

Hydraulic Standard Roller Compactor Dual size

CRT-RC-H2



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Advanced integrated hydraulic control, precision
and reliability guaranteed

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BRIEF INTRODUCTION

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.

The CRT-RC-H2 is hydraulically powered and controlled by a programmable logic controller (PLC) connected to an HMI which the operator can use to select the number of passes. A manual pressure control is adjusted to set the required load.

Its main function is to produce slabs for wheel tracking tests. Users have compacted hot asphaltic materials over stress absorbing membrane interlayers (SAMIs) on a base of cracked concrete in order to assess the effectiveness of the SAMI by using shear or bending tests.

KEY FEATURES

- Steel wheeled roller segments
- Solid machine frame
- Optional heated head for reducing mixture sticking to roller during compaction
- Model for compaction of 305 x 305mm and 305 x 400mm slabs
- Slab depth from 40 to 135 mm
- Roller compactor moulds will fit Cooper Technology Wheel trackers so that compacted slabs can be wheel-tracked without de-moulding
- Maximum compaction load of 30kN per 305mm roll width (equivalent to largest on-site static rollers)
- Speed control
- HMI for operator selection of number of passes
- 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
- Vibrating roller option with adjustable frequency to simulate on-site vibratory rollers
- CE marked

SYSTEM ELEMENTS

The CRT-RC-H2 is comprised of :

- A robust flame cut steel frame
- An in-house designed HMI controlled hydraulic system
- Integral hydraulic power unit for standalone use
- Safety Guard

KEY USES

Preparation of homogeneous asphalt slabs :

- Wheel tracking tests
- Coring to produce specimens for indirect tensile and axial tests
- 4 Point Bending Test Beams

STANDARDS

- EN 12697-33 Steel roller

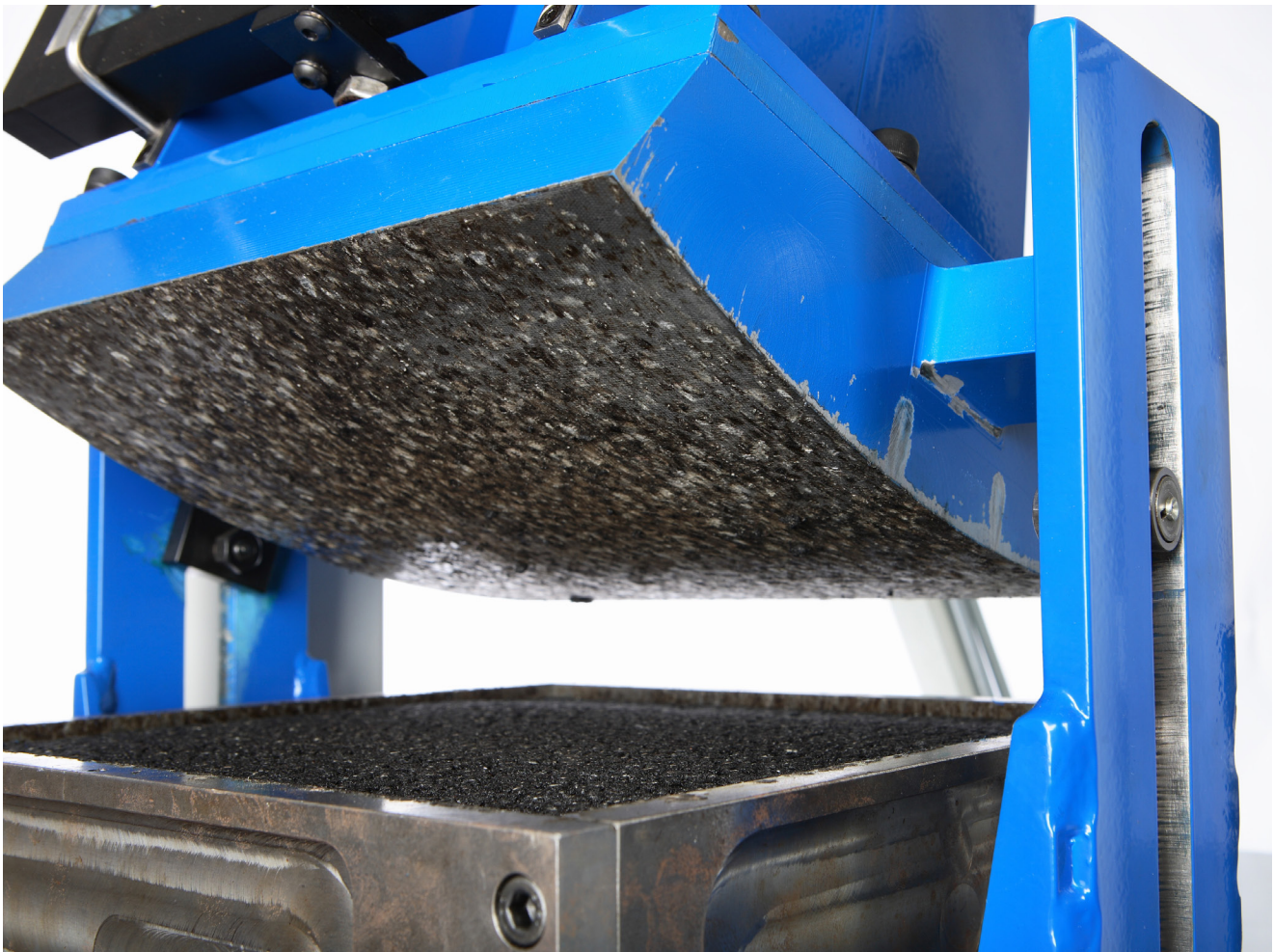
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SPECIFICATIONS

Maximum Roller Load	30kN over 305 mm roll width
Trolley Travel	±150 mm or ±200 mm
Speed	Variable up to 10 cycles per minute
Slab Thickness mm	40-135
Electrical Supply	220–240 Volts 50 Hz @ 16A (others available)
Dimension mm (WxDxH)	600 x 1450 x 1900
Working space required mm (WxDxH)	1600 x 1700 x 2000
Estimated Weight Kg	270
PC	Not Required



Accessories

Accessories are not included in the price of the main device and may be purchased separately if required.

CRT-RC-HH

Heated head option to avoid sticky mixtures to impact on compaction results

CRT-RC-HVIB

Vibration option to simulate conditions in-situ



CRT-WTRCM-50

Steel and aluminium quick release mould for roller compactor or wheel tracker, 305 x 305 x 50mm deep¹



CRT-WTRCM-100

Steel and aluminium quick release mould for roller compactor or wheel tracker, 305 x 305 x 100mm deep¹

CRT-RCM-50W

Steel and aluminium quick release mould for roller compactor or wheel tracker, 305 x 400 x 50mm deep¹

CRT-RCM-100W

Steel and aluminium quick release mould for roller compactor or wheel tracker, 305 x 400 x 100mm deep¹

¹ Please enquire for any other depths

Calibration & Maintenance

Annual Service and Maintenance Contracts are available for this device.

Please enquire for further details.

Note: This device should be checked annually.