



- Ram position, ram pressure and temperatures are recorded over the shot cycle at a rate of 1kHz. This can be increased if required or made user selectable.
- Cycle monitoring time is user definable, 0.5 seconds to 5 seconds. This can be increased if required.
- Operates on Standard Pentium PC under Windows95/98/NT/XP. The system can also be installed on a laptop using a different DAQ card and interface box.
- Graphical presentation of ram pressure against ram position, ram velocity against ram position, ram pressure against shot time.

These graphs can be displayed together on one screen or zoomed individually.

Graphs are displayed the instance the shot cycle is complete, allowing the operator to take quick corrective action if required.

- The graphs can be saved to disk, and then displayed as an overlay together with the latest shot profile enabling an instant visualisation of any changes in the process. Repeat jobs can be quickly set up ensuring replication of the previous process conditions.
- Key parameters are recorded or calculated at the end of each shot and displayed to the user.

These parameters include Fill Time, Intensifier Fill Pressure, Average Fill Pressure, Impact Pressure, Biscuit Length, Average Shot Velocity for each stage, Acceleration & Deceleration Times, Ram Creep, Intensifier Hold, Gate Velocity, Die Temperature.

- Warning systems include Green/Amber/Red Warning Lights & Audible Alarm.
- Statistical Process Control (SPC):
  1. Control Charts are displayed in the SPC window and are updated at end of shot for each of the key parameters above.
  2. User specified or automatic calculation of Upper and Lower Control Limits based on standard deviations for all key parameters.
  3. User defined sub-group size: 2 to 500.
- Built in counter. Can be set to count up or down from any start figure.
- Quality window. Text window saved with the job, allows user to append general quality information.
- Data backup and import/export facility for distribution between other machines.

