

TECHNICAL PROBLEMS AND SOLUTIONS

THE INJECTION MACHINE DOES NOT REACH THE INDICATED TEMPERATURE

1.-Programmed temperature

Check that the programmed temperature is the desired one by pressing the "P" button, following the instructions of the machine manual.

2.- Electric voltage

Check that the electric voltage is stable. Otherwise, the electronic plaque on the injection machine can be "deprogrammed".

3.-Equipment voltage

Check that the equipment voltage is appropriate (220v or 110v, according to the country).

4.-Resistance

Ask your distributor and/or technical service if it is necessary to replace the machine resistance.

5.-Fuse

Ask your distributor and/or technical service if it is necessary to replace the machine fuse.

FLAWS IN THE INJECTION – Possible causes

(The denture was not completely injected)

1.-Incorrect installing and/or use of the injection machine

(Follow the use and maintenance instructions provided in the manual.)

- a) AIR PRESSURE: Check that both the pneumatic pressure of the injection machine and the air pressure of the compressor are set according to the instructions in the user manual. Make sure there are no defective connections, air leaks or hose connectors with narrow parts.
- b) CARTRIDGE LUBRICATION: Spray the cartridge with siliconed demolder for high temperature, following the instructions in the user manual. The lack of demolder will cause the aluminum cartridge to adhere to the furnace wall and leave residues, which in the long run will provoke the cartridge stoppage or blockage, thus spoiling the denture injection.
- c) CARTRIDGE PLACEMENT:
Be careful not to place the cartridge on the opposite side of what is indicated in the manual.
- d) FURNACE CLEANING: Remember to clean the furnace regularly, following the instructions in the manual.

2.-Waxing thickness

(See technical indications).

Check if you have respected the recommended waxing thickness, especially in the retainers (Minimum thickness: 1.5 mm).

Also check the thickness left between the teeth crown and the plaster model (Minimum thickness: 1 mm).

3.-Tubes placement

(See technical indications).

- a) In the areas where there is only one artificial tooth and only one retainer goes through there might appear injection flaws, since the polyamide has little space to fluidly go through towards the vestibular area of the denture. In these cases it is recommended: firstly, to evaluate the possibility of increasing the space between the tooth crown and the plaster, as indicated in the previous point; secondly, and as

an alternative, to place a secondary tube along the side of the artificial tooth that reaches the vestibular area. This will allow a better flow of the material when injecting.

- b) Do not place 2 dentures in the same muffle.

4.-The amount of material is not enough

a) **INAPPROPRIATE CHOICE OF CARTRIDGE:** Check if the leftover of the injected cartridge is approximately of 1 cm. In this case, it is probable that the content of the chosen cartridge was not enough to complete the piece. Ask for a bigger cartridge. In case of having already used a bigger cartridge and still not having had enough material, ask your distributor.

b) **MISFIT MODEL / EXAGGERATED TUBES OR WAXING:** Check that the model is placed as close as possible to the injection orifice.

Also check if the tubes and waxing thicknesses are not bigger that what is necessary or indicated.

In any of these cases, part of the cartridge is being unnecessarily used, and this may have caused the injection flaw.

5.-Humidity in the muffle

It is important to let the plaster and separator dry out well before injecting the muffle. Humidity inside the muffle can spoil the injection.

6.-Cartridges with defective packaging or expired

Check the expiration date of the cartridges. Do not inject the cartridge if it has already expired.

If the expiration date is valid but the bag lost its vacuum-seal protection, do not use it.

If you use it, it may "burst" during the injection process and spoil the work.

BUBBLES IN THE DENTURES

1.-Inappropriate tubes:

Check that the diameters and orientation of the tubes are the indicated ones.

(See technical indications).

2.-Humidity in the muffle

DENTURES THAT DO NOT FIT WELL

1.-Defective impression taking:

If the denture fit well in the original model but does not fit well in the mouth, this means that the impression taken by the dentist has not been correct.

2.-Defective duplicate:

If the denture does not fit well in the original model, it is probable that there has been a problem when duplicating the model.

3.-Variation in the vertical dimension:

- a) **USE OF INAPPROPRIATE PLASTER:** Check that you are using the plaster type indicated by your distributor (Special plaster type IV), and that it is of good quality.
- b) **INAPPROPRIATE PREPARATION:** Follow the plaster preparation instructions provided by the distributor (appropriate consistence for the muffle and counter muffle, and spatulating time)
- c) **OVERCOMPRESSION:** Check that the air pressure of the injection machine is the indicated one. In case of being above, it may cause an overcompression of the plaster in the muffle and provoke the variation in the vertical dimension.

DETACHMENT OF PLASTER TEETH FROM THE COUNTER MUFFLE

1.-Teeth covered with wax:

Teeth must remain free from wax up to 1 mm from the neck, so as to make them retentive in the counter muffle plaster.

TEETH THAT LOST THEIR POSITION

1.-Use of inappropriate plaster:

Check that you are using the indicated plaster type: Special plaster type IV (Densita), and that it is of good quality.

2.-Defective teeth cleaning:

Teeth must be clean and wax free.

3.-Air bubbles:

Avoid trapping air bubbles in the plaster, since this may cause a change in the teeth position when injecting.

DETACHMENT OF TEETH

1.-Lack of mechanical retention in the teeth:

Check if they have been made according to the recommendations (see technical indications).

2.-Insufficient space between the tooth and the model:

There must be a minimum space of 1 mm between the tooth crown and the model.

3.-Incomplete denture injection.

INSUFFICIENT SPACE TO PERFORM TEETH RETENTIONS

1.-Central perforation:

Make a central orifice leaning towards the tooth vestibular area, where there will be more coronary height.

2.-Lateral perforations:

Make the perforation leaning towards the vestibular area.

DENTURE FRACTURE

1.-Inappropriate thickness:

Do not reduce the thickness more than what is recommended.
(See technical indications).

IMPORTANT! In the areas where there are natural canine teeth, it is not recommended either to reduce the thickness or to stretch the extension in order to maintain stability and resistance, since it is a flexing area which will be over-demanded.

LOSS OF BRIGHTNESS IN DENTURES IN USE

1.-Inappropriate cleaning:

Cleaning method:

Dentures must be daily cleaned with a soft brush and neutral soap.

Decontamination: sodium hypochlorite = 1 part in 4 parts of water, during 15´ minutes (weekly frequency).

Tartar removal: submerge in pure sodium hypochlorite, until the tartar is removed.

DO NOT use toothpaste, since it contains abrasives.

DO NOT use alcohol to clean it.

2.-Scratches in normal use:

In case of being scratched in normal conditions of use, it is recommended to perform a re-polishing.

PIGMENTATION

In some cases, the sediment deposit may cause the superficial pigmentation of the denture. This can be solved with the same techniques used for the above mentioned *tartar removal* and *re-polishing*, thus recovering the brightness and original color of the denture.

Dear client:

We hope that you find this PROBLEMS AND SOLUTIONS guide useful.

Let us know your comments.

We remain at your disposal for any queries you might have.

Nuxen S.R.L.
Technical Department