

2025

BESMAK

CONCRETE PRESS & BENDING TEST SYSTEM

SERVO HYDRAULIC



DUAL
CAPACITY

BCO-CDF/ST

DESCRIPTION

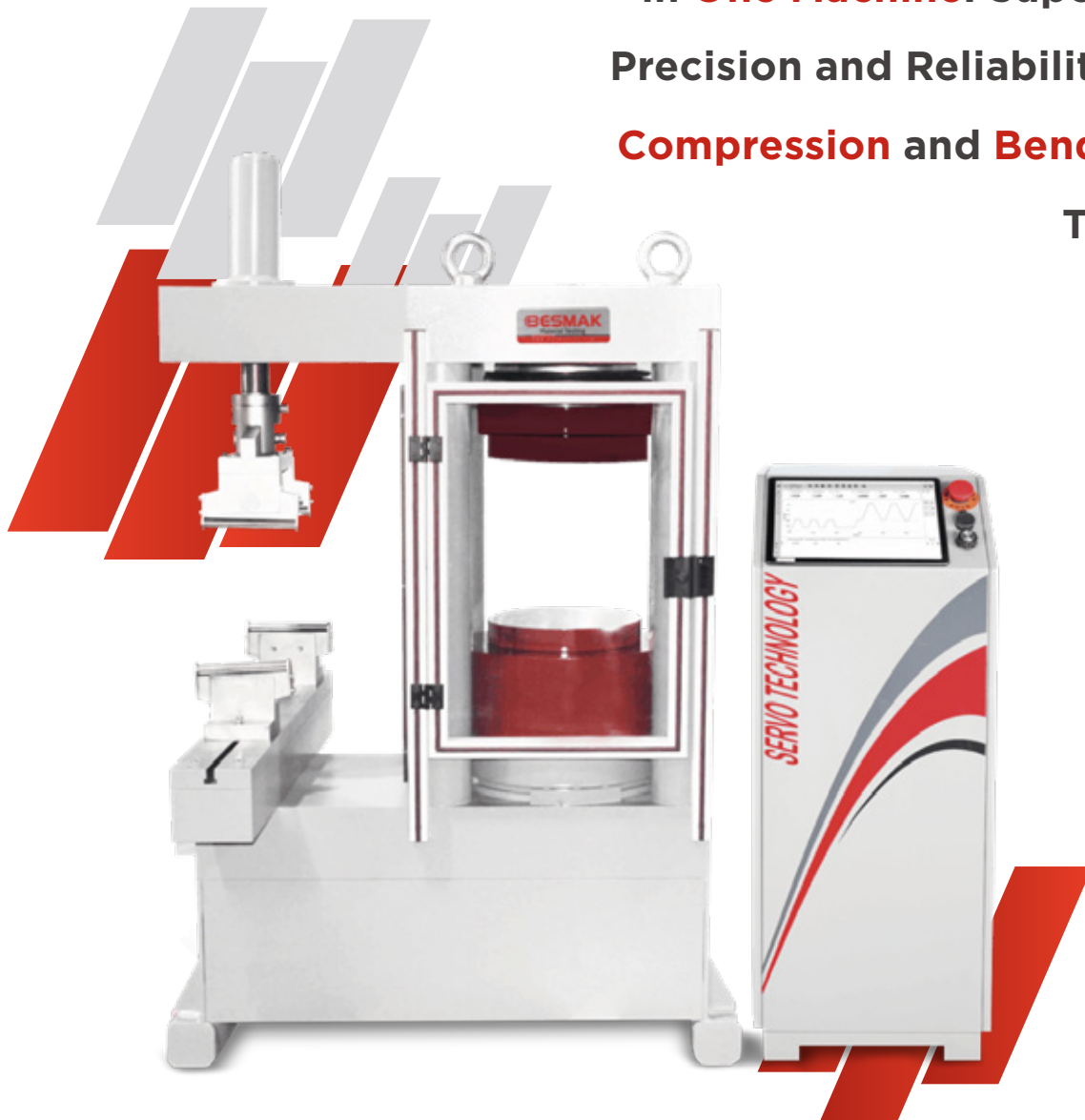
The BESMAK BCO-CDF/ST Series is a high-performance servo-hydraulic concrete press that combines compression and bending tests in a single, compact, and ergonomically designed machine. This system delivers exceptional accuracy, thanks to its robust servo-hydraulic load frames, intuitive software with powerful testing capabilities, high-capacity digital controllers, and durable jaws and fixtures. Compression and bending tests are conducted in compliance with ASTM and ISO standards, ensuring reliable and standardized results.

The BCO-CDF/ST Series Test System includes a rigid combined compression and bending body, a hydraulic unit with intermediate spacing components, a 2-channel electronic controller, a Linux-based 10-inch LCD display with built-in testing software, PC software, and a user manual. This automated testing system offers high capacity and flexible configurability, providing dependable test results for a wide range of applications. Its advanced features and user-friendly design make it an ideal solution for precise and efficient material testing.

APPLIED STANDARDS

✓ EN 12390-4 ✓ EN 12390-4 ✓ EN 1339 ✓ EN 1340 ✓ ASTM C39

Unmatched Performance
in One Machine: Superior
Precision and Reliability in
Compression and Bending
Tests



TECHNICAL SPECIFICATIONS

FRAME

- High stability with low friction single-effect piston
- Testable sample sizes: Cube (150x150x150, 200x200x200 mm), Cylinder (100x200, 150x300, 160x320 mm), Concrete Beam (100x100x400/500 mm, 150x150x600/750 mm)
- Upper head: 3° movement for homogeneous load distribution.
- Compression plate diameter: 320 mm, hardness min. 53 HRC
- Hardened and smoothened surfaces
- Test transition: Compression and bending sides have manual or automatic transition.



COMPRESSION TEST



BEND TEST

This testing device provides high performance, **flexibility, and reliable results, making it an excellent solution for concrete testing.**

COMPRESSION STROKE

60 mm

COMPRESSION CAPACITY RANGE

0-3000 kN

LOAD MEASUREMENT

Precision of 1% according to EN-ISO-7500-1 standard

4 COLUMN

Compression and bending frame on the side

BENDING STROKE

120 mm

BENDING CAPACITY RANGE

0-300 kN

HYDRAULIC UNIT

Servo system, quick loading, high flow electric motor-driven













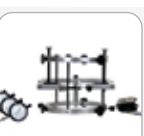





HIGH STABILITY, LOW FRICTION

Maximum impact on stabilization and friction with a single-acting piston

FRAMES

PRODUCT CODE	PRODUCT NAME
BCO-CDF3000-150/ST	Fully Automatic 4-Column Hydraulic Compression and Bending Test Machine, Combined Frame, 3000kN Compression / 150kN Flexural Capacity
BCO-CDF3000-200/ST	Fully Automatic 4-Column Hydraulic Compression and Bending Test Machine, Combined Frame, 3000kN Compression / 200kN Flexural Capacity
BCO-CDF3000-300/ST	Fully Automatic 4-Column Hydraulic Compression and Bending Test Machine, Combined Frame, 3000kN Compression / 300kN Flexural Capacity

ACCSESORIES

 <p>BALL SEAT FOR 2000/3000 KN COMPRESSION MACHINE BCO-199/1</p>	 <p>HARDNESS PLATEN FOR CONCRETE COMPRESSION MACHINE BCO-HP</p>	 <p>TOUCH SCREEN BMT-CUT/LCD-10</p>
 <p>AUTO - CENTERING DEVICE BGE-671/1</p>	 <p>PISTON SEAL SET BGE-605/3</p>	 <p>PRESSURE TRANSDUCER BGE-PT</p>
 <p>DISTANCE FOR 2000/3000 KN CONCRETE PRESS BCO-DP</p>	 <p>LVDT LVDT</p>	 <p>3-4 POINT BENDING FIXTURE FOR CONCRETE BEAM Concrete Beam BCO-FF</p>
 <p>NEOPREN PADS AND CAPPING RETAINERS BCO-122</p>	 <p>FLEXURAL FIXTURE FOR CONCRETE KERBS BCO-KRB</p>	 <p>DISTANCE FOR 2000/3000 KN CONCRETE PRESS BCO-DP</p>
 <p>COMPRESSOMETER-EXTENSOMETER COMP</p>	 <p>FLEXURAL FIXTURE FOR FLAGSTONE (LONG SAMPLE) BCO-FF / Flagstone Long Sample</p>	 <p>CEMENT COMPRESSION APPARATUS BCE-CCJ</p>
 <p>CEMENT FLEXURAL APPARATUS BCE-CFJ</p>	 <p>COMPRESSION JIG ASSEMBLY FOR ROCK-CORE SPECIMENS BRC-710</p>	 <p>COMPRESSION FIXTURE FOR FLEXURAL TEST MACHINE BCO-CF</p>

DUAL CAPACITY SINGLE POWER

Unlimited Performance in Testing



BESMAK

MATERIAL TESTING MACHINES



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