What is the Presster™?

- **It is a tablet press simulator designed to match compression force and dwell time of any press.**
- **It is a compaction simulator designed to mimic a punch displacement profile of any rotary press.**
- **It is a high-speed single station tablet press with standard tooling.**
- **It is a powerhouse computer for tabletabiliy, compressibility and compactibility profiles, Heckel plots, lubricant studies, and many other reports and graphs.**

Benefits of the Presster™

- Eliminate the need for scale-up in the formulation development process
- Shorten the scale-up path to market
- Prevent capping and lamination at the production speeds
- Develop formulations for a particular production press
- Select a production press best suited for a particular product

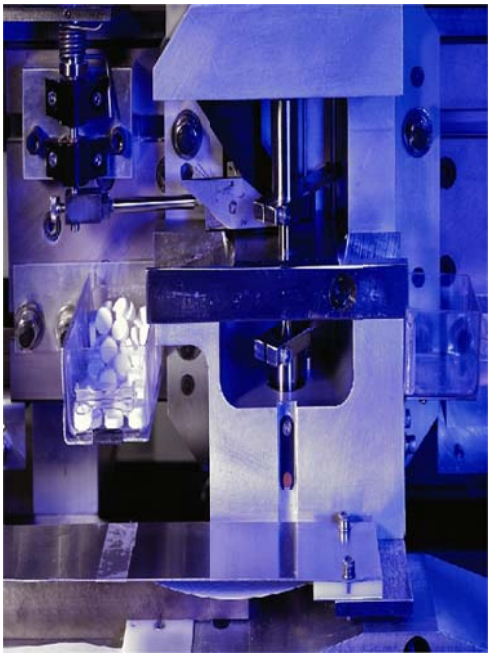
Measurement Control Corporation
13D Great Meadow Lane, East Hanover, NJ 07936
Tel: (800) 504-9010 Fax: (862) 250-6299
Web: www.mcc-online.com
e-mail: email@mcc-online.com

- Optimize the production speed best suited for the specific production press
- Estimate optimal production output
- Troubleshoot problem batches without having to shut down production
- Check and calibrate production presses
- Establish the robustness of the formulation by compacting it for a wide range of production press brand and models
- Compare production presses with respect to ability to handle different compounds
- Study the basic compaction mechanisms
- Evaluate various excipients with respect to the desired tablet properties and bioavailability
- Evaluate different vendors of the same or similar excipient
- Study scale-up parameters
- Study process variables
- Fingerprint new actives and excipients
- Create compaction data bank of the excipients
- Investigate and optimize the effect of precompression
- Optimize the ejection force and the amount of lubricant
- Optimize the concentrations of various excipients in the formulation
- Optimize the mechanical properties of tablets
- Prevent capping and lamination

Measurement Control Corporation
13D Great Meadow Lane, East Hanover, NJ 07936
Tel: (800) 504-9010 Fax: (862) 250-6299
Web: www.mcc-online.com
e-mail: email@mcc-online.com

The Presster™ has:

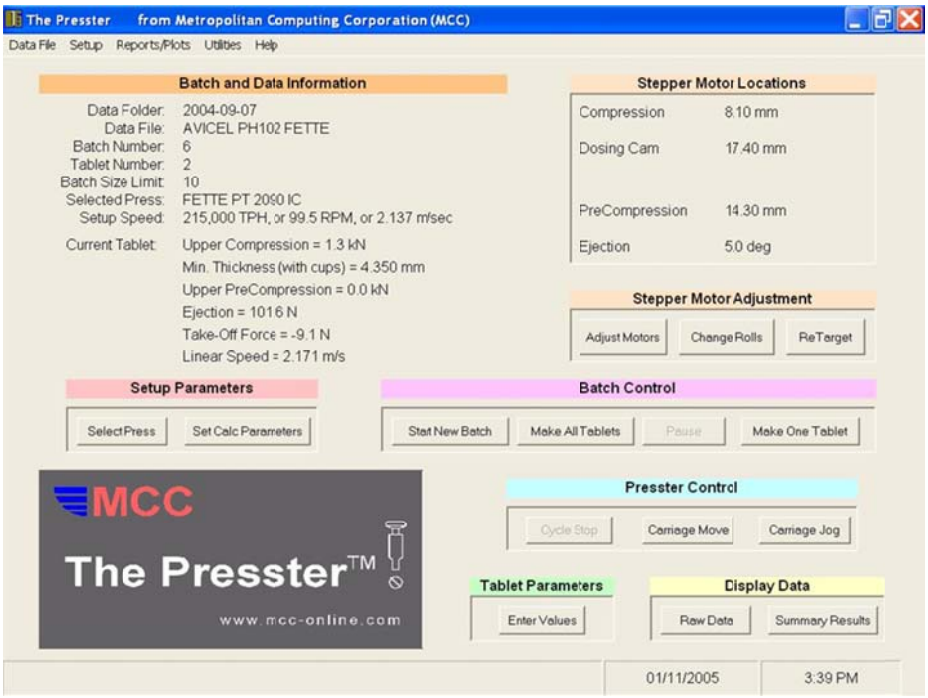
- **Standard IPT B tooling (D tooling optional), upper and lower compression rolls, ejection cam, take-off bar, variable speed motor controller, tablet weight and thickness adjustments and overload protection mechanism.**



- **A choice of interchangeable compression rolls to mimic the loading pattern of any rotary tablet press, with easy changeover mechanisms.**
- **Instrumentation to measure precompression, compression, ejection, take-off and (optionally) die wall forces, punch displacement, and press speed.**
- **Manual or automatic (gravity force) feed shoe mechanism.**
- **Computerized adjustment of depth of fill (tablet weight), lower wheel position (tablet thickness), and press speed (in terms of dwell time).**
- **Professional computer and color printer for scientific reports and plots.**
- **State-of-the-art software with a comprehensive database of parameters for various tablet presses, to match dwell times and compression profiles.**
- **Comprehensive user manual, technical documentation and validation protocol.**

The Presster™ Software:

- Mouse / menu driven under Windows.
- Provides the means for comparing different compactibility profiles or Heckel plots, e.g. superimposing the current profile with previously collected graphs.
- Allows users to make any XY graphs (scatter, correlation or regression plots) of any pair of acquired or manually entered variable values.
- Produces reports and plots in the Excel (raw waveforms and statistics for all tablets made).
- Prints on demand any screen graph, report or display on the color printer.
- Has a comprehensive context sensitive on-line help.

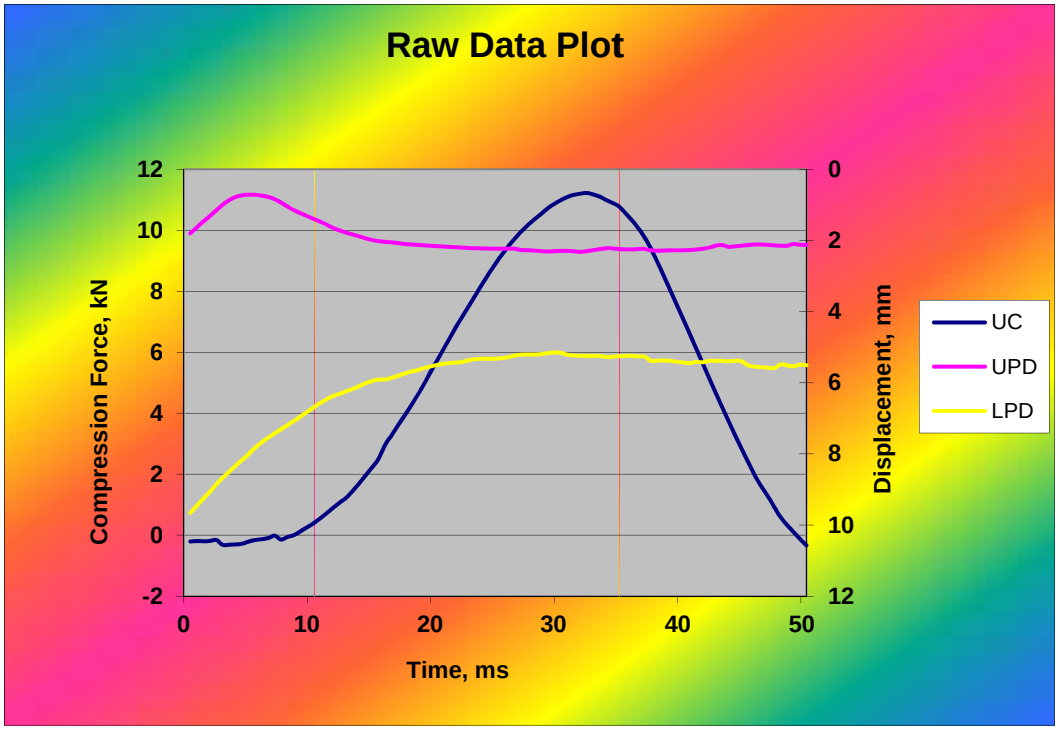


Measurement Control Corporation
13D Great Meadow Lane, East Hanover, NJ 07936
Tel: (800) 504-9010 Fax: (862) 250-6299
Web: www.mcc-online.com
e-mail: email@mcc-online.com

The Presster™ Functionality:

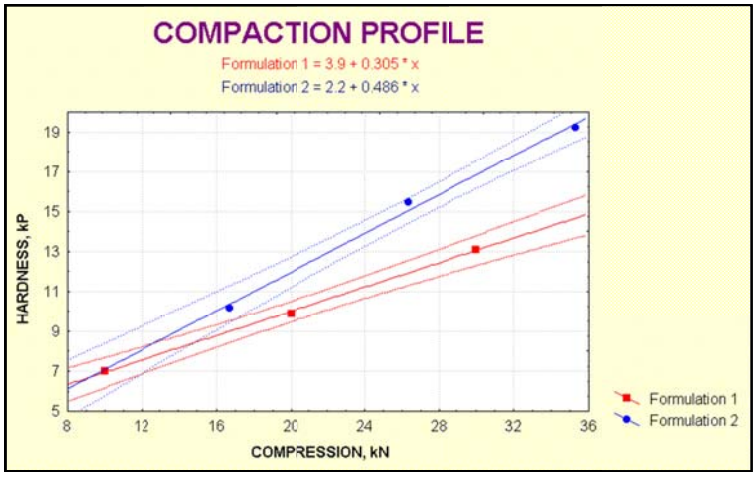
Under computer control the fully configured Presster™ will

- ✓ Make tablets with up to 50 kN compression force at a user specified speed (dwell time).
- ✓ Display compression, precompression and ejection waveform and peak force, peak offset time, decompression time, dwell time, contact time, and other quantities.

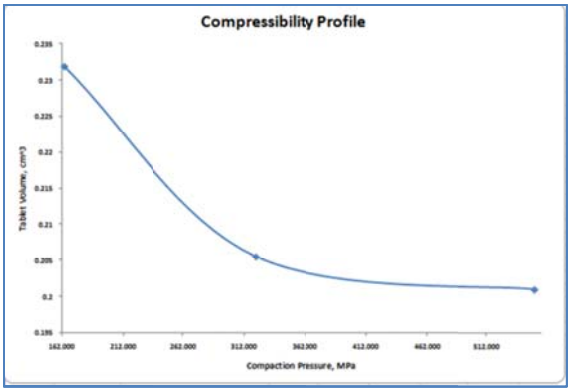


- ✓ Measure punch displacement, calculate tablet volume, elastic recovery, work of compaction, and display Heckel or stress vs. strain plots.
- ✓ Allow input of tablet weight in g or mg, tablet thickness and diameter in mm or inches, and hardness in kP, SCU, or N.

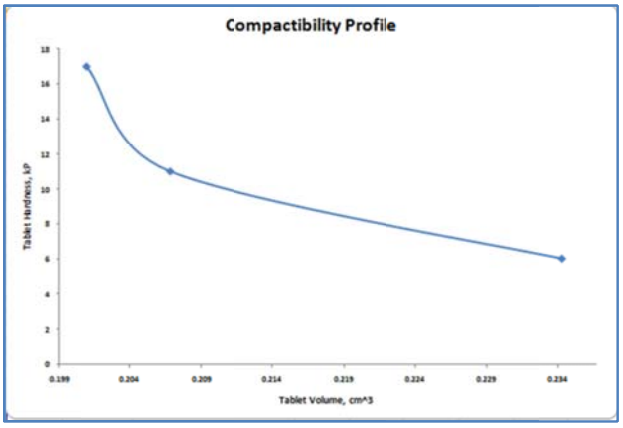
- ✓ Display tabletability / compaction profile where each point corresponds to compression and hardness for each tablet made, or sample average. This plot can be converted into tensile strength vs. compression pressure.



Measurement Control Corporation
13D Great Meadow Lane, East Hanover, NJ 07936
Tel: (800) 504-9010 Fax: (862) 250-6299
Web: www.mcc-online.com
e-mail: email@mcc-online.com

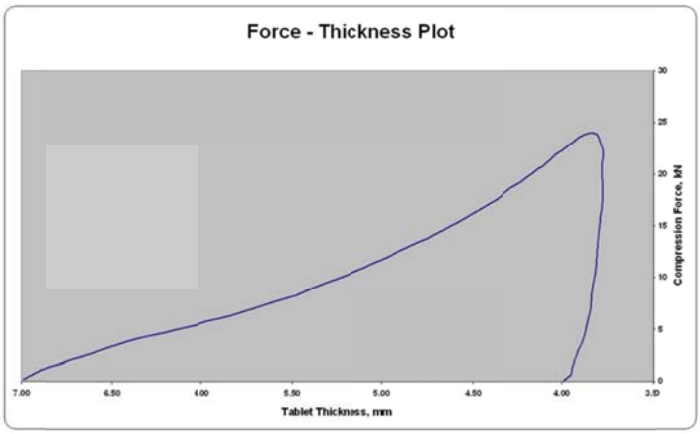


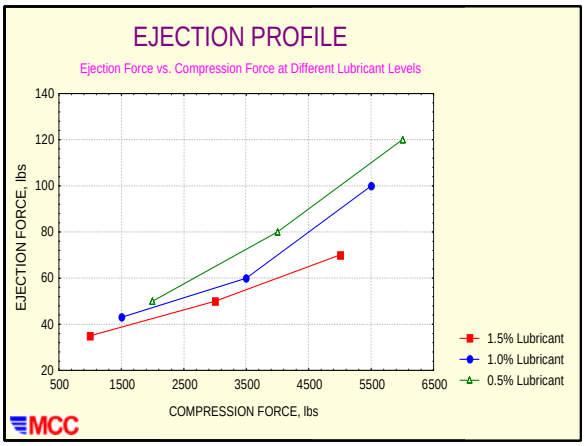
✓ Display compressibility profile where each point corresponds to compression and volume for each tablet made, or sample average. This plot can be converted into solid fraction vs. compression pressure.

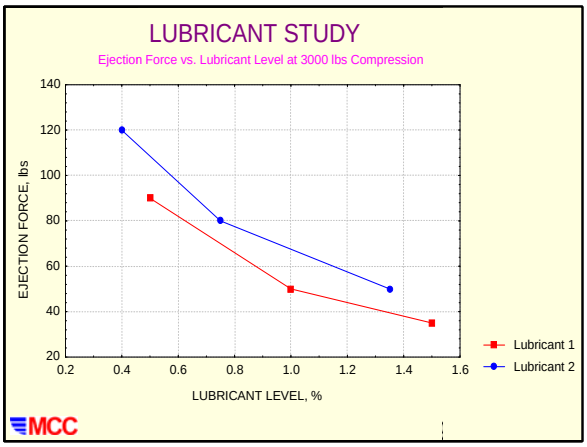


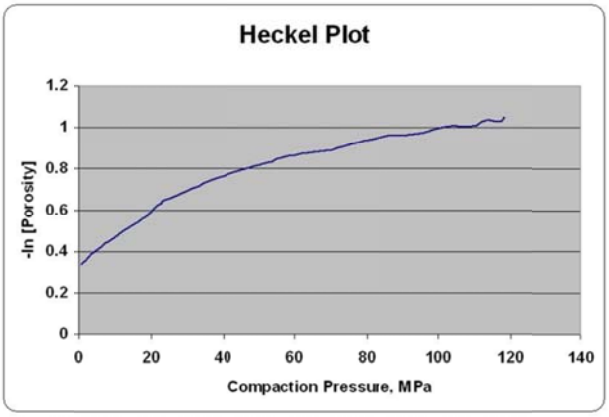
✓ Display compactibility profile where each point corresponds to volume/density and hardness for each tablet made, or sample average. This plot can be converted into tensile strength vs. solid fraction.

✓ Display an array of scientific plots and reports that are widely used in formulation development.









Measurement Control Corporation
13D Great Meadow Lane, East Hanover, NJ 07936
Tel: (800) 504-9010 Fax: (862) 250-6299
Web: www.mcc-online.com
e-mail: email@mcc-online.com