CALIFORNIA BEARING RATIO (CBR) FOR LAB

For determining the California Bearing Ratio (CBR) of soils and to evaluate the relative quantity of subgrade and subbase soils and some base course materials. Soil samples are mixed with varying quantities of water, compacted in a mold by a tamper, weighed and the dry compacted density determined. A perforated plate with adjustable stem and surcharge weights are placed on the specimen and the mold and weights soaked in water. The initial height and the height after given periods of soaking are determined by a micrometer dial mounted on a tripod and the sample swell reported as the percentage of the initial height. The sample is penetrated by a piston at a constant rate and the load required for penetration to different depths is recorded.

MANUAL CBR LOADING MACHINE

The **S4242** determines bearing ratio of soil when compacted and tested in the lab. It compares the penetration load of the soil to that of a standard material. The Manual CBR Loading Machine utilizes a three speed mechanical jack for test speeds and for rapid travel. The machine meets ASTM D-1883 and AASHTO T-193 when the operator accurately cranks to the required test speed of 0.05"/min. The loading machine is furnished with a 10,000 lbf calibrated load ring with dial indicator. If the soils vary widely in strength, it is advisable to order extra lower capacity load rings such as the **G3832** (2,000 lb) or a **G3836** (6,000 lb). The **S4111** CBR cylinder mold is 6" ID x 7" high. The perforated base is 8" x 8" x 3/8" plated steel and is fitted with threaded rods and thumb nuts.

MOTORIZED LOADING MACHINE

The **S4251** & **S4252** Motorized Loading Machine is very similar in design and application to the **S4242** except that it is motorized with preset speed selections. The motor drives the machine at a constant rate of 0.05"/min. The **S4252** is 220V/50Hz version.

MASTER-LOADER MULTI-USE COMPRESSION TESTER

The **S4254** Master Loader handles a variety of tests with one load frame (Marshall, CBR, Unconfind, Unconsolidated undrained triaxial). Bench mounted unit features pre-set speed selections and accessories. Variable speed setting allows stepless adjustments from 0.002" to 2.000" per minute.

MODELS	DESCRIPTION	STANDARDS
S4242	CBR LOADING MACHINE, MANUAL	ASTM D-1883, D-4429 / AASHTO T-193
S4251	CBR LOADING MACHINE, MOTORIZED, 110V / 60 Hz	
S4252	CBR LOADING MACHINE, MOTORIZED, 220V / 50 Hz	
S4254	MASTER LOADER MULTI USE COMPRESSION TESTER, 120V / 60 Hz	ASTM D-1633, D-1883, D-2166, D-1559, / AASHTO T-193, T-208, T-245, / BS 1377

ACCESSORIES	DESCRIPTION
C5041	CURING TANK
G3103	MICROMETER DIAL GAUGE, 1" TRAVEL IN .001" INCREMENTS
G4421	SOLUTION BALANCE, 20 KG
G6091	OVEN, 28" X 24" X 20" CHAMBER
L1118	MIXING BOWL. 13-1/4" DIA.
L1642	BOX, ALUMINUM, 2" DIA, 1 DOZ
L3652	STRAIGHT EDGE, PLATED STEEL, 12"
S4111	CBR, MOLD, W/ COLLAR & BASE
S4112	LBR TEST MOLD, 6" ID X 6" H
S4121	SPACER DISC, 2.416" H
S4122	SPACER DISC, 1" H (VA SPECS)
S4135	FILTER PAPER FOR MOLDS, 100 / PKG
S4141	SWELL PLATE, W/ STEM & NUT
S4151	STEEL WEIGHT, 5 LB ANNULAR
S4152	STEEL WEIGHT, 5 LB SPLIT
S4155	SURCHARGE WEIGHT, STEEL SLOTTED
S4161	DIAL HOLDER TRIPOD, LESS DIAL
S4162	TRIPOD, BRASS C.O.E. DESIGN
S4182	PISTON, STATIC LOAD, W/ SCALE

S4254

GEOSTAR® TRIAXIAL EQUIPMENT

A totally automated computer based triaxial testing system is a follow up to its highly successful GeoStar consolidation testing equipment. The new system was developed in conjunction with a Finnish University and consulting group. This apparatus allows a single computer to control a complete triaxial test set plus up to three consolidation and one direct shear loading frame. All frames are computer controlled for an infinitely variable rate of strain loading. The ease of use of this economically priced system allows laboratory managers a new degree of accuracy in test results with a corresponding decrease in labor content for completed tests. All test results are achieved on the master computer and can be printed in a report ready format using a laser printer.

Please call for more detailed specifications

MODELS	DESCRIPTION	STANDARDS
S7100	GEOSTAR TRIAXIAL SYSTEM	ASTM D-4767-88 D-2850-87 / AASHTO T-234

UNCONFINED COMPRESSION MACHINE

The Unconfined Compression machine is used for determining the compressive strength of undisturbed or remolded soil samples. The undisturbed or molded soil cores are placed between platens in a compression machine, loaded by strain-controlled or stress-controlled method and the load at failure recorded. An accurate and lightweight mechanical tester for the field or lab. Load is applied by a gear box type loading jack and measured by a double proving ring with dial gauge. Has platens, frame and strain dial gauge. The motorized type has a 500 lb proving ring, variable speed drive and a reversing switch. The **S8631** has an infinitely variable control from 0" to 0.5" per minute.

S8631

MODELS	DESCRIPTION	TYPE	CAPACITY	
S8621	UNCONFINED COMPRESSION MACHINE	MANUAL	500 LB	ASTM D-2166 / AASHTO T-208
S8622			1000 LB	
S8623			15000 LB	
S8631	UNCONFINED COMPRESSION MACHINE, 110V / 60 Hz	MOTORIZED	500 LB	
S8632	UNCONFINED COMPRESSION MACHINE, 220V / 50 Hz		500LB	

ACCESSORIES	DESCRIPTION
S8728	UNCONFINED COMPRESSION ATTACHMENT SET