

The only truck  
wheel balancer  
with pneumatic locking



**CEMB**

**C202<sub>SE</sub>**

BALANCING MACHINES

## ► Technical data

Three-phase power supply	230/400 V 50/60 Hz
Max. absorbed power	0,8 Kw
Balancing speed	70 rpm
Balancing accuracy	10 g
Cycle time with 150 kg wheel (22.5")	< 20 sec.
Rim diameter	10" ÷ 28" or 265 ÷ 715 mm
Rim width	1,5" ÷ 20" or 40 ÷ 510 mm
Max. wheel diameter	1300 mm
Max. wheel weight	250 Kg
Air supply (with pressure regulator)	8 ÷ 10 bar
Gross weight	350 Kg
Packing dimensions	163x123x176 h cm

We wish to remind you that:

a good off-the-vehicle balancing allows to eliminate dynamic and static unbalance and therefore to get a drastic reduction of vibrations, with advantages for passenger comfort and vehicle lifetime. While an on-the-vehicle machine allows to balance front wheels only statically, an off-the-vehicle machine allows to balance all wheels dynamically, rear wheels included. It is also possible to balance bus wheels, which can hardly be balanced on-the-vehicle due to the limited height of bus bodies from the ground.

**From a research made in Sweden on a large fleet of trucks and buses it resulted an increase of 20 % of tyre life, thanks to the off-the-vehicle dynamic balancing.**

## ► Accessories

### recommended accessories



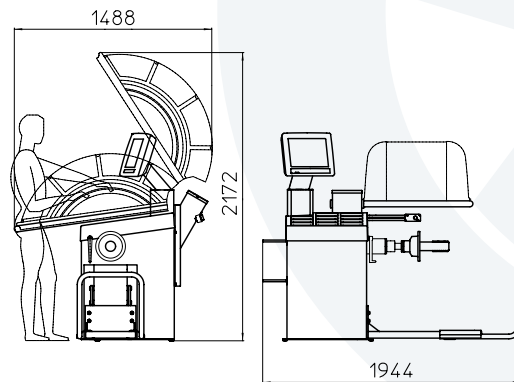
**UC202/SE** pneumatic cone adaptor 65mm Ø shaft with 3 cones, for light truck wheels having central hole Ø 76 to Ø 178 mm.



**SR202/SE** stud adaptors for centering the wheel on 8 or 10 fixing holes. 10 x Ø 225/285/335 mm 8 x Ø 275/285 mm.



**Large cone kit** including: IV cone, V cone, GG disc for centering wheels having central hole Ø 202 - 221 - 281 mm. To be used as an alternative to stud adaptors.



Some of our customers:



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# C202/SE

## General features

**C202/SE is the only truck wheel balancer in the world with pneumatic wheel locking system. Ideal for busy tire shops that balance truck/bus wheels in significant quantities.**

**Considerable time saving during the wheel locking and unlocking on the balancing machine (some minutes per wheel).**

**No effort for the operator.**

**High precision centering of the wheel on the balancer.**

Flat Screen 15" TFT monitor with 256 colours.

Powerful three phase motor 1,5 Kw.

Fully automatic cycle with powerful electrical braking.

All types of wheels for truck and bus can be balanced (also the huge Super Single wheel from the last generation).

Complete with wheel guard and lift.

Self-learning function for batch balancing in production lines of truck and bus wheels.

Unbalance tolerance threshold (adjustable).

Optimisation program to compensate the tyre unbalance with the rim unbalance.

ALU functions for light alloy rims.

SPLIT program to divide counterweights among spokes of alloy rims.

Four-operator program, to enable four different operators to memorise the dimensions of four different vehicles at the same time.

Sturdy anvil for counterweights.

## Optional

**EMS Eccentricity Measuring System by Sonar**  
Measure of radial difformity (Run-Out) and tyre defects. The real value (in tenths of millimeters) of the 1st harmonic eccentricity as well as the tyre peak-to-peak value are obtained through a proper Sonar sensor. Measuring results are shown on the screen both graphically and in figures. The clear graphic indications as well as the practical use of the test allow to obtain the simple and quick control of the quality of all wheels and strong improvement of the service made to your customers with no effort and no time consuming by the operator.



## ALU-S function



Light alloy rims are more and more used for truck and bus wheels too and they can be balanced in a single spin, thanks also to the new automatic distance and diameter measuring system. On wheels that can be corrected with both weights hidden on rim inner side, ALU S function allows to accurately set the dimensions (automatic distance and diameter) specific for the two correction planes. Calibration approximation, which is always present in standard ALU programs, is therefore eliminated. As a consequence, it is possible to balance any alloy rim in a single spin, with great accuracy and time saving.

## Pneumatic wheel locking



The C202/SE has been specifically designed and realized in a sturdy way for the real professional expert and an intensive work on bus and truck wheels. Due to its sturdiness, C202/SE has been selected by vehicle and tyre manufactures and the Armies in many countries all over the world, after long and rigorous comparative tests. It is also used for mass balancing or at industrial level for balancing hundreds of wheels a day. The pneumatic wheel locking is activated by a pedal that the operator can place in the best position for him.

## Pneumatic lift



The C202/SE is always supplied with a powerful integrated pneumatic lift (capacity 280 Kg). This is equipped with wheel-sliding trolley having a side bar with double function:

- granting the operator's safety
- easing the wheel axial displacement.

The pneumatic lift is activated by a second pedal who can be positioned by the operator. The lift is of a "soft action type" that means the operator, using his own weight on the forks of the lift, can lower the wheel by a few millimeters. This feature is extremely useful for a good centering of the wheel.

## "Automatic" minimization of static unbalance

It indicates the optimal value of weights to apply, by using an "intelligent" averaging system to minimise residual static unbalance unavoidable by using the standard weights on the market, available in 50 g steps. The static unbalance is the major cause to most truck vibrations. Thanks to static minimisation, balance quality appreciably improves with no effort and no loss of time for operator.

Initial unbalance	Default approximation	Possible approximations		
Inside 230 g - Outside 180 g Angle 50°	Inside 250 g - Outside 200 g Static residual 40 g	Inside 250 g - Outside 150 g Static residual 30 g	Inside 200 g - Outside 200 g Static residual 10 g	Inside 200 g - Outside 150 g Static residual 60 g
	By conventional wheel balancer		Selection with CEMB minimisation	

