

CHANDLER
ENGINEERING®



VISCOSITY



AMETEK®
OIL & GAS

Performance | Quality | Safety

For over 60 years Chandler Engineering has produced the highest quality measurement instruments for the Upstream Oil & Gas Industry. Well known for high pressure, high temperature (HPHT) well cement testing instruments, the Chandler Engineering portfolio has grown to include reservoir analysis, drilling fluids and corrosion testing instruments as well as many other unique solutions for reservoir evaluation, well construction and completions.



Pipe Flow and In-Line Viscometers

These instruments are designed for testing under complex flow conditions and can be customized to unique flow requirements.

Model 5400 Dynamic Scale Loop provides outstanding measurement of the performance of scale inhibitors under high pressure and high temperature. The system operates by injecting fluids into the test loop, and measuring the differential pressure within the loop as scale is formed during the test. This fully automated system includes pH measurement and data acquisition and control software.



6500 Friction Flow Loop is a fully automated system which accurately determines the effectiveness of friction reducer polymers, as well as a highly effective tool for optimizing slick water fluid designs. Fluid is circulated through two 25' tubing lengths to provide data including Reynolds numbers and Percentage of Friction Reduction. The system is provided with full data acquisition and control software. Multiple pressure and temperature options are available.



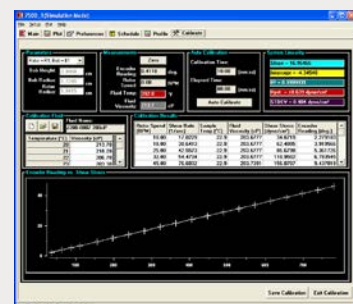
Model 8500 Foam Rheometer measures the rheological properties of foamed fluids under high pressure and high temperature conditions. The automated software includes features that allow the operator control over foam quality, shear rate, shear stress, test time and operating temperature.



Model 3330 In-Line Viscometer provides real-time viscosity measurements of fracturing fluids viscosity. The instrument is designed to be used at the well site and made to withstand the rigors encountered within field operations.



Rheo™ Data Acquisition & Control Software is fully automated and enables users to make the most of their viscometers. This software makes it simple to set-up for any test protocol. Test data is in a standard CSV format for sharing and transfer to spreadsheets and other programs. The software includes automatic calibration routines.





Rotational Viscometers

Chandler Engineering manufactures atmospheric and high pressure, high temperature (HPHT) viscometers. The HPHT viscometers can provide measurements at elevated pressures and temperatures in accordance with API standards.

Model 5550 HPHT Viscometer offers a computer controlled unique design with a sliding carbon dry-block heater and a high-precision digital torque sensor that is external to the sample cell.

Max. Pressure 2,000 psi / 14 MPa

Max. Temperature 500° F / 260° C

Model 5600 Shear History Simulator is used to simulate shearing conditions on fracturing fluids. The instrument allows the fluid to be dynamically loaded into the Model 5550 Viscometer per API procedures.

Model 7550 HPHT Viscometer offers the smallest footprint for a drilling fluids instrument. The small size and unique design allows for an ergonomically friendly operation. These fully automated viscometers are provided with data acquisition and control software.

Max. Pressure 30,000 psi / 205 MPa

Max. Temperature 500° F / 260° C

Model 7600 Ultra HPHT Viscometer offers the highest pressure and temperature ranges available. These fully automated viscometers are able to simulate the most severe downhole conditions. They are provided with data acquisition and control software.

Max. Pressure 40,000 psi / 275 MPa

Max. Temperature 600° F / 310° C

Model 3530 Viscometer offers manual or fully automated control for field or laboratory use. Computer control permits ease of operation and automatic data acquisition at any speed from 0.01 rpm to 600 rpm.

Model 3530 16 manual speeds; shear rates from 0.017 to 1021 sec⁻¹



CHANDLER
ENGINEERING®

Headquarters

2001 North Indianwood Avenue
Broken Arrow, OK 74012-1163 U.S.A.
Phone: +1 918 250 7200 • Fax: +1 918 459 0165
chandler.sales@ametek.com
chandler.service@ametek.com
www.chandlereng.com

Sales and Service Offices

AMETEK Oil & Gas - Houston Sales and Services

4903 W. Sam Houston Parkway N., Suite A-400
Houston, TX 77041
Phone: +1 713 466 4900

AMETEK Singapore Pte. Ltd. (Asia Sales)

Phone: +65 6484 2388
Email: chandler.asia@ametek.com

AMETEK Moscow (Russia Sales)

Phone: +7 495 660 8208
Email: chandler.russia@ametek.com

AMETEK Chandler Engineering - U.K. (EU, ME, Africa)

Phone: +44 (0) 1224 725222
Email: chandler.uk@ametek.com

Chandler Australia

Phone: +65 6484 2388
Email: chandler.australia@ametek.com

Chengdu Industrial Trading & Supply Co. (China)

Phone: +86 28 8616 2896 or +86 28 8616 2897
Email: chandler.china@ametek.com

AMETEK Brazil

Phone: +55 19 3825 8904
Email: chandler.brazil@ametek.com

AMETEK UAE

Phone: +971 52 645 3606
Email: chandler.uae@ametek.com



The Oil & Gas Industry is truly a global endeavor with operations on every populated continent. As a global industry needs global support, AMETEK Oil & Gas strives to continuously grow and develop its sales and support network. In addition to a global network of factory trained personnel, AMETEK Oil & Gas maintains factory-direct customer support capabilities at its manufacturing sites and a growing number of regional offices.

Our global support network of AMETEK offices and factory-trained distributors and representatives continues to grow. Contact us at chandler.sales@ametek.com today.

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