Digital Load Cell Calibrated E-Z Press

The Digital Load Cell E-Z Press™ provides real time calibrated force readings displayed in a large, bright digital readout. These laboratory presses are available in 1000 and 5000 pound versions. They are useful for low force applications where a reliable calibrated force measurement is desirable, such as intrinsic dissolution testing. Force is measured in most hydraulic lab presses by interpolation.

The pressure of the hydraulic fluid in a standard lab press is piped to a gauge and the gauge is marked to correspond to the rated force of the hydraulic cylinder at a known hydraulic fluid pressure. This method of measurement, while reasonably accurate, is neither calibrated nor is it a direct measurement of force. Furthermore, standard presses cause the force to increase in spurts as a pump forces hydraulic fluid against the piston of a hydraulic cylinder.



Digital Load Cell Press with ICL Heated Platens

The Digital Load Cell E-Z press functions like a wine press. The load is applied by turning the lead screw on top of the press against a sample which is mounted directly on top of a calibrated load cell with a digital readout. Force application by this method is more linear and allows for finer gradations in force selection. The load cell is built into the press and is located beneath the 4.5" diameter stainless steel platen on which the sample is mounted. The load cell is factory calibrated using NIST traceable instruments and standards to an accuracy of +/- 0.5% for linearity, repeatability and hysteresis combined.

The digital load cell press can be used with either of ICL's intrinsic dissolution apparatus models (0012-7825 or 0012-8404), as well as with ICL's heated platens (0012-6664). The load cell is highly sensitive, so expansion or contraction of the press frame will be detected by the load cell when a sample is clamped within the press. An optional cooling coil (0012-8403) is available for use with heated platens which will limit the expansion and contraction of the press body caused by temperature changes.



Ref.	Description
0012-8392 cell, CE Marked	Digital Load Cell E-Z Press™, 1000 Pounds of force, digital readout, built-in 1000 pound load
0012-8379 cell, CE Marked	Digital Load Cell E-Z Press™, 5000 Pounds of force, digital readout, built-in 5000 pound load
0012-6664	Heated Platens for use with Digital Load Cell E-Z Press™
0012-8403	Cooling Coil for use of Digital Load Cell E-Z Press™ with heated platens
0012-8092	Intrinsic Dissolution Die Sets with 2 dies and 2 flat bottom beakers
0012-8404	Wood Apparatus Intrinsic Dissolution Apparatus

