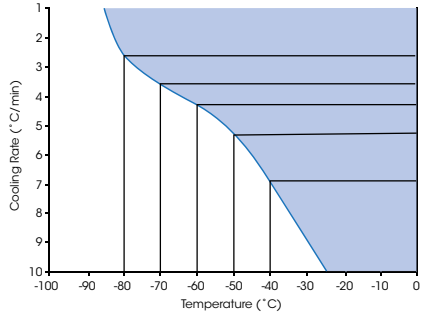
DISCOVERY HYBRID RHEOMETERS
TEMPERATURE SYSTEMS AND ACCESSORIES

Air Chiller System (ACS-3)

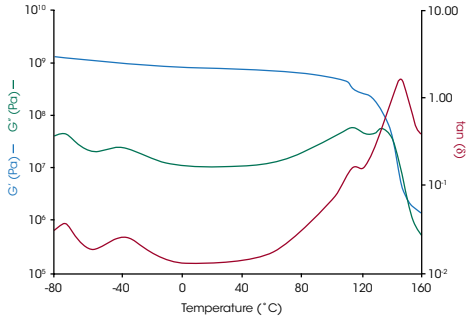
The new Air Chiller System, ACS-3, is a unique gas flow cooling system that enables temperature control of the Environmental Test Chamber to temperatures as low as -85 °C. Equipped with a three-stage cascading compressor design, the ACS-3 allows for low temperature environmental control without the use of liquid nitrogen, instead utilizing compressed air (7 bar, 200 L/min) as the cooling medium. The ACS-3 can help eliminate or reduce liquid nitrogen usage and associated hazards from any laboratory and offers an incredible return on investment.



Features and Benefits

- Safe: eliminates the need for liquid nitrogen or other refrigerated gases
- Convenient: never change, refill, or order another tank of liquid nitrogen. The ACS-3 is ready to run whenever you are.
- Small: occupies less space than equivalent liquid nitrogen cooling systems.
- Affordable: provides considerable cost savings over recurring gas deliveries.

ABS/PC Blend Temperature Ramp



Low Temperature Polymer Transitions

Polymers are often blended to produce a desirable combination of toughness, modulus, and processing characteristics. One such combination is a blend of polycarbonate (PC) with acrylonitrile butadiene styrene (ABS). The ACS-3 provides a sufficient range of temperature control to characterize the multiple low and high temperature transitions of this multi-component sample. The data in the figure were collected during a temperature ramp with a rectangular specimen in torsion.

New Castle, DE USA

Lindon, UT USA

Saugus, MA USA

Hüllhorst, Germany

Shanghai, China

Beijing, China

Tokyo, Japan

Seoul, South Korea

Taipei, Taiwan

Bangalore, India

Sydney, Australia

Guangzhou, China

Eschborn, Germany

Wetzlar, Germany

Brussels, Belgium

Etten-Leur, Netherlands

Paris, France

Elstree, United Kingdom

Barcelona, Spain

Milano, Italy

Warsaw, Poland

Prague, Czech Republic

Sollentuna, Sweden

Copenhagen, Denmark

Chicago, IL USA

São Paulo, Brazil

Mexico City, Mexico

Montreal, Canada

tainstruments.com

L50020.001