

ELECTROMECHANICAL FLEXURAL & COMPRESSION TESTING MACHINE

Electromechanical Flexural-Compression Testing Machine can perform Flexural-Compression Tests of various types of materials.

It is produced with a capacity of 50 kN or 100 kN.

The device works with an Electromechanical Motor.

Piston movement is limited by 2 switches located at the top and bottom of the piston.

The Electromechanical Flexural-Compression Testing Machine machine consists of;

- Load Frame
- 50 kN or 100 kN Load Cell according to device capacity,
- Movable Upper Plate for compression tests,
- Digital graphic readout unit
- Software

Accessories should be ordered separately according to the type of test to be performed for flexure tests.

Load Frame

The Load Frame consist of 2 rigid columns, a cast iron base with gear box inside and a steel bridge to hold the Load cell and accessories.

The vertical distance can be adjusted by the help of the upper platen.

The distance between the columns can be adjusted up to 1 meter.

Digital Graphic Readout Unit

The device can be controlled from the computer automatically or run from the control unit automatically or manually.

Load/stress values can be read from the computer or LCD screen Graphic Readout Unit.

The Load vs Time graph can be seen from the LCD screen during the test.

Test data can be stored by the computer after failure.

The pace rate can be adjusted between 0,05 and 24 kN/sn.

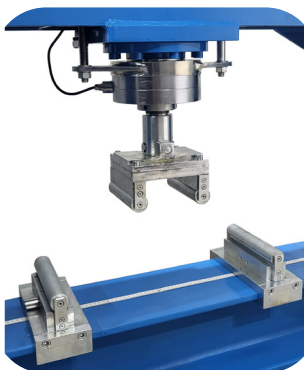
Software

The device can be connected to any computer with Ethernet cable.

Thanks to software, different types of user and sample data can be stored and printed out the test report.

HİRA Compression-Flexural Software is provided free of charge with the device.

FLEXURAL TESTING ACCESSORIES



HR-C5050

Flexural Testing Assembly for Concrete Beams

The test assembly is used for 3 or 4 point flexural tests on 100 or 150 mm Concrete Beams.

The set consist of 2 upper and 2 lower rollers of $\varnothing 38 \times 160$ mm.

The distance of lower bearers can be adjusted between 100 mm and 800 mm. The distance between upper bearers can be set to 100 mm or 150 mm.

For 3 point testing one of the bearers can be removed and the other placed in the center.



HR-C5051

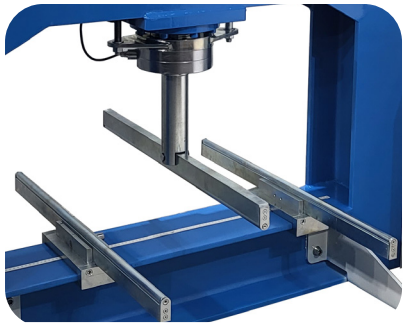
Flexural Testing Assembly for Concrete Kerbs

The test assembly is used for flexural tests on Concrete Kerbs.

The set consists of 2 lower rollers of $\varnothing 20 \times 620$ mm and $\varnothing 40$ mm upper loading piston with ball seating assembly.

The distance of lower rollers can be adjusted between 100 mm to 800 mm.

HİRA TESTING EQUIPMENT



HR-C5052

Flexural Test Assembly for Concrete Paving Flags and Concrete Terrazzo Tiles, Natural Stone Kerbs and Slabs

The test assembly is used for flexural tests on Concrete Paving Flags and Concrete Terrazzo Tiles, Natural Stone Kerbs and Slabs.

The set consists of 2 lower rollers and upper roller of Ø 20x 620 mm.

The distance of lower rollers can be adjusted between 100 mm to 800 mm.

Splitting Tensile Test Device for Block Pavers

Splitting Tensile Test Device for Block Pavers is accessory for compression machines for measuring the splitting tensile strengths of 60-100 mm height x 220 mm length concrete block pavers according to the requirements of the related standards.

HR-C5053



Splitting Tensile Test Device for Concrete Cubes

Splitting Tensile Test Device for Concrete Cubes is accessory for compression machines for measuring the splitting tensile strengths of 150 mm cube concrete specimens according to the requirements of the related standards.



HR-C5054

Splitting Tensile Test Device for Cylinders

Splitting Tensile Test Device for Cylinders is accessory for compression machines for measuring the splitting tensile strengths of Ø150x300 mm and Ø160x320 mm cylindrical specimens according to the requirements of the related standards.

HR-C5055



CEMENT COMPRESSION & FLEXURAL TEST ACCESSORIES



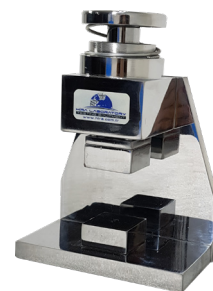
HR-CE1525

Cement Flexural Jig Assembly (40x40x160 mm)

It is used for flexural strength test of 40x40x160 mm cement samples.

Cement Compression Jig Assembly (40x40x40 mm)

It is used for compressive strength test of 40x40x160 mm cement samples.



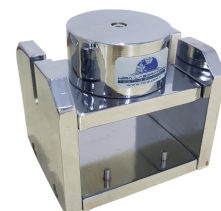
HR-CE1527

Cement Compression Jig Assembly (50x50x50 mm)

It is used for compressive strength test of 50x50x50 mm cement samples.

Cement Compression Jig Assembly (70,7 mm)

It is used for compressive strength test of 70,7 mm cement samples.



HR-CE1528
www.hira.com.tr

Technical Specifications:

Product Code	Product Name	Dimensions (cm)	Weight (kg)	Power Supply
HR-E0050	Electromechanical Flexural-Compression Testing Machine, 50 kN	105x130x115	220	220 V, 50-60 Hz, 1 ph
HR-E0100	Electromechanical Flexural-Compression Testing Machine, 100 kN	105x130x115	220	220 V, 50-60 Hz, 1 ph

Spare Parts & Accessories:

Product Code	Product Name	Power Supply
HR-E0050/1	Electromechanical Flexural-Compression Testing Frame, 50 kN	---
HR-E0100/1	Electromechanical Flexural-Compression Testing Frame, 100 kN	---
HR-G0975	Computer & Printer	220 V, 50-60 Hz, 1 ph
HR-G0981	Load Cell, 50 kN capacity	---
HR-G0982	Load Cell, 100 kN capacity	---
HR-E8500	Digital Readout Unit	220 V, 50-60 Hz, 1 ph
HR-E8500/1	Software	---

Test Accessories:

Product Code	Product Name	Standards	Dimensions (cm)	Weight (kg)
HR-C5050	Flexural Testing Assembly for Concrete Beams	ASTM C 293, ASTM C 78, EN 12390-5, BS 1881:118	20x20x20	16
HR-C5051	Flexural Testing Assembly for Concrete Kerbs	EN 1340	62x25x10	17
HR-C5052	Flexural Testing Assembly for Concrete Paving Flags and Concrete Terrazzo Tiles, Natural Stone Kerbs and Slabs	EN 1339, EN 1343, EN 12372	62x26x15	25
HR-C5053	Splitting Tensile Test Device for 150x150 mm Cube Specimens	EN 12390-6	18x15x32	15
HR-C5054	Splitting Tensile Test Device for 60-100 mm height Block Pavers	EN 12390-6, EN 1338, ASTM C 496	24x16x32	17,5
HR-C5055	Splitting Tensile Test Device for Ø150x300 mm & Ø160x320 mm Cylindrical Specimens	EN 12390-6, ASTM C 496	34x15x33	25
HR-CE1525	Flexure Jig Assembly to test 40x40x160 mm mortar prisms	---	15x15x18	11
HR-CE1526	Compression Jig Assembly to test 50 mm (2") mortar cubes	---	15x15x18	12
HR-CE1527	Compression Jig Assembly to test 40x40x40 mm mortar prisms	---	15x15x18	12
HR-CE1528	Compression Jig Assembly BS, to test 70,7 mm mortar cubes	---	15x13x19	9