



# HUMBOLDT

## HCM-5080 & HCM-5080.4F Automatic Digital Controller for Concrete Compression Frames

Humboldt's HCM-5080 Automatic Digital Controller for concrete compression frames is designed to make fast work of testing cylinders, cubes and beams. The HCM-5080 provides an easy-to-use automated testing work flow— just choose the test standard you wish to run and the controller will quickly guide you through the setup. And, its automated "Fast Testing" feature allows you to speed up your testing operation between breaks— you just have to load the new sample and the controller will handle the rest. It even gives each test a new sequential name.

Humboldt's HCM-5080 is now available as an automated option for all Humboldt concrete compression machines. It features a 7" high-resolution, color, touch-screen, which provides accurate, precision machine operation. It also provides specific test control and data acquisition for Humboldt compression machines.

Compression machines with the HCM-5080 controller feature a robust and reliable 1hp pump, which is automatically controlled by the HCM-5080.

### Retrofit Your Frame

The HCM-5080 Automatic Controller is perfect for retrofitting previously installed compression frames by most manufacturers. The HCM-5080 includes the new, automatic 1hp motor and mounting hardware. The retrofit package is also available with a compatible transducer, if your application requires it.



**Test Setup Wizard** 9:55 AM

TYPE  SAMPLE  BREAK

Select Test Type:  
Please select the type of test you will be running.

ASTM  C39      BS  EN 12390-3

C78

C293

C469

C496

C1019

C109/C109M

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**Input 1 Calibration** 2:24 PM

1. SENSOR DETAILS 2. LIMITS 3. MULTI POINT 4. NAME

Create Multi-Point Calibration:  
Please note a minimum of 2 points are required for a successful calibration.

POINT	APPLIED	A/D COUNTS
0	0	12852
1	50000	24401
2	10000	35649
3	150000	38348
4	200000	42120
5	250000	50520
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0

Entry Method  
 QUICK CLICK  
 MANUAL ENTRY

Calibration  
Custom

Clear Point

Tests 6:48 AM ID 1

PREVIOUS TESTS CURRENT TESTS [TEST\_1]

INPUT 1 LOAD

19375 lbf

STRESS 1542 psi

RATE 35 psi/sec

Target Rate = 70.0

TEST CONTROL

# HCM-5080 & HCM-5080.4F Automatic Digital Controller



## FEATURES:

Provides two channel inputs for load, which allows for the control of two separate compression frames

Provides two additional channel inputs for displacement, which allows the performing of 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

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

HCM-5080 Controller Specifications	
HCM-5080 HCM-5080.4F	120V 60Hz 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

HCM-5080 Controller Includes	
HCM-5080.800	Controller
HCM-5080.900 (120 60Hz) or HCM-5080.900.4F (220 50/60Hz)	Pump Controller
HCM-5080.925	Hydraulic Power Pack
HCM-5080.950	Power Pak Installation Kit

Accessories	
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 46Hydraulic Oil, 1L (2L required)



**Humboldt Mfg. Co.**  
**www.humboldtmfg.com**  
 875 Tollgate Road  
 Elgin, Illinois 60123 U.S.A.

U.S.A. Toll Free: 1.800.544.7220  
 Voice: 1.708.456.6300  
 Fax: 1.708.456.0137  
 email: hmc@humboldtmfg.com