

# Pneumatic Steel Roller Compactor

CS-RC2S

ASTM D04-WK34713 ,EN 12697-33 STEEL ROLLER



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The Roller Compactor is robust, reliable and can prepare slabs for different tests in full compliance with international standards

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## INTRODUCTION

The CS-RC2S is pneumatically powered and controlled by a programmable logic controller (PLC) connected to an HMI which the operator can use to select the number of passes and compaction load levels. Although the primary function is to produce slabs for wheel tracking tests, the slabs can be sawn into beams or cored to provide specimens for a variety of other 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
- Model for compaction of 305 x 400 mm (12 x 16inch ) and 305 x 305 mm (12 x 12inch) slabs
- Slabs can be used as wheel-tracking specimens, cored to make indirect tensile test specimens or sawn into beam fatigue specimens
- Roller compactor moulds will fit Cox & Sons Wheel trackers so that compacted slabs can be wheel-tracked without de-molding
- Maximum compaction load of 30kN per 305mm (12inch) roll width (equivalent to largest on-site static rollers)
- Speed control
- HMI for operator selection of number of passes and compaction levels
- Vibrating roller option with adjustable frequency to simulate on-site vibratory rollers. This reduces the compactive effort required
- Safety enclosure with interlocked doors to prevent unguarded operation

## SPECIFICATIONS

Maximum Roller Load	30kN (6750lbf) over 305mm (12inch) roll width @ 7bar, 38kN @ 9 bar
Trolley Travel mm (inch)	±150 (6)
Speed	Variable up to 10 cycles per minute
Slab Thickness mm (inch)	40-100 (1.6-4)
Electrical Supply	CS-RC2S: 1 Ph 240 V 50 Hz CS-RC2S60: 1 Ph 110 V 60 Hz
Vibrating Frequency	0-50 Hz (only for vibration option)
Compressed Air	7bar (100psi), 700 l/m (25cfm)
Dimensions (WxDxH) mm inch	1900 x 1100 x 1520 (75 x 43 x 60)
Working space required (WxDxH) mm inch	2900 x 1700 x 1700 (114 x 67 x 67)
Estimated Weight Kg (lb)	670 (1477)
PC	Not required

## PRE-REQUISITE

### CS-WTRCM-50

Steel and aluminium quick release mold for roller compactor or wheel tracker, 305 x 305 x 50 mm (12 x 12 x 2 inch) deep<sup>1</sup>

### CS-WTRCM-100

Steel and aluminium quick release mold for roller compactor or wheel tracker, 305 x 305 x 100 mm (12 x 12 x 4 inch) deep<sup>1</sup>

### CS-RCM-50W

Steel and aluminium quick release mold for roller compactor or wheel tracker, 305 x 400 x 50 mm (12 x 16 x 2 deep<sup>1</sup>

### CS-RCM-100W

Steel and aluminium quick release mold for roller compactor or wheel tracker, 305 x 400 x 100 mm (12 x 16 x 4) deep<sup>1</sup>

### CS-F12T-AIRDRYER

Air dryer with 1200L/min 43cfm flow rate and 3°C (37.4°F) dew point. 230/1/50

### CS-COMP-1210

Large Compressor (up to 10bar (145psi) and 1200l/min) for supply of air to two pieces of large flow equipment such as Roller Compactors and Four Point Bending rigs

<sup>1</sup> Other sizes available, please inquire

## YOU MAY ALSO NEED...

### CS-RCVIB

Vibration option to simulate conditions in-situ

### CS-RCHEIGHT

Specimen height measurement during compaction

### CS-RC2S-TEMP

Temperature in mould display