



Malfunction Coatron A: "Needle clogs very often"

Problem:

Needle get clogged and showed "ROBOT FAILED" message during boot-up

Reason:

- Not enough plasma in primary tube. Needle input of whole blood
- Particles in the rinse solution or tubing system
- Inside or outside carryover

Carry Over can happen,

- Clean Solution not from TECO
- Rinse Solution not from TECO and with particles inside
- XYZ adjustment not correct
- Air in tubing (No rinse solution installed)
- Wash Position defect (silica membrane defect)
- Needle expired (> 50.000det performed)

Unclog the needle:

Clots must be removed always backward from tip to end of needle.

- Switch off system.
- Lower the plunger of the pump by hand to create sub-pressure inside of needle.
- Now apply a thin "non metal" fiber (e.g. fisherman rope) and try to move the clot inside to needle.
- When the needle is free, then remove needle, tubing, syringe from system and clean all parts carefully.

Check list:

- Remove tubing from valve and check if there are any particles
- Check, if origin rinse solution is installed and not refilled by enduser.
- Check if there are any particles in the rinse tank
- Check, if the origin clean solution is installed
- Check XYZ adjustment
- Perform SERVICE\CLEAN NEEDLE and watch, if needle is flushed inside+outside correctly
- Replace needle, if older than 50K tests

Typical user errors:

- 1) User forgot to remove caps on vials. Needle crash and system displays "Robot Error". After reboot everything seems normal. But during crash, the Z-offset of needle got de-adjusted.
- 2) User refill rinse tank with own water. Particles and improper system water can damage the valve and interfere the cleaning function
- 3) User do not install a full rinse tank. In this case instrument will not warn "OUT OF RINSE" correctly. Air in tubing system will cause wrong volumes in the cuvettes and improper wash function.