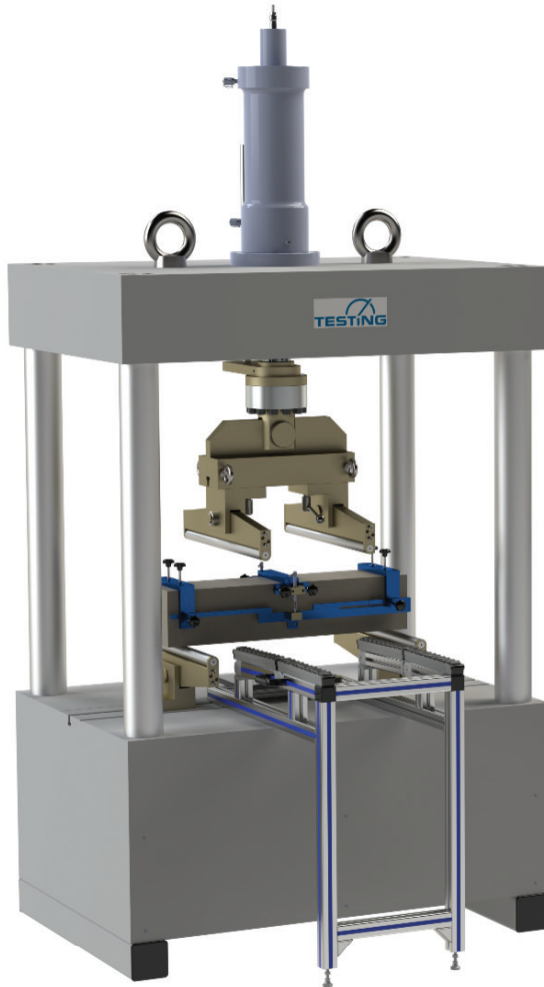




HUMBOLDT

Flexural Testing Machine, 230V 50/60Hz, 3ph



HCM-1200.7F.3

Flexural Testing Machine For Fiber Reinforced Concrete

ASTM C496, C1550, C1609; EN 12390-5,
EN 14651 CMOD, EN 14488-3, EN 14488-5

This 300kN (67443lbs.) Flexural Testing Machine is designed for the determination of the post-crack properties of steel fiber and fiber-reinforced concrete, concrete beams and shotcrete according to EN 7500-1 and EN 12390-4 in a very wide measuring range class 1.

- Suitable for high-precision force/displacement and deformation-controlled test procedures
- Automatic switching between the control modes in one test procedure
- Extremely solid and stiff 4-column frame with a maximal frame deformation of 2.8 MN/mm
- The upper bending roll is variable adjustable from 3- to 4-point bending
- Compression platens are adaptable

Specifications

Double acting test cylinder in servo-slide quality with integrated displacement measurement. In the basic configuration, the framework is designed for force-, position- and strain-controlled tests, whereby the force value is determined via a strain gauge load cell (class 0.5).

A position measuring system is installed in the cylinder by default. The massive steel frame is extremely stiff, the columns are tensioned without any play. A double-acting bending test cylinder with long piston stroke in servo-slide quality is mounted on the upper crossbeam. An anti-rotation lock prevents the twisting of the piston rod with the upper bending edge. The upper bending edge can easily convert from 3-Point to 4-point bending. Additional accessories like curb stamp, machine platens etc. can be adapted. The bending edges and beams for 3-point-bending and 4-point-bending are included.

Hydraulic System

The powerful hydraulic unit with 40L oil tank includes all necessary safety, control and directional valves according to DIN 4413. It generates a maximum system pressure of 350 bar and a volume flow of 1.2L / min. A fine 3µm pressure filter filters the hydraulic oil and protects system components. The hydraulic unit is inside the control cabinet producing very low noise levels (<66 dB). A high-quality servo valve for pressure or volume flow control enables the most precise force and stroke control (closed-

loop control). An additional low-pressure pump for the oil-air cooler (for long test scenarios) provides 20 bar 6.2 L / min volume flow and fast lift function.

Measuring and Control Electronics

Machine uses a digital Doli EDCi20 controller. This is installed in the control cabinet and can optionally be operated with a remote control. The control electronics provide automatic testing with given loading speeds for force, displacement and strain-controlled tests with sensitive and adjustable break detection. Communication to the PC: Ethernet socket / USB 2.0 configuration. Remote configuration and remote maintenance via TeamViewer function (PC required).

- Ship wt. 9,478 lbs. (4,300kg)

Specification	HCM-1200.7F.3
Capacity	67,443 lbf (300kN)
Force Measuring Range	675 – 67443 lbf (3 – 300kN) Class 1
Stroke	3.93" (250mm)
Column Spacing, Front	37.8" (960mm)
Column Spacing, Side	24.0" (610mm)
Bending Roll Dims	1.18" x 20.08" (ø30 x 510mm)
Distance, Upper Rolls	2.95 – 13.39" (75 – 340mm)
Distance, Lower Rolls	3.15 – 40.16" (80 – 1020mm)
Flex Machine (L x W x H)	47.3 x 33.5 x 96.5" (1200 x 850 x 2450mm)
Control Cabinet	47.25 x 22.45 x 41" (1200 x 570 x 1040mm)

Description	Information	Part #
Machine Platen	Machine platen device for Ø215 acc. EN12390-4 spherical mounted	HCM-1200.5
Measuring Rods	For EN 14488-3, ASTM C1609 testing. Includes measuring probe.	HCM-1200.6
CMOD Clip-on Extensometer	For EN 14651 tests 5.0mm compressed gauge length +4mm/-1mm measuring range.	HCM-1200.7
Round Panel	For ASTM C1550, includes measuring sensor.	HCM-1200.8
Energy Absorption Device	For EN 14488-5, includes measuring sensor.	HCM-1200.9
Roller Conveyor	For sample insertion of concrete beams into the 4-column frame.	HCM-1200.10



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