Hydraulic Compact Steel Roller Compactor

ASTM D04 - WK34713; EN 12697-33 STEEL ROLLER

The Roller Compactor is considered to be the method of laboratory specimen compaction that results in slabs of asphaltic paving materials with properties that most closely simulate those of materials in the highway. Slabs can be compacted to target mixture densities using loads that are equivalent to those of full-scale compaction equipment.

This compactor is hydraulically powered and controlled by a programmable logic controller (PLC) connected to an HMI (Human Machine Interface), which the operator can use to select the number of passes. A manual pressure control is adjusted to set the required load. The main function of the Compact Steel Roller is to produce slabs for beam fatigue and wheel tracking tests.

Features:

- Steel wheeled roller segments
- Solid machine frame
- Optional heated head for reducing mixture sticking to roller during compaction
- Model for compaction of 320 x 260mm (12.6 x 10.2 inch) and 305 x 400 mm (12 x 15.75 inch) slabs
- Slab depth from 40 to 135 mm (1.6 to 5.3 inch)
- Slabs can be used as wheel-tracking specimens, and cored to make indirect tensile test specimens or cut into beams for 4-Point Bending Test
- Roller Compactor molds will fit Cox & Sons Wheel Trackers so that compacted slabs can be wheel-tracked without de-molding
- Maximum compaction load of 30kN (6750lbf) per 305 mm (12 inch) roll width (equivalent to largest on-site static rollers)
- Speed control
- HMI for operator selection of number of passes
- Vibrating roller option with adjustable frequency to simulate on-site vibratory rollers

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HA-5700

Ship wt. 79 lbs. (36kg)
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Specifications
- Maximum Roller Load: 6750 lbf (30kN) over 12" (305mm) roll width
- Trolley Travel: ±6" (150mm) or ±8" (200mm)
- Speed: Variable up to 10 cycles/min.
- Slab Thickness: 1.6 to 5.3" (40 to 135mm)
- Electrical Supply: 110V 60 Hz, 1 Ph; 240V 50Hz, 1 Ph
- Dimensions: 23.6" x 57" x 74.8" (600 x 1450 x 1900mm)
- Working Space Required (WxDxH): 63" x 67" x 79" (1600 x 1700 x 2000mm)
- Desktop PC: Not required

Accessories
- Steel and aluminum quick release mold for roller compactor or wheel tracker, 12" x 15.75" x 2" (305 x 400 x 50mm) deep: HA-5700.3
- Steel and aluminum quick release mold for roller compactor or wheel tracker, 12" x 15.75" x 4" (305 x 400 x 100mm) deep: HA-5700.4