

FAQ_CM21_004 – Basic settings and parameters!

=> How to adjust below, see in the manual!

Transformer step:	1 (if other is chosen, mention it)
Air supply:	min. 4 bar and dry/clean ! Check if water is in the tank, if yes, please mention it, and if the filter is still in. => It may happen that an air regulator is damaged/not working properly, due to water or dirt
Copper wire profile:	2.05 +/- 0.03 mm
Welding roller grooves:	width 2.10 mm, depth 0.40 mm => Edges should not be sharp, grind them manually!
Welding speed:	See display frequency inverter, 50 - 55Hz (10 - 12m/min) => Above 12m/min micro leakages can appear!
Welding pressure:	1.7 - 2.0 bar (35-40 daN/kg)
Wire tension/pressure:	2.0 bar
Upper clamping bar pressure:	2.5 bar
Welding rolls:	Take off the copper wire and turn both rollers manually, both shall move easily.
Copper wire guide rolls:	Once the copper wire is off, turn all guide rolls, including the one in front of lower weld roll, all shall move easily.
Height of lower welding roll:	Make sure that the welding point is equal with the center of Z-bar!
Lateral position of lower/upper weld roll:	After weld one canbody, check the tin layer on the copper wire after the lower weld roll, and after the upper weld roll. Both tin layer shall be <u>in the center</u> of copper wire! If not, move the roll/wheel laterally.
Wire chopper:	The distance between both transport rings shall be around 0.30mm.
Cooling water flow:	The slider on the flow meter S25 shall be adjusted to 5.0 l/min! => If less, mention it!
Tin plates:	Make sure that burrs on the edges are minimized; burrs work against the welding process, and also against reaching the requested overlap!

Short explanation about the function of the clamping system:

In the center is the carriage, which moves along a precise guide bar, which is mounted below the Z-bar. There are four clamping rails, two lower and two upper, which are mechanically connected with the carriage. All four guide clamping rails are grinded and therefore absolutely even! The lower rails are supported by some ball bearings, which are taking the pressure and force. Both rails must slide smoothly and in contact along these bearings!

The upper rails are mechanically connected with a cylinder, mounted on the carriage.

Both cylinders are pulling the rails on the backside against the lower rails. To make sure press the upper rails in the front down, there is one cylinder in the center and above the Z-bar mounted. He is pushing two ball bearings down, which are rolling in a slot along the upper rails. Finally there are two more cylinders, located at the very end of the carriage.

Each one is pulling - over a stainless steel rod – another ball bearing against the upper rails.

Handling of canbody:

As larger/longer as the can body in diameter is, it is better to hold/handle the body with both hands on the diameter, and push in - especially on the backside - the clamping rails!

Overlap problems/loosing overlap:

- Feed in a canbody into the clamping bars, and make sure both edges are really touching the Z-bar grooves. It may happen – as long as the canbodies are – that the clearance between the upper and lower rail is becoming smaller.
- Close the clamping rails by turning the switch (showing weld rolls open/closed) on the control panel:
 - Try to turn by finger both ball bearings of the top/front cylinder.
 - Try to turn by finger both ball bearings of the rear/center cylinders (pulling stainless steel rod)
 - Try to turn by a screwdriver all ball bearings below the lower guide rails.
 - => If anyone is moving freely, inform us, or if you know how to adjust, do it.
- Feed in a canbody into the clamping bars, and make sure both edges are really touching the Z-bar grooves. Try to pull the canbody on the inner but also on the outer side out of the guide rails.
- If you pull one side out, take off the upper rail first, and lay it on a very precise grinded table, or take off both upper rails, and hold them together. If there is any clearance, inform us, or try to align it yourself.
=> Attention: Don't press too much, they can get easily damaged!