

## Multi-purpose Roller Compactor



### CRT-RCMP

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

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-RCMP and CRT-RCMPV are 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.

### Standards

- EN 12697-33 Steel roller

### Key Features

- Steel wheeled roller segments
- Solid machine frame
- Model for compaction of 305 x 305mm and 500 x 180mm slabs
- 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, or 180mm width (equivalent to largest on-site static rollers)
- Speed control
- Fully programmable logic controller (PLC) connected to an HMI (Human Machine Interface) which the operator can use to select the number of passes and compaction load levels (up to 6)
- Vibrating roller option with adjustable frequency to simulate on-site vibratory rollers
- Safety enclosure with interlocked doors to prevent unguarded operation
- Slabs can be used as wheel-tracking specimens, cored to make indirect tensile test specimens or sawn into beam fatigue specimens
- A vibrating roller is incorporated into the CRT-RCMPV model. This reduces the compactive effort required
- CE marked

### Key Uses

Preparation of homogeneous asphalt slabs:

- Wheel tracking tests
- Sawing into beams for bending tests
- Coring to produce specimens for indirect tensile and axial tests

### Accessories

Accessories are not included in the price of main device (unless stated otherwise) and may be purchased separately if required.

CRT-RCMP-HH	Heated Head for CRT-RCH2
CRT-RCMP-VIB	Vibration Head for CRT-RCH2
CRT-WTRCM-50	Mould - 305x305x50mm deep
CRT-WTRCM-100	Mould - 305x305x100mm deep
CRT-RCM-50	Mould - 305x400x100mm deep
CRT-RCM-100	Mould - 305x400x100mm deep
CRT-RCM-50MP	Mould - 180x500x50mm deep
CRT-RCM-100MP	Mould - 180x500x100mm deep
CRT-WTIMRCM-50	Mould - 305x305x50mm deep Stainless Steel
CRT-WTIMRCM-100	Mould - 305x305x100mm deep Stainless Steel
CRT-WTIMRCM-26060	Mould - 260x320x60mm deep Stainless Steel
CRT-WTIMRCM-50	Mould - 305x305x50mm deep Stainless Steel
CRT-INSERT-10	Mould - 305x305x10mm deep Stainless Steel
CRT-INSERT-10W	Mould - 305x400x10mm deep Stainless Steel
CRT-RCMP-SC305305	Surcharge Collar 305x305mm
CRT-RCMP-SC305400	Surcharge Collar 305x305mm
CRT-RCMP-SC305400	Surcharge Collar 180X500mm

### Specifications

Technical specifications are subject to change without notice.

Maximum Roller Load	30kN over a 305mm, or 180mm width
Trolley Travel mm	±150mm for 305mm mould ±250mm for 500mm mould
Speed	3.5sec (+/- 0.5sec)/pass with the 305mm mould 5sec (+/- 0.5sec)/pass with the 500mm mould
Slab Thickness	40-100
Electrical Supply <sup>1</sup>	220-240 Volts 50Hz @ 13A (others available)
Vibrating Frequency	0-50Hz (CRT-RCMPV model only)
Compressed Air	7bar, 700l.min-1
Dimensions mm (W x D x H)	2150 x 650 x 1650
Working space required mm (W x D x H)	3650x1950x1850
Weight (approx.) Kg	750
PC	Not required

<sup>1</sup> others available upon

### Calibration & Maintenance

Calibration, Annual Service and Maintenance Contracts are available for this device. Please enquire for further details. Note: This device should be checked and calibrated annually.

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