

Balanced Mix Design Frame



CS-BMD9500

The Cox & Sons multi-purpose loading system - Perform BMD and standard mix tests with quality and precision

The Balanced Mix Design Frame provides the ultimate solution for a lab looking to perform the key new BMD tests IDEAL-CT, IDEAL-RT, I-FIT, and SCB. Additionally, it can be used to perform standard laboratory tests such as Marshall, TSR, and interlayer shear bond. More information on Balanced Mix Design can be found [here](#). The Cox and Sons BMD 9500 is the market-leading load frame for labs that need to run balanced mix design tests. Unique PID control lifts the machine above other screw driven machines with highly accurate speed control and provides servo control performance at a fraction of the price.

Standards

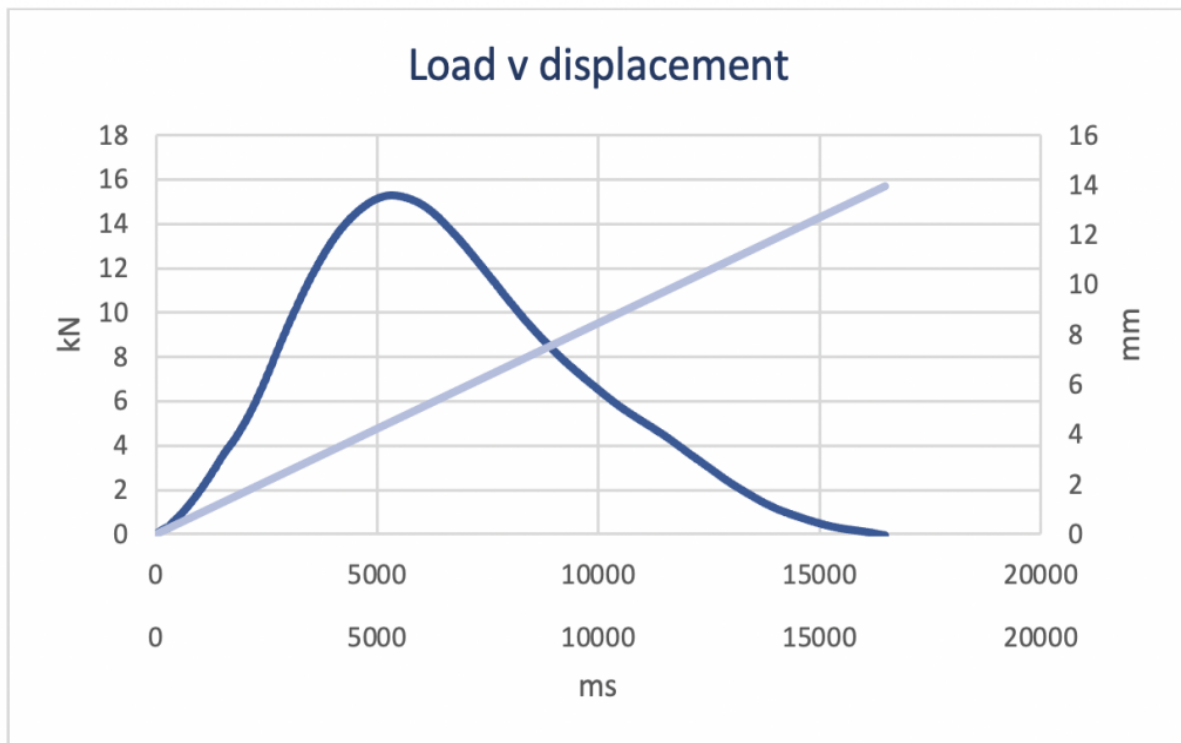
- IDEAL-CT (TTI Method) — ASTM D8225
- IDEAL-RT (TTI Method) — ASTM WK71466
- I-FIT (SCB IL Method) — AASHTO TP124
- SCB (LSU Method) — ASTM D8084
- TSR — AASHTO T283
- ISS (Interlayer Shear Strength) — AASHTO TP114
- TxDOT (Interlayer Shear Strength) - Tex-249-F
- Marshall — ASTM D6927, AASHTO T245
- BS EN 12697-23

Balanced Mixed Design Frame CS-BMD9500 is able to perform IDEAL-CT ASTM, SCB AASHTO(I-FIT), IDEAL-RT ASTM, SCB ASTM (Louisiana), Tack Bond Shear AASHTO, Marshall, Leutner, and TSR. You can find recommended test accessories (In the Accessories tab) For key BMD tests, the results are calculated on the machine. This feature removes the awkward procedure of downloading data and transferring it to a PC in order to be calculated and displayed. This also gives operators the opportunity to quickly determine whether the design of a sample mix is within spec. Of course, if required data can easily be transferred to a PC for reports or further research.

Key Features

- PID software algorithm produces servo-hydraulic riving displacement control

- Super stiff frame to minimise frame flex during tests
- Instant on-screen test results - no need to transfer data to a PC
- Analysis for IDEAL-CT, IDEAL-RT, I-FIT, and ASTM SCB
- Included in NCAT BMD machine assessment



Accessories

Accessories are not included in the price of main device (unless stated otherwise) and may be purchased separately if required.

CS-BMD9500-CT	IDEAL-CT (TTI Method) ASTM D8225 test accessory for CS-BMD9500.
CS-BMD9500-RT	IDEAL-RT (TTI Method) ASTM WK71466 test accessory for CS-BMD9500.
CS-BMD9500-I-FIT	SCB Testing (LSU Method) ASTM D8084 and I-FIT Testing (SCB IL. Method) AASHTO TP124 test accessory for CS-BMD9500.
CS-BMD9500-ISS	ISS (Interlayer Shear) AASHTO TP114 4" and 6" samples test accessory for CS-BMD9500.
CS-BMD9500-ISS-M	ISS (Interlayer Shear) AASHTO TP114 100 and 150mm samples test accessory for CS-BMD9500.
CRT-LEUTNER	Leutner test accessory 100&150mm
CS-BMD9500-TSR4	TSR Testing AASHTO T283 4" Lottman breaking head CS-BMD9500.
CS-BMD9500-TSR6	TSR Testing AASHTO T283 6" Lottman breaking head for CS-BMD9500.
CS-BMD9500-TSR100M	TSR Testing AASHTO T283 100mm Lottman breaking head for CS-BMD9500.
CS-BMD9500-TSR150M	TSR Testing AASHTO T283 150mm Lottman breaking head for CS-BMD9500.
CS-BMD9500-MAR4	Marshall breaking head 4" for CS-BMD9500.
CS-BMD9500-MAR100M	Marshall breaking head 100mm for CS-BMD9500.
CS-BMD9500-MAR6	Marshall breaking head 6" CS-BMD9500.
CRT-ITS-FRAME	Indirect Tensile Strength BS EN 12697-23 100mm and 150mm test accessory for CS-BMD9500.

Specifications

Technical specifications are subject to change without notice.

Load capacity	11000 lbf (50kN)
Speed range — Testing	0.00001 – 2.00000 in/min (0.00001 – 50.80000 mm/min)
Speed range — Fast Approach	3.0 in/min (75.0 mm/min)
Data channels	4
Platen Size / Travel	10" (254mm) / 4" (100mm)
Data storage	1000 tests and up to 3000 readings per test
Clearance, vertical	40" (1000mm)
Clearance, horizontal	15" (380mm)
Voltage	110/220V 50/60Hz - 5.0amps
Net weight	300 lbs (136kg)

Controller Specifications

Display (Resistive Touch)	7" (178mm) VGA (480 x 800)
Real-time Test Data	Graphic and Tabulation
Processor	Dual 32-bit ARM
RAM	64MB
Memory, Non-Volatile	4GB
Analog to Digital Converter	24 bit
Data Acquisition	4 Channels
Logging Speed	up to 50 readings per second
Multi-Test Storage	1000
Points Per Test	3000
USB port (front)	export data, import/export calibration data, WiFi
USB Port (back)	provides external power for wireless access point
Ethernet Connection	for network connectivity
Emergency Stop	Large Button
24-bit Differential Analog to Digital Converter	2
Ambient Temperature Sensor	1
Ambient Temperature Sensor	1
Limit Switches	2
Firmware Update	Ethernet or flash drive

Calibration & Maintenance

Calibration, Annual Service and Maintenance Contracts are available for this device. Please enquire for further details. Note: This device should be checked and calibrated annually.

Datasheet Version: 20.11/01