RELATIVE DENSITY TEST

STANDARDS: EN 13286-5, ASTM D4253, ASTM D4254

Relative density relates the dry density of cohesionless soil to the maximum and minimum densities. The degree of compaction of cohesionless soil can be stated in terms of relative density.

This method, in the EN standard, covers the determination of the maximum dry density and water content of cohesionless materials when compacted using a vibrating table. Materials for which this method is applicable may contain up to 12% by mass fines (<0.063 mm). The maximum particle size of the materials to be tested is 80 mm. This method applies to mixtures to be used in road construction.

The ASTM, also specify that it is used for the determination of the relative density of cohesionless soil for which impact compaction will not produce a well-defined moisture-density relationship curve and where the maximum density of impact method will generally be less than by vibratory method.

The two versions: HR-S7500 Conforming to EN and HR-S7505 Conforming to ASTM are practical identical except for the 0.1 cu.ft. mould.

HR-S7500 Relative Density Test Set Supplied complete with 762x762 mm Vibrating Table (3600 rpm) which adjustable vibration magnitude, 14200 cm³ 0,5 cu.ft. Relative Density Mould Set (Mould, Circular surcharge weight with handle, Surcharge base plate with handle and detachable guide sleeve with clamp assembly) and Relative Density Gauge Set.

HR-S7505 Relative Density Test Set Supplied complete with 762x762 mm Vibrating Table (3600 rpm) which adjustable vibration magnitude, 0,1 cu.ft. and 0,5 cu.ft. Relative Density Mould Set (Mould, Circular surcharge weight with handle, Surcharge base plate with handle and detachable guide sleeve with clamp assembly) and Relative Density Gauge Set.

Relative Density Gauge Set is supplied with Analog displacement dial gauge (50 x 0.01 mm division, 0-100 scale) with holder and Metal calibration bar.

Relative Density Pouring Funnel Set is required for loose placement of 9.5mm and finer granular soils in the Mould Set. The Funnel Set includes two Ø152 x 305 mm metal cylinders, each with funnel and 152 mm long delivery spout attached to one end. Spouts are 25.4 mm and Ø 12.7mm. The pouring devices are mandatory according to ASTM D4253 and should be ordered separately.

Technical Specifications:

Product Code	Product Name	Dimensions (mm)	Weight (kg)	Power Supply
HR-S7500	Relative Density Test Set, EN	762x762	290	220 V, 50 Hz, 1 ph
HR-S7500/60Hz	Relative Density Test Set, EN	762x762	290	220 V, 60 Hz, 1 ph
HR-S7505	Relative Density Test Set, ASTM	762x762	310	220 V, 50 Hz, 1 ph
HR-S7505/60Hz	Relative Density Test Set, ASTM	762x762	310	220 V, 60 Hz, 1 ph

Spare Parts & Accessories:

Product Code	Product Name	Power Supply
HR-S7500/1	Vibrating Table, 762x762 mm	220 V, 50 Hz, 1 ph
HR-S7500/1/60Hz	Vibrating Table, 762x762 mm	220 V, 60 Hz, 1 ph
HR-S7500/2	0,1 cu.ft. Relative Density Mould Set	---
HR-S7500/3	0,5 cu.ft. Relative Density Mould Set	---
HR-S7500/4	Relative Density Gauge Set	---
HR-S7500/5	Relative Density Pouring Funnel Set	---

HR-S7500/5

HR-S7500