



HUMBOLDT

Large, Four-Point Bending Beam Machine

Large Hydraulic, Four-Point Bending Beam Machine

ASTM D7460; AASHTO T321; EN 12697-24 Annex D, EN 12697-26 Annex B

The CRT-LH4PT-BB uses advanced servo-hydraulic technology and a high-speed digital data acquisition and control system together with user-friendly software. During testing both graphical and tabular data are displayed on screen and test data is stored to disc in Microsoft Excel™ compatible format. The test frame is housed in a Temperature Controlled Cabinet with fan-assisted air circulation and a temperature range of -20 to 30°C. The unique constant torque clamping and three-transducer deflection measurement system of the

CRT-LH4PT-BB can be configured to accept different beam sizes. This means that the ratio between beam dimensions and maximum aggregate size of test specimens will satisfy the requirements of the relevant European specifications.

Features:

- Frequency range 0.1 to 60Hz
- High-quality, Servo-Hydraulic Four-Point Bending Machine
- Double-acting, fatigue-rated hydraulic actuator with integral stroke transducer
- Utilises Star servo valve with "Sapphire Technology"
- Unique, three-transducer, on-specimen deflection measurement system
- Accepts various beam sizes: 380 to 660mm in length and 50 x 50mm and 100 x 100mm cross sections.
- Temperature Controlled Cabinet range -20 to 30°C
- Sinusoidal controlled strain or controlled stress fatigue test modes
- Constant torque motorized specimen clamping to eliminate errors due to localized beam indentation
- Self-contained loading system
- User friendly software for determination of fatigue resistance and stiffness modulus
- Supplied with certification of a UKAS-accredited calibrator
- Covered for noise reduction

Software:

- User friendly, intuitive and reliable Windows® software developed using LabVIEW™



- Specifically written to meet AASHTO and ASTM standards
- The user interface can be translated into the user's preferred language – please inquire
- Stored test data can be analyzed and compared with other test data utilizing a spreadsheet package
- Utilities are included for curve fitting of acquired data; testing of system's inputs and outputs; phase correction and a transducer database for storing calibration factors

Large, Hydraulic Four-Point Bending Beam,
 400V 50Hz, 3PH HA-5500.7F3
 208-230V 60Hz, 3PH HA-5500.2F3

Ship wt. 1435 lbs. (650kg)

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Specifications	
Force Transducer	2250lbf (10kN)
Specimen Transducer Range	±0.09" (3 x ±2.5mm)
Actuator Stroke	0.4" (10mm)
Frequency	0.1 to 60 Hz
Electrical Supply	400V 50Hz, 3 Ph
Compressed Air	100-145psi (7-10 bar) @ 100 L/min (3.5cfm)
Test Frame Dimensions	41.5" x 43" x 83" (1050 x 1100 x 2100mm)
Working Space Required (WxDxH)	81" x 83" x 90.5" (2050 x 2100 x 2300mm)
Desktop PC	Included

Accessories	Model
Dummy PVC beam 2" x 2" x 15" (50 x 50 x 380 mm)	HA-5400.1
Dummy PVC beam 4" x 4" x 26" (100 x 100 x 660 mm)	HA-5400.2