fully automated rheometer. The software is designed to allow the operator control over foam quality, shear rate, shear stress, time length of tests and operating temperature. The Model 8500 utilizes a calibrated volume to calculate and control the percentage of foam quality.



FEATURES

- Coriolis Mass Flow Meter
 - Accurate measurement and feedback of flow rate
- Foam Generator
 - Gas & liquid mixing at the desired foam quality
- ✓ High Pressure View Cell
 - Visual foam quality monitoring, and bubble distrib.
- Gas Booster
- Elevates gas pressure to operational requirements
- CO2 Compatible Elastomers
 - Ensures system compatibility with ${\rm CO_2}$ foams
- Over Temperature Circuit
 - Safety control prevents operation above the designed temperatures
- Over Pressure Relief Valves
- Safety control prevents operation above the designed pressures





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Specifications

Maximum Pressure

3,000 psi / 20791 kPa

Temperature Range

Ambient - 350°F / 177°C

Shear Rate Range

50 - 1000 1/sec

Shear Stress Range

2 - 5000 dyne/cm²

Wetted Material

C276 inside oven, 316 Stainless Steel outside of oven

Utilities

Power Requirements:

220VAC 20A 50/60 Hz Single Phase

Air Supply:

80-120 psi @ cfm

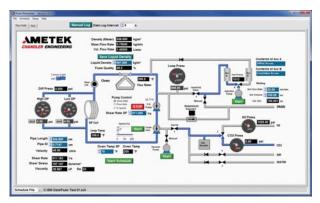
Water:

20-30 psi

Compressed Gases:

N, and CO,

Manufacturer's specifications subject to change without notice



Software Screenshot





Scan the above QR Code wth your phone to view product information on our Website.



2001 North Indianwood Avenue, Broken Arrow, OK 74012 Tel: +1 918-250-7200 • Fax: +1 918-459-0165 e-mail: chandler.sales@ametek.com • www.chandlereng.com

Houston Sales and Services 4903 W. Sam Houston Parkway, N., Suite A-400, Houston, TX 77041 Tel: +1 713-466-4900 • Fax: +1 713-849-1924