

Short Instruction for Using Casting Unit **LUKACAST S**



Valued Customer,
after setting-up LUKACast **S** according to our instruction manual,
you should make a final countercheck before you start casting:

Please check once more connection:



Electrical Supply:

Voltage supply according to label on machine ?
Plugged-in?

Cooling water:

Water tap is connected to **Water In**?
Water tap open?

Vacuum:

Vacuum pump installed, plugged-in and switched
on?

Protective Gas:

Valve on bottle opened
Pressure regulator gauge on bottles shows 6 bars?

All is OK?

Insertion of crucible



Quartz wool in quartz
crucible shield?

- Crucible has no damages
or cracks?

Insertion of thermocouple





- Thermocouple's protection tube is mantled?
- For crucibles with graphite inlet: Tip of thermocouple touches graphite?
- If no thermocouple is used: do not forget to connect DUMMY-plug

Insertion of flask adapter

- Adapter's size is suitable for diameter of your flasks?
- Inserted on right length = only small gap between flask and crucible's spout?

Test running (without metal and without hot flask)

To ensure that machine is running well, please check system by a test running .

- Insert crucible with graphite inlet.
- If thermocouple is used: place tip of protection tube in contact to graphite inlet
Temperature set by „-“, „+“ button.
..... Or place Dummy plug.
- Insert a cold flask.
- Pressure set (pressure after casting) to 2,00 bar at the display.
- Switch on machine: the LUKACast **S** makes a set-up routine, visible in display.
- When display indicates  LUKACast **S** is ready for use
- Push „Start“ button.
- Wait a couple of seconds, graphite inlet of crucible becomes red machine is heating!
- Close chamber and push the second time „Start“. LUKACast **S** makes a pressure test first and after then it is setting up vacuum.
- The vacuum is indicated on the display, just at arrival of machine switches to a timer automatically,  which indicates length of flask stays under full vacuum.
- After 30 seconds (now full vacuum has reached even inside of chamber) press top button of the lever and turn whole chamber.
- Immediately after reaching end-stop, vacuum will be replaced by an overpressure by inert gas.
- In display appears  = overpressure according to set value.
- Unlock the lever and turn chamber back to horizontal position,
- Wait until pressure is released automatically to 
Now you can open the chamber.

Ready! Now you can start casting metal!

Caution: After starting first casting of the session, LUKACast **S** make a self-test. Routine is checking vacuum and insert gas pressure. If vacuum is missing or system is leaking, error message E081 appears, if inert gas pressure is missing or too low, error message E083 appears.