

Humboldt Digital Controllers and Indicators for Compression Machines



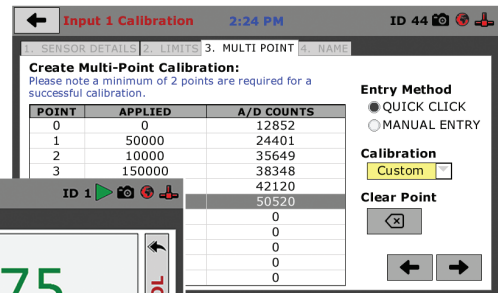
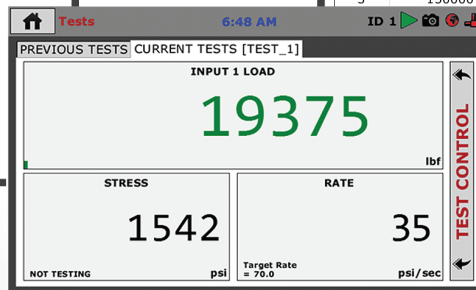
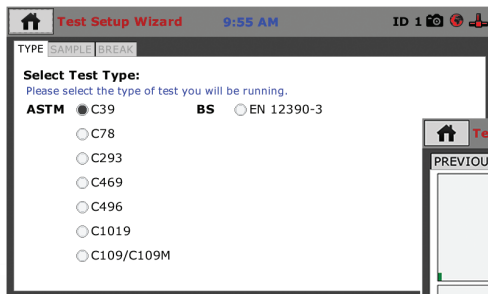
Testing Equipment For



Construction Materials

HUMBOLDT

Humboldt Digital Controllers and Indicators for Compression Machines





HCM-5080 and HCM-5070 Automatic Controllers

Humboldt's HCM-5080 and HCM-5070 automatic controllers are designed to make fast work of testing cylinders, cubes and beams with all of Humboldt's compression frames.

These controllers provide an easy-to-use automated testing work flow— just choose the test standard you wish to run from the menu and the controller will quickly guide you through the setup. Choose the "Fast Testing" option and your compression frame will run tests as fast as you can load your cylinders, cubes or blocks while sequentially numbering each test automatically. Just click on the start button.

The HCM-5080 and HCM-5070 controllers feature a robust, reliable and cool-running 1hp, multi-piston pump, which works together with the controller for full operational control.

These controller's high-resolution, 7-inch, color, touch-screen provides accurate, precision frame operation, setup and calibration. Test setup is simple, just choose the ASTM standard you wish to use and the controller will quickly walk you through the setup procedure. Calibration is also easy with these controllers, allowing you to use from 1 to 10 points to calibrate the machine in any increment you choose. It also provides an accurate motor-control knob, which let's you dial in precise loads for calibration.

Humboldt's controllers provide two channel inputs for load, which allows for the control of two separate compression frames when using the HCM-HP4014 selector valve accessory. Both controllers also provide two additional channel inputs for displacement, which provides an easy solution for determining Poisson's ratio and Young's modulus testing.

Humboldt's automatic controllers provide data acquisition capabilities of up to 1000 tests with 3000 points per test. This information can be exported via the front USB port and a flash drive.



Features:

- Provide two channel inputs for load, which allows for the control of two separate compression frames
- Provides two additional channel inputs for displacement, which allows performing extensometer and compressometer testing
- 7", high-resolution color touch-screen display with live readout, graphical and tabular display
- Easy test setup, just choose the standard you wish to test for and the controller will walk you through the complete setup
- Rapid approach, initial load and testing load are automated during test cycles
- Automatic control of test parameters
- Provides data acquisition of one reading per second
- Integral storage within the controller of up to 1000 tests and 3000 points per test
- Simple, Fast and accurate machine calibration with accurate, motor-control knob
- Displays in Imperial or metric numbers
- Pre-programmed to run the following tests: ASTM C39, ASTM C78, ASTM C293, ASTM C469, ASTM C496, ASTM C1019, ASTM C109/C109M, BS EN 12390-3

Humboldt's HCM-5070 automatic controller is a console version of the HCM-5080 automatic controller and both share the same features.

Humboldt Automatic Controller HCM-5080
Humboldt Automatic Controller HCM-5080.4F
CE Ship wt. 180lbs. (82kg)

Humboldt Auto Console Controller HCM-5070
Humboldt Auto Console Controller HCM-5070.4F
CE Ship wt. 200lbs. (91kg)



HCM-5090 Digital Indicator

Humboldt's HCM-5090 digital indicator provides the same platform and many of the same features as the HCM-5080 and HCM-5070 except that it does not act as a controller, but works with a manually-operated pump. The HCM-5090 digital indicator features:

- Provide two channel inputs for load, which allows for the control of two separate compression frames
- Provides two additional channel inputs for displacement, which allows performing extensometer and compressometer testing
- 7", high-resolution color touch-screen display with live readout, graphical and tabular display
- Easy test setup, just choose the standard you wish to test for and the controller will walk you through the complete setup
- Provides data acquisition of one reading per second
- Integral storage within the controller of up to 1000 tests and 3000 points per test
- Simple, Fast and accurate machine calibration
- Displays in Imperial or metric numbers
- Pre-programmed to run the following tests: ASTM C39, ASTM C78, ASTM C293, ASTM C469, ASTM C496, ASTM C1019, ASTM C109/C109M, BS EN 12390-3

Humboldt Digital Indicator HCM-5090.3F
CE Ship wt. 13 lbs. (5.9kg)

Automatic Controllers for upgrading existing compression frames

Looking to upgrade your existing compression machine? Now you can easily upgrade it with one of Humboldt's automatic compression machine controllers — the HCM-5080 and HCM-5070. Both controllers come with our robust, reliable and cool-running 1hp pump, which works together with the controller for full operational control of your compression machine. The HCM-5080 upgrade kit come with necessary brackets and mounting hardware and both are available with new compatible transducers making these upgrade kits a quick and easy upgrade. See next page for more information on Humboldt's digital controllers and indicators.



HCM-720

HCM-720 Digital Indicator

ASTM C39, E4, AASHTO T22

The i7 is an easy-to-use digital load indicator that simultaneously displays both live load and rate of load values during a test. It eliminates the need to toggle keys between functions, and, automatically displays peak load and average rate of load at the end of each test.

All test information is clearly displayed on the indicator's 5.3" (135 mm) wide 240 x 64 pixel backlit V.G.A., liquid-crystal display with adjustable contrast settings. Test data is displayed in user selectable engineering units of lbs, kN, kg and N with rate of load displayed in force units per second.

The indicator will store up to 600 tests in memory, and transfer them directly into a word document via the optional USB Able Cable, or print them on an optional serial printer. Stored test data includes; test date and time, sample ID number, peak load and average rate of load. The average rate of load calculation is based on the average load rate applied to the sample during the second half of the test.

The i7 is also available as a retrofit package.

HCM-720 Digital Indicator

HCM-720



Ship wt. 13 lbs. (5.9kg)

Humboldt Controller Specifications

HCM-5080	120V 60Hz
HCM-5080.4F	220V 50/60HZ
HCM-5070	120V 60Hz
HCM-5070.4F	220V 50/60HZ
HCM-5090.3F	120/220V 50/60HZ
Display	7" (178mm) VGA (480 x 800) Resistive-touch screen
Processor	Dual 32-bit ARM
RAM	4GB
Analog to digital converter	24 bit
Data acquisition	4 Channels
Data Speed	1000Hz (1kHz)
Logging speed	1 reading per second
Multi-test storage	1000
Points per test	3000

Accessories for HCM-5080 & HCM-5070

HCM-4177	Pressure Transducer, 10,000 psi with Cable and Plug
HCM-4177.1	Pressure Transducer, 10,000 psi
HCM-4177.4	Cable for Pressure Transducer 10,000 psi with Plug
HCM-005050	ISO VG 46 Hydraulic Oil, 1L (2L required)
HCM-HP4014	Frame Selector Valve

Accessories for HCM-5090

HCM-4177	Pressure Transducer, 10,000 psi with Cable and Plug
HCM-4177.1	Pressure Transducer, 10,000 psi
HCM-4177.4	Cable for Pressure Transducer with Plug

www.humboldtmg.com
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