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# **European Standard Roller Compactors - Steel Roller**



## The most popular Roller Compactor worldwide is robust, reliable and the industry standard

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-RC2S and CRT-RC2SV are pneumatically powered and controlled by a programmable logic controller (PLC) connected to a 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 400mm and 305 x 305mm 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 (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
- 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

#### **Key Uses**

Preparation of homogeneous asphalt slabs:

- Wheel tracking tests
- Sawing into beams for bending tests



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• 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-RCVIB Vibration Head Option

CRT-RC2S-DHT Roller Compactor Specimen Height Measurement Device

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-RC2S-SC305305 Surcharge Collar 305x305mm CRT-RC2S-SC305400 Surcharge Collar 305x305mm

### **Specifications**

Technical specifications are subject to change without notice.

Maximum Roller Load 30kN over 305mm roll width @ 7bar, 38kN @ 9 bar

Trolley Travel mm ±150

Speed Variable up to 10 cycles per minute

Slab Thickness 40-100

Electrical Supply<sup>1</sup> 220-240 Volts 50-60 Hz @ 13A Vibrating Frequency 0-50 Hz (CRT-RC2SV model only)

Compressed Air 7-10 bar @ 700 L/min Dimensions mm (WxDxH) 1900 x 1100 x 1520 Working space required mm (WxDxH) 2900 x 1700 x 1700

Estimated Weight Kg 670 PC N/A

others available upon  ${\bf Maintenance}$ 

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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