



# SB2010

Large scale shear box



**The SB2010 large scale shear box is the most up to date and technologically advanced direct shear box available.**

Designed and developed to determine the shear strength of soil specimen in accordance with BS1377 Part 7 1990, the SB2010 can also be used on geo-synthetics.

Fully automated, the SB2010 incorporates a PC controller for operating the machine, logging and displaying test data in realtime and for reporting.

## Software

The SB2010 shear box is a closed loop system controlled by a PC controller with user friendly and intuitive software. The system is networkable and can integrate fully with laboratory IT.

## Benefits of SB2010:

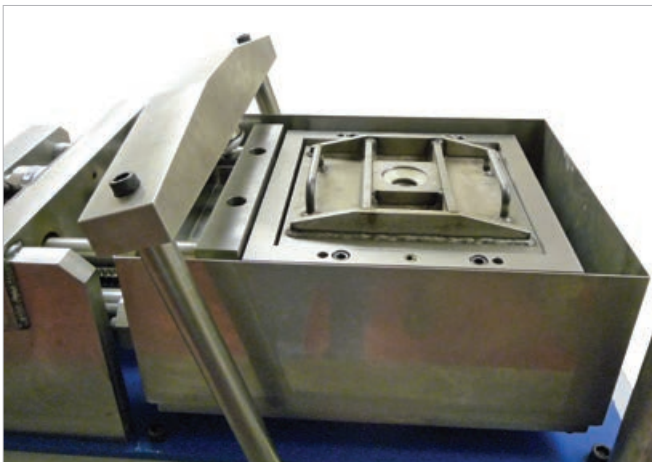
- Complies to BS1377 Part 7 1990
- Fully automatic loading and displacement measurement
- Integral reference arm, optional rated winch for easy handling
- Hydraulically controlled vertical loading system
- Precision stepper motor for horizontal loading
- Direct measurement of load by calibrated load cells
- Full calibration and support services available



## How it works

Horizontal loads up to 100KN are applied using a precision stepper motor to ensure accurate speed of advancement, whilst load is measured directly using a calibrated load cell.

Vertical loads up to 100KN are applied using a high performance hydraulic proportional valve and cylinder, and is measured directly using a calibrated load cell.



Rugged PDA unit	
Features	Fully automated test operation Stepper motor for precision controlled horizontal loading rate Test data is displayed in real-time Heavy duty hand winch included for removal of sample box Safety features include overload sensors and emergency stop button
Max sample box size	L 302mm x W 305mm x D 100mm upper & lower
Programmable strain rate	0 to 10mm/min
Strain rate resolution	0.1mm/min
Maximum travel	50mm
Travel resolution	0.01mm
Overall dimensions	L 750mm x W 1600mm x D 1850mm
Weight	Approx 1010Kg
Max lateral load	100KN
Lateral load cell range	0 to 100KN
Lateral load cell non-linearity	0.1% FS
Max vertical load	100KN
Vertical load cell range	0 to 50KN
Vertical LVDT range	0 to 25mm
LVDT non-linearity	0.07% FS
Power supply	Three phase VAC (240VAC to 440VAC three phase converter can be supplied)
Interfaces	USB, Ethernet

**All of our equipment is supplied fully calibrated to UK national standards.**

## SB2010 user training

We provide full training for all equipment purchased from James Fisher Testing Services. Our training sessions are created and led by our in-house experts, providing you with the skills and knowledge needed to operate the equipment safely, efficiently and with confidence.

We offer classroom and site training within the UK, on-site training overseas and virtual classroom training. No matter what your needs or technical experience we can provide the right training solution for your requirements.

