



**Rheometer
Services
Inc.**

rs5000-S5 Torque Rheometer



The **rs5000-S5 Torque Rheometer** is designed for use with all **RSI** mixers, extruders and most competitors attachments. All control functions of the torque rheometer are achieved via the **SYSTEM 5** PC based control/data acquisition system. Interchangeable, auto-range detect, direct in-line torque measurement provides the highest accuracy/resolution available. These features make the **rs5000-S5** the most powerful and versatile torque rheometer on the market.

SYSTEM ARCHITECTURE

The **rs5000-S5 Torque Rheometer** incorporates state of the art Allen-Bradley PLC industry standard technology. This eliminates the extended down time associated with single source, proprietary hardware. It also expands the system capabilities in regard to high speed/high resolution data and enhanced safety features not found in other torque rheometers currently available. A single high speed Ethernet connection to the PC provides all communications with the instrument.



TORQUE MEASUREMENT

The **rs5000-S5 Torque Rheometer** is equipped with a state of the art in-line torque load cell providing the highest level of torque repeatability & accuracy available.

TEMPERATURE CONTROLS

The **rs5000-S5 Torque Rheometer** is the first torque rheometer to utilize industry standard Allen-Bradley *Flex I/O* PLC technology for providing unprecedented control of process temperature, melt temperature and independent air cooling channels. 6 temperature control zones, 2 melt temperature zones and 4 independent cooling zones are provided with additional zones available.

SPEED CONTROL

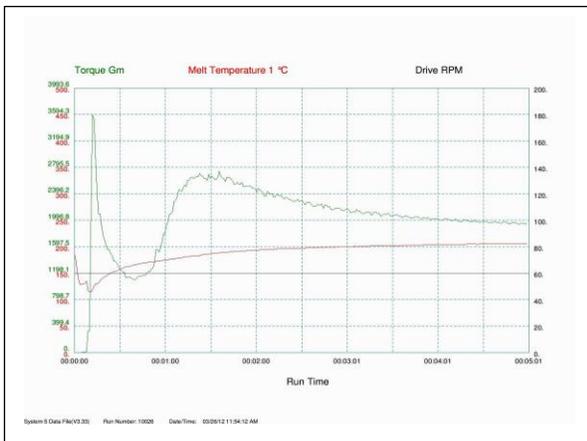
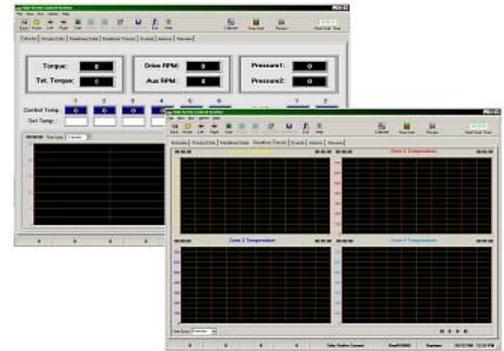
The **rs5000-S5 Torque Rheometer** incorporates state of the art AC drive technology with closed loop control to ensure optimum speed control. The computer programmable speed control, with multi ramp capability, is made available by means of the **SYSTEM 5** control software. The user also has the option of a selectable manual speed control via a 10 turn potentiometer.

PRESSURE INDICATION

The **rs5000-S5 Torque Rheometer** is compatible with all standard range pressure transducers. 2 pressure zones are standard with up to 8 available.

SYSTEM 5 SOFTWARE FEATURES:

- Unlimited recipe storage
- Custom process View
- 8 hour runtime maximum
- User defined alarm limits for all process parameters
- Digital and graphic display of all process parameters
- Auto alarm logging
- Event marker with user comments
- Powerful data review/report generator
- Time, date and operator stamps on all alarm and event markers
- User and administrator access levels protect vital system settings.



Run Data	
Z1 = Zone 1 Temperature °C	A1 = Drive RPM%
Z2 = Zone 2 Temperature °C	A2 = Aux RPM%
Z3 = Zone 3 Temperature °C	A3 = Pressure 1 psi
Z4 = Zone 4 Temperature °C	A4 = Pressure 2 psi
Z5 = Zone 5 Temperature °C	A5 = Torque Gm
Z6 = Zone 6 Temperature °C	A6 = Melt Temperature 1 °C
Z7 = Melt Temperature 2 °C	A7 = Drive RPM%
Z8 = Melt Temperature 3 °C	A8 = Aux RPM%
Z9 = Zone 7 Temperature °C	
Z10 = Zone 8 Temperature °C	
Z11 = Zone 9 Temperature °C	
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