

2025

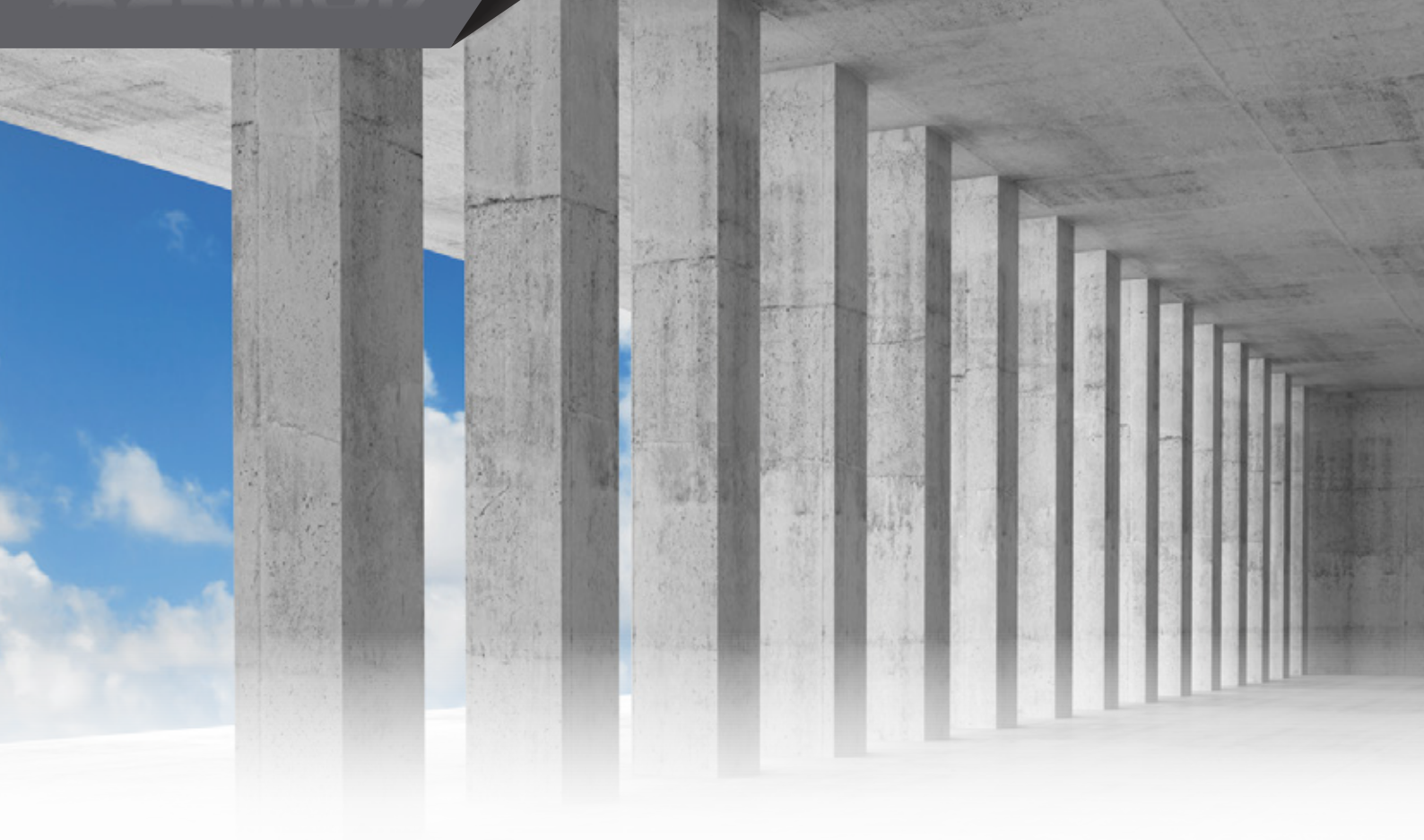
BESMAK

AUTOMATIC HYDRAULIC COMPRESSION MACHINE

WALL-TYPE SEMI-AUTOMATIC



BCO-W/STSO



DESCRIPTION

A compression test evaluates the behavior of materials under crushing loads by compressing the specimen and recording deformation at various load levels. BESMAK offers a wide range of advanced compression testing machines designed to meet diverse user needs. Our product lineup includes 4-Column and Wall-Type Frame Structures, as well as Fully Automatic and Semi-Automatic models, featuring both Membrane and Touch Screen control options. These machines are engineered to deliver exceptional performance and reliability for concrete compression testing.

At BESMAK, we prioritize compliance with international standards while continuously pushing the boundaries of innovation. Our dedicated research and development team has introduced groundbreaking technologies, such as the Sematron Touch Series Control and Software System. Developed entirely in-house, this system boasts a 1 kHz data acquisition speed for high-speed data display and supports various sensors, including LVDT, strain gauges, load cells, and pressure transducers. The multi-channel controller unit allows seamless integration of different frames with a single hydraulic power pack, enhancing flexibility and efficiency.

APPLIED STANDARDS

✓ TS EN 12390-4 ✓ ASTM C39

Compression Testing

Machines by BESMAK:

PRECISION, INNOVATION, AND VERSATILITY

BESMAK's compression testing machines offer unmatched precision, innovation, and versatility for testing hardened concrete and various materials. Designed to meet international standards, these machines provide reliable performance, advanced hydraulic systems, and user-friendly controls. Whether for laboratory or industrial applications, BESMAK ensures accurate and repeatable testing results with cutting-edge technology.

TECHNICAL SPECIFICATIONS

FRAME

- Rigid load frame in welded construction
- Suitable for testing 150×150×150, 200×200×200 mm cube and 150×300, 160×320 mm cylinder samples
- Upper platen spherically seated to allow an inclination up to 3° for homogenous loading
- Given with corrosion-resistant distance platens for different size samples (30 mm, 50 mm, 70 mm, 80 mm)
- All transmission surfaces are additionally plane – parallel – treated and fine machined
- Lower platen marked to allow centering of both cubes and cylinders
- Safety door switch for secure operations
- Piston limit switch for secure operations
- At the end of the test process to start a new test the piston returns to the default position

LOAD MEASUREMENT AND CONTROL

- Load measurement and control is carried out with a pressure sensor with a sensitivity of class 1 or better according to EN-ISO-7500-1 standard, starting from 1% of the capacity.

HYDRAULIC UNIT

- Advanced hydraulic unit with multi-piston hydraulic pump driven by electrical motor, smooth and high flow rate, fast piston approach, with manifold and pressure limit valve, oil tank, comes with necessary joints
- Loading / unloading valve is manually operated

High Capacity

2000 kN
3000 kN

Compliance

EN 12390-4
ASTM C39

FRAMES

PRODUCT CODE	PRODUCT NAME
BCO-W1000/FR	Wall Type Frame, 1000kN Capacity
BCO-W1500/FR	Wall Type Frame, 1500kN Capacity
BCO-W2000/FR	Wall Type Frame, 2000kN Capacity
BCO-W3000/FR	Wall Type Frame, 3000kN Capacity



OPERATES WITH

**HIGH
PRECISION**
and **Minimal
Error!**



COMPRESSION TEST

TECHNICAL FEATURES

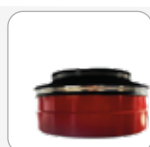
PRODUCT CODE	BCO-W2000/FR	BCO-W3000/FR
Load Capacity:	2000 KN	3000 KN
Piston Stroke	50 mm	50 mm
Lower Platen Dia.	300 mm	300 mm
Upper Platen Dia.	300 mm	300 mm
Thickness of Platens	46 mm	46 mm
Vertical Clearance	755 mm	780 mm
Horizontal Clearance	350 mm	350 mm
Depth Range	390 mm	450 mm
Hardness of Platens	55 HRC	55 HRC
Test Chamber Height	370 mm	400 mm
Weight	740 KG	1280 KG
Dimensions	505x410x1020 mm	500x575x1250 mm

** contact us for other dimensions

BCO-W/ST SERIES COMPRESSION MACHINES COMES WITH

- ✓ Rigid 4-column frame
- ✓ Hydraulic unit
- ✓ 2x50 and 1x70 mm distance pieces
- ✓ Linux based 10 inch industrial LCD display with built in test software
- ✓ PC software
- ✓ Software user manual

ACCSESORIES



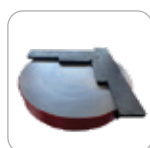
**BALL SEAT FOR 2000/3000
KN COMPRESSION
MACHINE**
BCO-199/1



**HARDNESS PLATEN FOR
CONCRETE COMPRESSION
MACHINE**
BCO-HP



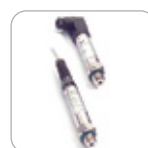
**BLOCK PLATEN
(RECTANGULAR)**
BCO-CBP



AUTO - CENTERING DEVICE
BGE-671/1



PISTON SEAL SET
BGE-605/3



PRESSURE TRANSDUCER
BGE-PT



**SPLITTING TENSILE
APPARATUS**
BCO-115



TOUCH SCREEN
BMT-CUT/LCD-10



**DISTANCE FOR 2000/3000
KN CONCRETE PRESS**
BCO-DP



**BESMAK ELECTRONIC
CONTROL UNIT**
BMT-SCU



**NEOPREN PADS AND
CAPPING RETAINERS**
BCO-122



**CEMENT COMPRESSION
APPARATUS**
BCE-CCJ



**CEMENT FLEXURAL
APPARATUS**
BCE-CFJ



**COMPRESSION JIG
ASSEMBLY FOR
ROCK-CORE SPECIMENS**
BRC-710



FRAME PEDESTAL
BCO-FP

"BESMAK: THE PIONEERING FORCE OF THE INDUSTRY, A GLOBAL LEADER EXPORTING TO OVER 50 COUNTRIES!"

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In the construction sector soil, asphalt, concrete, aggregates, cement, rock mechanics and construction materials for quality control testing laboratories aimed to provide high quality products using advanced technology and experience since it was established. In this way it's been one of the pioneering company in the international sector.

Our company imports, exports and technical support and has been producing hi-tech CNC machines on the 6300 m² closed area. We keep going R&D with our experienced engineers and we produced new design products in sector. Also electronic control units and software design made by our company too.

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BESMAK

MATERIAL TESTING MACHINES



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