

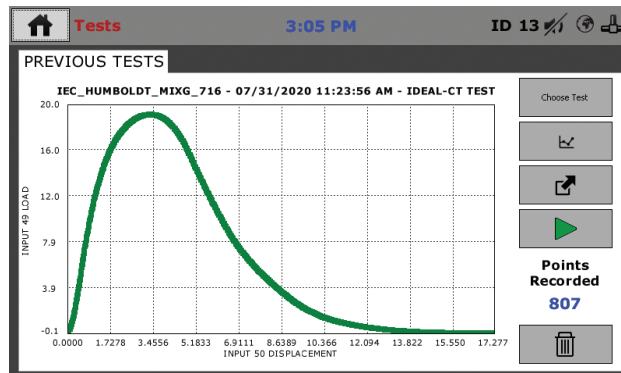


HUMBOLDT

Balanced Mix Load Frame HM-5125A.3F



Auto-test setup wizard



TYPE	PEAK VALUES	UNITS
THICKNESS	62.000	mm
PEAK LOAD @ 100%	19.0	kN
PEAK LOAD @ 85%	16.2	kN
PEAK LOAD @ 75%	14.3	kN
PEAK LOAD @ 65%	12.4	kN
DEF. TOLERANCE	5.1767	mm
POST-PEAK SLOPE	4538561	N/m
FRACTURE ENERGY	11796.6	Joules/m ²
WORK OF FRACTURE	109.7	Joules
CT INDEX	89.70	
COV	12.00	
AVG. SPEED	51.94944	MM/MIN



HM-5125A.3F

Balanced Mix, Automated Load Frame

Humboldt's HM-5125A.3F load frame has been designed to provide precise, test-rate control for the automated testing of balanced mix samples. This control is provided by a Closed-Loop Feedback control of the speed function, which ensures highly-accurate results.

Tests that can be run with this load frame are:

- Marshall — ASTM D6927, AASHTO T245
- TSR — AASHTO T283
- I-FIT (SCB IL Method) — AASHTO TP124
- SCB (LSU Method) — ASTM D8084
- IDEAL-CT (TTI Method) — ASTM D8225
- IDEAL-RT (TTI Method) — ASTM WK71466
- ISS (Interlayer Shear Strength) — AASHTO TP114

This easy-to-operate load frame allows you to easily choose your test and its parameters in the Test Setup Wizard for automated operation of the testing process and results.

At the completion of each test, the HM-5125A will display test results on its display screen per current ASTM or AASHTO specifications. This function eliminates the need for operators to download or transfer data to a computer for calculating or displaying test results. This also allows operators the ability to quickly evaluate whether a specimen mix design is within desired specifications.

Balanced Mix Load Frame

If reports or test data need to be printed or shared, data results can be transferred to a computer via an ethernet connection with a networked computer or via a USB thumb drive.

The HM-5125A's heavy-duty design and precise stepper-motor control provides a stable platform for years of reliable service. From educational institutions and consulting firms to high-volume commercial labs and construction projects, the HM-5125A Load Frame can perform these applications with ease.

The HM-5125A is built around Humboldt's integral, data logger with touch-screen control, which allows the load frame to be used as a standalone device capable of full test control and data logging. Operators can see all the data in several formats at the machine during the testing procedure.

HM-5125A.3F Specifications

Load capacity	11000 lbf (50kN)
Speed Range Testing: Fast Approach:	As Defined by Test 3.0 in/min (75.0 mm/min)
Data channels	Two 24 bit A/D Converters 50 Readings/Second
Platen Size / Travel	8" (203mm) / 4" (100mm)
Data storage	1000 tests and up to 3000 readings per test
Clearance, vertical	18" (457mm)
Clearance, horiz.	11" (280mm)
Voltage	110/220V 50/60Hz. 5.0 amps

IDEAL-CT (TTI Method) ASTM D8225

Description	Qty	Part #
Balanced Mix load frame	1	HM-5125A.3F
Load Cell, S-type 11,000 lbf (50kN)	1	HM-2300.100
Linear Potentiometer 1" (25mm)	1	HM-2305.10
Potentiometer Bracket	1	HM-2305BRSQ
Lottman Breaking Head, 150mm	1	H-1369

IDEAL-RT (TTI Method) ASTM WK71466

Description	Qty	Part #
Balanced Mix load frame	1	HM-5125A.3F
Load Cell, S-type 11,000 lbf (50kN)	1	HM-2300.100
Linear Potentiometer 1" (25mm)	1	HM-2305.10
Potentiometer Bracket	1	HM-2305BRSQ
IDEAL-RT Test Head	1	H-1354

SCB Testing (LSU Method) ASTM D8084

Description	Qty	Part #
Balanced Mix load frame	1	HM-5125A.3F
Load Cell, S-type 11,000 lbf (50kN)	1	HM-2300.100
Linear Potentiometer 1" (25mm)	1	HM-2305.10
Potentiometer Bracket	1	HM-2305BRSQ
Semi-Circular Bend Test (SCB) Head	1	H-1351

I-FIT Testing (SCB IL. Method) AASHTO TP124

Description	Qty	Part #
Balanced Mix load frame	1	HM-5125A.3F
Load Cell, S-type 11,000 lbf (50kN)	1	HM-2300.100
Linear Potentiometer 1" (25mm)	1	HM-2305.10
Potentiometer Bracket	1	HM-2305BRSQ
Semi-Circular Bend Test (SCB) Head	1	H-1351

Stand-alone Control

Touch-Screen Controller Provides:

- Multi-channel data acquisition
- Hi-res, 7", waterproof, touch-screen provides total control and real-time graphical display of tests
- Machine/Test control and data acquisition via touch-screen
- Calibration of channels for load cell and transducer
- Real-time graphical chart and numerical display of tests via touch-screen display
- Effective sampling rate of 40 readings per second
- Stores up to 1000 tests with 3000 points per test
- 2 USB ports. One in front for data transfer and the rear port is for powering a wireless access point.

The HM-5125A is sold as a Load Frame ONLY, refer to the Testing Setup charts on this page for needed accessories.

Marshall Testing ASTM D6927, AASHTO T245

Description	Qty	Part #
Balanced Mix load frame	1	HM-5125A.3F
Load Cell, S-type 11,000 lbf (50kN)	1	HM-2300.100
Linear Potentiometer 1" (25mm)	1	HM-2305.10
Potentiometer Bracket	1	HM-2305BRSQ
Marshall head, 4" Marshall head, 6" (choose one)	1	H-1349 H-1369
Marshall Software Module	1	HM-5005SW

ISS (Interlayer Shear) AASHTO TP114

Description	Qty	Part #
Balanced Mix load frame	1	HM-5125A.3F
Load Cell, S-type 11,000 lbf (50kN)	1	HM-2300.100
Linear Potentiometer 1" (25mm)	1	HM-2305.10
Potentiometer Bracket	1	HM-2305BRSQ
Interlayer Shear Strength Test Head (choose one)	1	HA-1343 HA-1343M

TSR Testing AASHTO T283

Description	Qty	Part #
Balanced Mix load frame	1	HM-5125A.3F
Load Cell, S-type 11,000 lbf (50kN)	1	HM-2300.100
Linear Potentiometer 1" (25mm)	1	HM-2305.10
Potentiometer Bracket	1	HM-2305BRSQ
Lottman head, 4" Lottman head, 6" (choose one)	1	H-1349 H-1369



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