

Ventilation during CPR with CCSV

Synchronizing heart and lungs during CPR

CCSV
adjusts the
ventilation
optimally to the
resuscitation
process



1. Start of resuscitation

At the emergency site, you start cardiopulmonary resuscitation as quickly as possible in the 30:2 procedure. Press the CPR button on the MEDUMAT Standard² to start manual ventilation. Now use MEDUtrigger for triggering of mechanical breaths directly at the ventilation mask.



2. Ventilation with CCSV

Once you have secured the endotracheal airway let CCSV work automatically. MEDUMAT Standard² now ventilates synchronously with uninterrupted chest compressions. No matter whether the chest compressions are performed manually or with an automatic chest compression device.



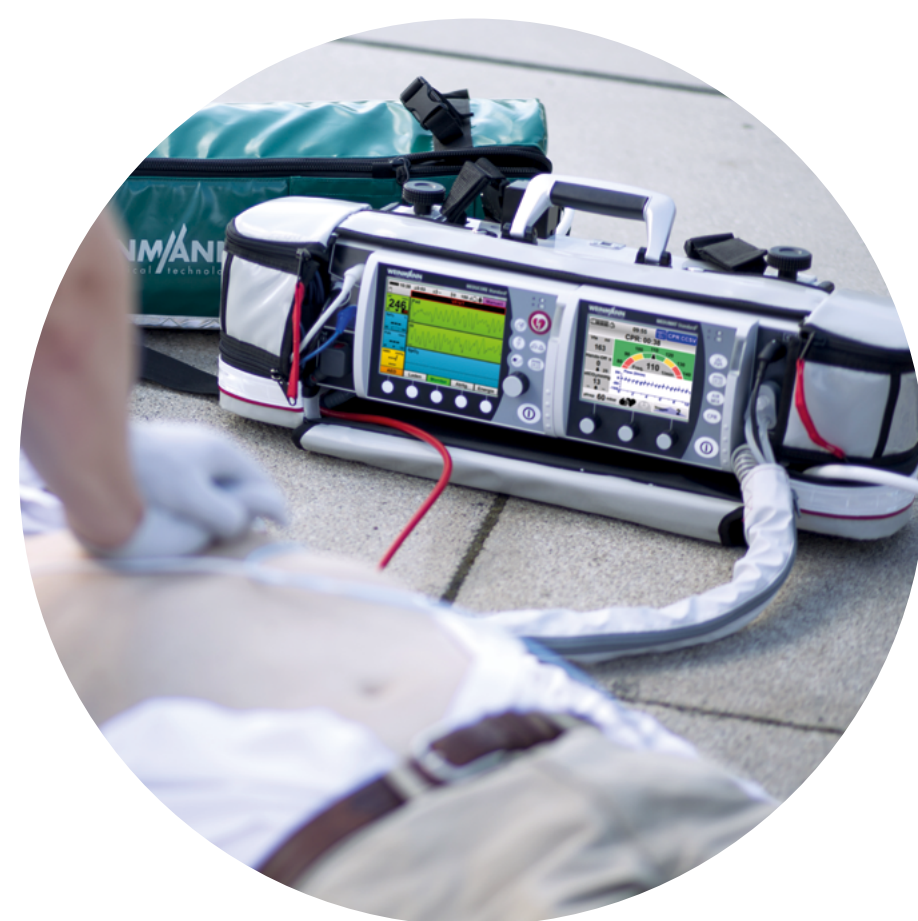
3. Uninterrupted chest compressions

Focus on performing the chest compressions without pauses. The frequency tachometer helps you maintain the right frequency. This also means you do not have to interrupt the chest compressions for ventilation. CCSV detects the compressions and ensures sufficient ventilation at all times.



4. Shock delivery required? Start the analysis!

MEDUMAT Standard² interacts perfectly with defibrillation and monitoring units like MEDUCORE Standard². If you interrupt the chest compressions for the rhythm analysis, MEDUMAT Standard² detects this and stops ventilation in CCSV mode automatically. This makes a trouble-free ECG analysis and shock delivery possible.



5. Continuing the chest compressions

Once you continue with chest compressions after delivering a shock, CCSV detects them and resumes synchronous ventilation.



6. Return of spontaneous circulation (ROSC)

If chest compressions are interrupted for a longer period of time, MEDUMAT Standard² automatically leaves CCSV mode and switches to volume-controlled backup ventilation.



7. Does resuscitation have to be repeated?

If you have to start the chest compressions again after ROSC has occurred, MEDUMAT Standard² resumes the resuscitation ventilation automatically in CCSV mode.

Everything at a glance

The image shows the MEDUMAT Standard² device interface with various controls and displays. Labels point to specific features:

- Tidal volume**: Volume delivered per mechanical breath (192 ml)
- Hands-off time**: Time since last detected chest compression (0 s)
- etCO₂**: If applicable, display of the etCO₂ (65 mmHg)
- Trigger**: Set the sensitivity for compression detection (2)
- Compression type**: Switch between manual and mechanical CPR devices at the touch of a button
- Frequency tachometer**: Displays the current compression frequency per minute (110 1/min)
- Flow curve**: Representation of the patient's inspiration and expiration. An "L" marks detected compressions and thus the trigger for ventilation.
- PEEP**: Set the end-expiratory pressure in the lungs: A higher PEEP may lead to the improved detection of compressions (can be set from 0 to 5 mbar)