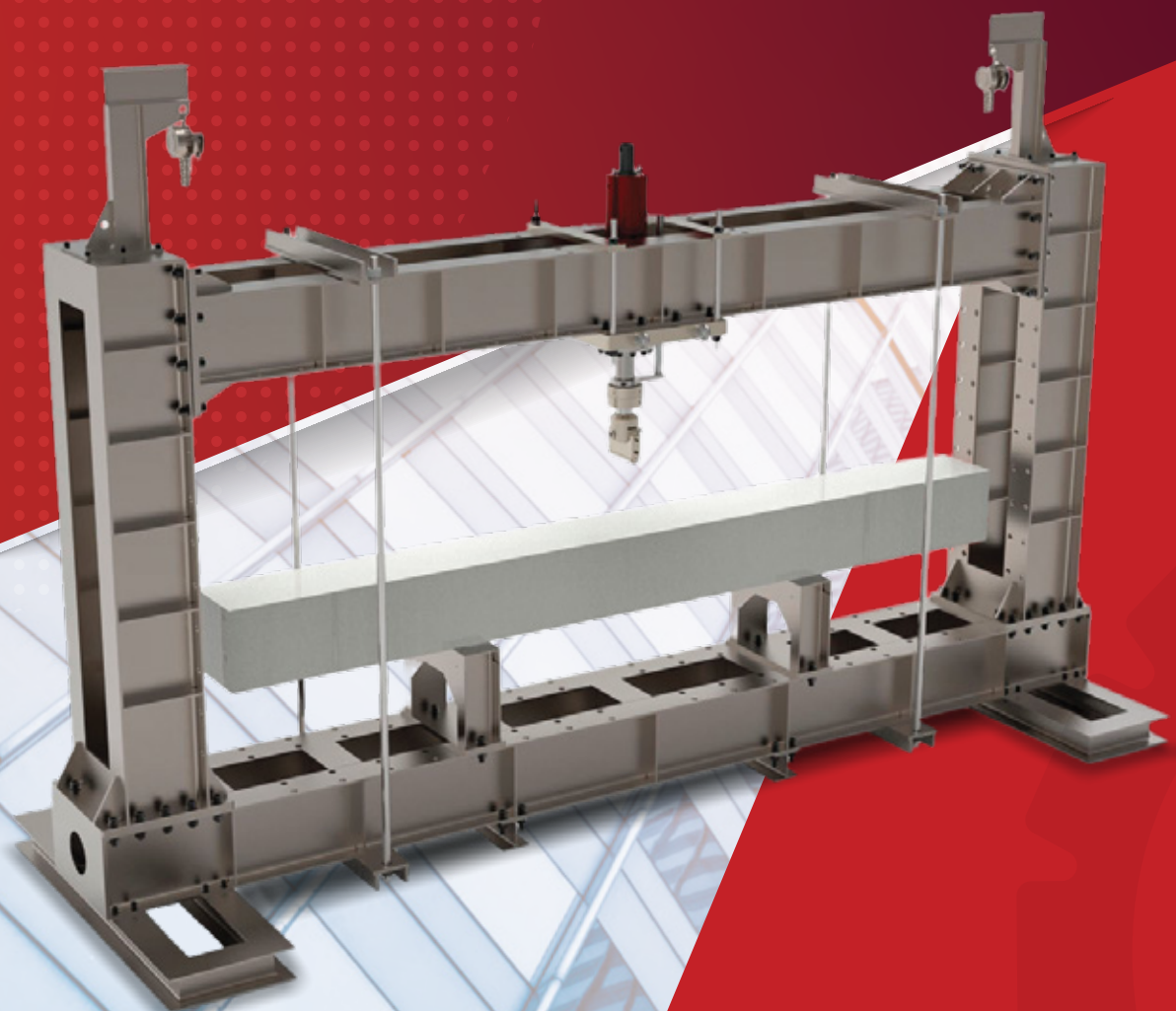


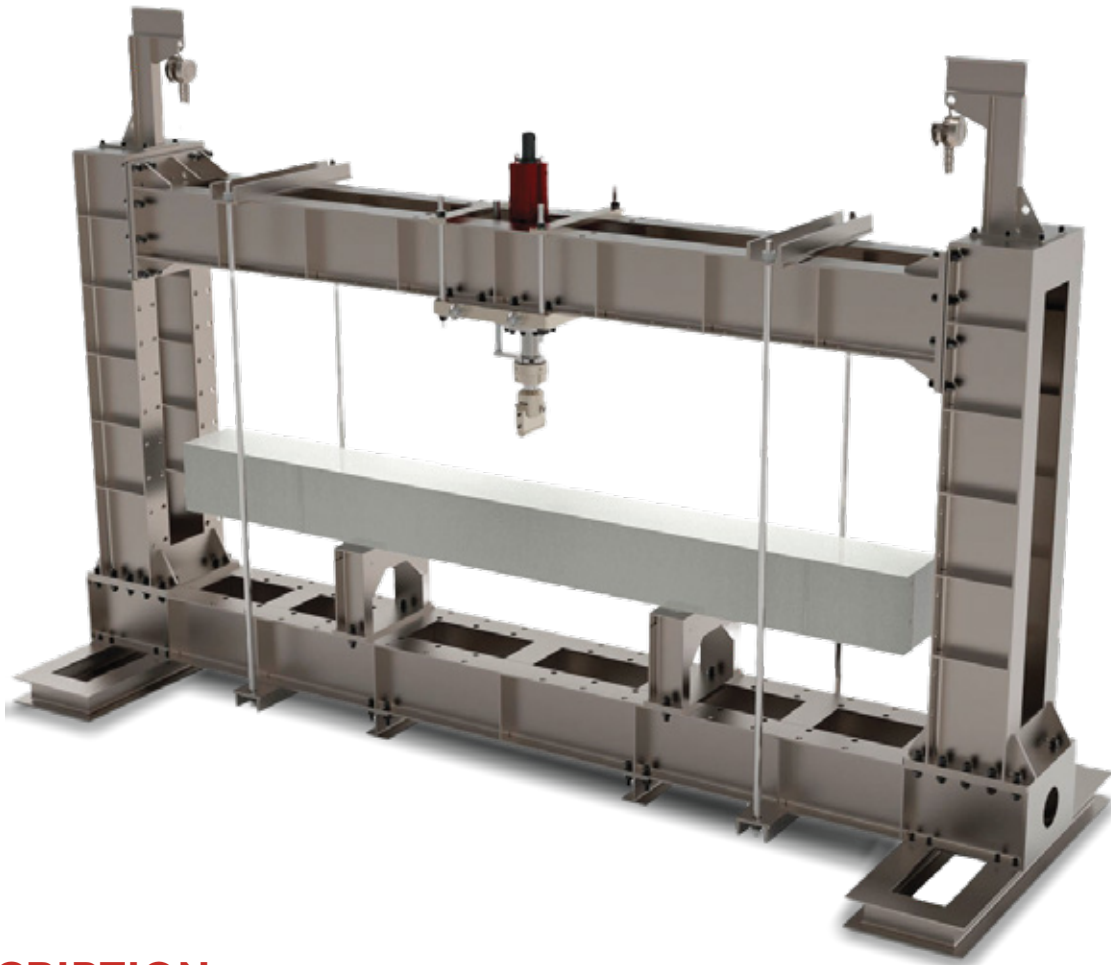
2025

BESMAK

LOAD FRAME



BMT-F.SPL



DESCRIPTION

The BESMAK BMT-F.SPL Series Loading Frame is a robust and reliable testing platform designed for high-precision load measurement and control applications. The system consists of a load cell for accurate force measurement, a hydraulic drive unit for controlled and safe testing operations, an electronic control unit for data processing and analysis, and an advanced test software with a user-friendly interface.

The modular and adaptable structure of the BMT-F.SPL Series allows the integration of custom or standard test accessories, making it suitable for a wide range of applications. With its ergonomic and user-friendly interface, it enables operators to efficiently manage test processes with ease.

Designed for high precision and durability, this testing system is ideal for measuring the mechanical properties of various materials, conducting load tests, and managing verification processes. Its high accuracy, long-lasting components, and precise calibration options make it a perfect solution for industrial testing laboratories, R&D centers, and quality control processes.

Moreover, the system offers extensive testing flexibility, allowing it to adapt to different testing requirements while simplifying the process through automated data recording, analysis, and reporting. Equipped with advanced software features that enhance testing efficiency and operator experience, the BMT-F.SPL Series sets a new standard in reliability, precision, and durability in material testing.

With its reliable performance and flexible structure, the BMT-F.SPL Series redefines excellence in material testing solutions. The system can perform the test procedures in accordance with EN-15129 and EN-1337 standards. Horizontal and vertical axial actuators can be tested and applied in linear loading, step loading, ramp loading, sinusoidal loading, triangular loading, rectangular loading, cyclic and user-defined universal structure (tensile and compression directions) with load and displacement control.

FOCUS ON

- HIGH PRECISION
- DURABLE STRUCTURE
- EASY OPERATION
- ADVANCED DATA ANALYSIS
- WIDE TESTING FLEXIBILITY

TECHNICAL FEATURES

Frame

The BMT-F.SPL Series Loading Frame features a high-rigidity, dual-column structure designed for maximum stability. Its low-friction, double-acting piston system ensures precise and reliable load application throughout the testing process. The robust and durable construction guarantees long-term accuracy and high-performance testing.

Hydraulic Unit

The system is equipped with an advanced multi-piston hydraulic unit driven by an electric motor. The high-flow hydraulic pump ensures smooth and rapid piston movement, while the integrated manifold and pressure limit valve enhance operational safety. Additionally, the hydraulic oil reservoir and necessary connection components ensure a fully functional and efficient hydraulic system. A load-controlled operation mode is also available for more precise testing.

Load Measurement and Control

With an advanced load measurement system, the machine provides high-precision load control between 4% and 100% of its capacity, ensuring Class 1 or better accuracy. The combination of precise sensors and an intelligent control mechanism ensures accurate and repeatable test results.

PC Software

The machine comes with universal testing software that enables full control via a computer. With an intuitive user interface, the software allows seamless test management, data analysis, and rapid reporting. Supporting various test procedures such as ramp loading, basic strength tests, and precise load application scenarios, it provides a comprehensive solution for laboratory testing needs.

Control Unit



The BMT-F.SPL Series features a high-tech control unit with five channels (two analog, three digital) for advanced data acquisition and precise load control. It allows adjustable load increases (1 kN/s – 25 kN/s), with automatic piston release upon specimen failure. The 1 kHz data acquisition ensures high accuracy, while the closed-loop (PID) control with dual-loop feedback optimizes performance. Additional features include automatic sensor recognition, calibration, and extra channels for load or displacement sensors, enhancing system flexibility.



PRODUCT CODE

PRODUCT NAME

BMT-F.60SPL

60 kN Load Frame

BMT-F.150SPL

150 kN Load Frame

BMT-F.300SPL

300 kN Load Frame

BMT-F.600SPL

600 kN Load Frame

BMT-F.1000SPL

1000 kN Load Frame

PRECISION POWER

AND EXCELLENCE IN CONTROL !

**BESMAK is
the representative of
largest companies in industry
which are the active in
many countries around
the world and sales of
Construction Laboratory
Testing Equipments**

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.



BESMAK

MATERIAL TESTING MACHINES



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