

Shenpaz
Dental Furnaces



Sintra PRO



USER MANUAL

Sintra PRO models: 90zr and 120zrf

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1. Explanation of Symbols / Explication des symboles

Warning indications

Warning indications in the text are marked with a color-backed triangle and boxed. In case of hazards through electricity, the exclamation mark in the warning triangle is substituted by a lightning bolt.

Signal words at the beginning of a warning indication specify the type and severity of the consequences, if the measures to avert the hazard are not adhered to.

NOTE means that property damage can occur.

CAUTION means that light to fairly serious personal injury can occur.

WARNING means that serious personal injury can occur.

DANGER means that serious personal injury can occur.

Other symbols in the manual

Important information that do not lead to hazards for humans or property damage are marked with the icon aside and are also boxed.

Indications d'avertissement

Les avertissements dans le texte sont signalés par un triangle coloré et sont encadrés. En cas de danger lié à l'électricité, le symbole d'exclamation du triangle de présignalisations est remplacé par un éclair. Les mots indicateurs au début d'une indication d'avertissement spécifient le type et la gravité des conséquences, si les mesures permettant d'éviter le danger ne sont pas respecté.

REMARQUE signifie que des dommages matériels peuvent survenir.

ATTENTION signifie que des blessures légères à assez graves peuvent survenir.

AVERTISSEMENT signifie que des blessures graves peuvent en résulter.

DANGER signifie que des blessures graves peuvent survenir.

Autres symboles du manuel

Les informations importantes ne présentant pas de danger pour l'homme ni de dégâts matériels sont marquées du symbole de côté et sont également encadrées.

2. General Safety Instructions/ Consignes générales de sécurité

When installing, starting-up and operating the machine, always observe the following safety instructions:

DANGER:

This product does not comply with the Directive.
Do not use in explosive atmospheres!
Do not operate with explosive gases or mixtures!

CAUTION:

A defective machine can lead to malfunctions!
On detection of damage or a functional defect of the machine:
Label the machine as defective.

WARNING:

Operation with power sources, products, consumables, auxiliary aids, etc., which are subject to the Ordinance on Hazardous Substances or in any way has an impact on the health of the operating personnel is not permitted.

NOTE:

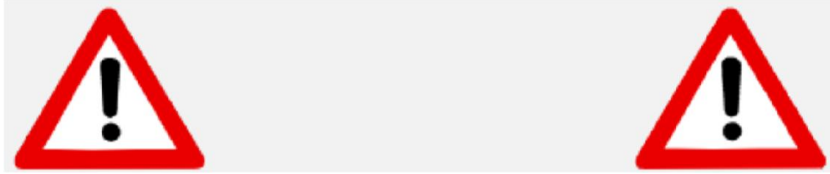
Switch the machine off when not in use or unsupervised for longer periods, e.g., overnight. This method of saving electrical energy also benefits the environment.

NOTE:

Starting-up and operation of the machine may only be carried out by trained specialized personnel.

Warning

ATTENTION!



ATTENTION!

Mount on non-flammable surface material only!

Take out the furnace with the assistance of two persons. To do so, each person will take a side by holding the bottom of the furnace with one hand and the top side with the other hand.

Do not pull out the furnace by its support in order to avoid damages.

CAUTION: PLEASE READ THE INSTRUCTIONS CAREFULLY BEFORE OPERATING THE FURNACE.

- Only use ZrO₂ powders with recognized approval for use in dental furnaces.
- Do not use tray for fast cycle – Lid only directly on the top of the table.
- During use the area around the furnace table is very hot approach and contact with the door and top of the furnace
Take out the tray only when the furnace is cold.
- Dental work must only be placed on the furnace tray.
- In the event of an external power failure while the furnace is in operation:
 - 1) Disconnect the power supply cord from the electrical power outlet.
 - 2) Use only authorized Supply cord with the right voltage -230 V-115V 50Hz/ 60 Hz (supply with the furnace)

Caution!
Risk or Danger
Refer to documentation.



Caution!
Risk of electric shock



Caution!
Hot surface!



FRANÇAIS :

Respectez toujours les consignes de sécurité suivantes lors de l'installation, de la mise en route et de l'utilisation de la machine:

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DANGER:

Ce produit n'est pas compatible avec la directive.
A ne pas utiliser dans une atmosphère explosive !
A ne pas utiliser avec des Gas ou mélange de gas !

ATTENTION:

Une machine défectueuse pourra créer une mal fonction !
En cas de machine défectueuse
Notifiez la machine défectueuse

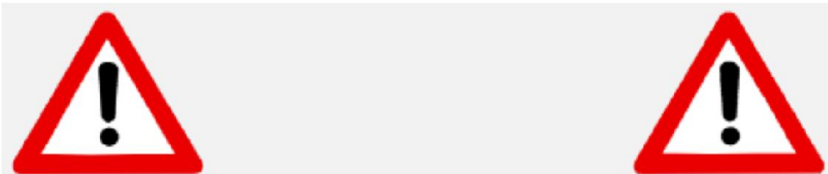
AVERTISSEMENT :

Fonctionnement avec des produits, consommables, auxiliaires. etc., qui sont sujet a L'ordonnance sur les produits dangereux ou qui peuvent être dangereux pour l'utilisateur ne sont pas permis.

NOTE:

La mise en route et l'utilisation de la machine ne doit être effectuées que par du personnel spécialisé et formé.

ATTENTION !



ATTENTION !

Ne placer le four que sur des matériaux ininflammables !
Sortez le four avec l'aide de deux personnes. Pour ce faire, chaque personne prendra un côté en tenant le bas du four avec une main et le côté supérieur avec l'autre main.
Ne tirez pas le four par son support pour éviter des dommages.

ATTENTION !

VEUILLEZ LIRE ATTENTIVEMENT LES INSTRUCTIONS AVANT D'UTILISER LE FOUR.

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- Utilisez uniquement des poudres de ZrO₂ avec une certification reconnue pour une utilisation dans les fours dentaires.
 - En cours d'utilisation, la zone autour de la table du four est très chaude et le contact avec la porte et le dessus du four. Ne retirez le support du plateau que lorsque le four est froid.
 - Les travaux dentaires ne doivent être placés que sur le plateau du four.
 - En cas de coupure de courant externe pendant le fonctionnement du four, le four reprendra son cycle automatiquement au retour du courant
- 1) Débranchez le cordon d'alimentation de la prise de courant.
 - 2) Utilisez uniquement un cordon d'alimentation autorisé avec la tension appropriée - 230 V-115V 50Hz / 60 Hz (à fournir avec le four).

Caution!
Risk or Danger
Refer to documentation.



ATTENTION!
Risque de choc électrique



ATTENTION!
Surface Chaude!



ATTENTION !

2.1 Location and environmental conditions

- a) Altitude up to 2000 meters;
- b) Ambient Temperature 5°C to 40°C;
- c) Maximum relative humidity 80% for temperature up to 31°C decreasing linearly relative humidity at 40°C;
- d) Mains supply voltage fluctuations up to + - 10% of the nominal voltage;
- e) Transient over voltages typically present on the mains supply category II;
- f) Applicable rated pollution – Degree “2”
- g) distance from electrical plug must be up to 2 Meters

Situation et conditions environnementales

- a) Altitude jusqu'à 2000 mètres ;
- b) température ambiante de 5 ° C à 40 ° C ;
- c) Humidité relative maximale de 80% pour des températures allant jusqu'à 31 ° C diminuant de manière linéaire l'humidité relative à 40 ° C

- d) Fluctuations de la tension d'alimentation jusqu'à + - 10% de la tension nominale ;
- e) transitoire entre les tensions présentes généralement sur la catégorie d'alimentation principale II
- f) Pollution nominale applicable - Degré «2»
- g) la distance de la prise électrique doit être inférieure à 2 mètres

2.2 Rating & Fuses

230V/115v - 50Hz/60Hz

Circuit breaker: 16A/230V or 20A / 115V

Circuit breaker 25A fast

230V / 115v - 50Hz / 60Hz

Disjoncteur : 16 A/230V ou 20A/1 15V

Disjoncteur 25A vite

2.3 Power Source

Be certain that the power supply conforms to the electrical specifications of the SINTRA PRO 90 Zr/ SINTRA PRO 120 Zrf.

Assurez-vous que l'alimentation électrique est conforme aux spécifications électriques du SINTRA PRO 90 Zr / SINTRA PRO 120 Zrf.

Connect the furnace to a grounded power outlet socket.

Connectez le four à une prise de courant mise à la terre.

A single source of electricity must be used.

Une seule et unique source d'électricité doit être utilisée.

2.4 Standards and approvals

CE Declaration of Conformity

This product was designed and manufactured based on careful selection of the harmonized standards to be observed, as well as additional technical specifications. It thus corresponds with the state-of-the-art and ensures maximum safety.

In terms of design and performance, this product complies with the European Directives and the supplementary national requirements. Conformity has been confirmed with the CE marking. The product's Declaration of Conformity.

Class A equipment

Equipment suitable for use in all establishments other than domestic and those directly connected to a low voltage power supply network which supplies buildings used for domestic purposes.

Déclaration de conformité CE

Ce produit a été conçu et fabriqué sur la base d'une sélection minutieuse des normes harmonisées à respecter ainsi que de spécifications techniques supplémentaires. Il correspond donc aux spécifications techniques et garantit une sécurité maximale.

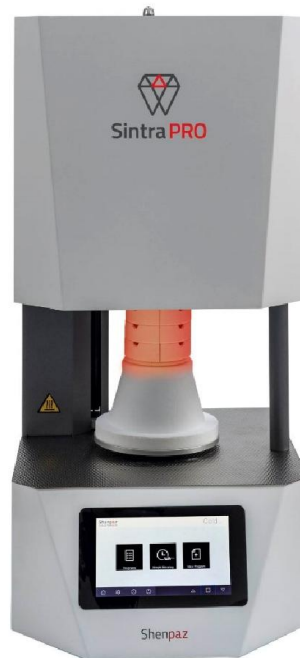
En termes de conception et de performances, ce produit est conforme aux directives européennes et aux exigences nationales supplémentaires. La conformité a été confirmée avec le marquage CE. La déclaration de conformité du produit.

Équipement de classe A

Équipements pouvant être utilisés dans tous les établissements autres que domestiques et directement connecté à un réseau d'alimentation à usage domestique.

3. Machine specifications

SINTRA PRO 90 Zr/SINTRA PRO 120Zrf are sintering furnaces for dental zirconia oxide materials.



3.1 Delivery Scope

- 1 High-temperature furnace, model name, SINTRA PRO 90 Zr or SINTRA PRO 120 Zrf
- 1 Mains cable 1.5 meters
- 1 Sintering tray + lid
- 1 High temperature sintering table
- 100 gr zirconia beads (only with SINTRA PRO 120 Zrf)
- 1 wrench

After unpacking, check the machine for completeness and possible transport damages. Please claim any transport damages immediately with your supplier.

4. Installation

4.1 Setting Up

The furnace is intended exclusively for use within dry, closed space.

The furnace must be positioned below an exhaust pipe or an exhaust hood.

Sufficient ventilation must be ensured at the set-up location, in order to draw off the heat and possibly developing exhaust gas.

A clearance of at least 50 mm is to be observed sideward, to the rear and upwards of the furnace. The lateral clearance to non-flammable materials can be reduced to 20 cm.

Minimum space requirements for the SINTRA PRO 90 Zr/ SINTRA PRO 120 Zrf (incl. connections):

- Width: 1.4 m (0.8 m for non-flammable materials)
- Depth: 0.9 m
- Height: 1.0 m

The set-up surface must be level.

The net weight of the machine is 67kg. The set-up surface must withstand an appropriate load.

During operation, the room temperature must be between 5 °C and 40 °C; avoid large variations in temperature.

The floor covering must be made of non-flammable material, so that hot material falling out of the furnace cannot inflame the covering.

Set up the machine on a sturdy work table or work bench (on a non-flammable surface).

Remove all packaging material.

Before Powering:

Make sure Power Switch is off.

Connect the quick air pressure connector (5-10 bar) to enable the furnace degassing capability.

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To avoid electrical over load, make sure the furnace is the ONLY device connected to the electrical source line.

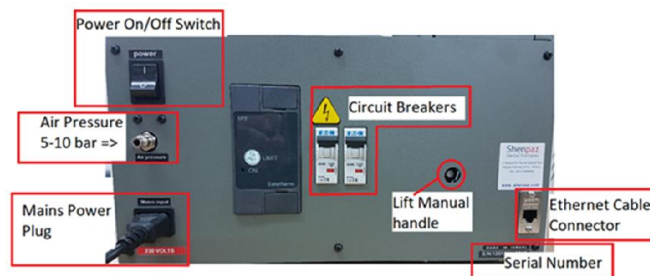
Make sure power source is of the correct type! (Either 230V or 115V) according to furnace marking.

Only use the SINTRA PRO supplied original power cable and plug.

Usage of unauthorized cables is dangerous!

Connect Ethernet cable to allow networking.

Connect Mains Power Plug.



4.2 Installation of the refractory table

Remove any remaining packaging material, papers from inside the furnace.

SINTRA PRO has 2 configurations (90 Zr and 120 Zrf).

The supplied accessories kit box will contain the necessary parts to get you started, according to the model purchased.

SINTRA PRO 120 ZRF



SINTRA PRO 90 ZR



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- Turn on the furnace
- The aluminum tray (lift) will go down to its bottom position Automatically
- Position the Sintering Table in place.
- You are ready to start Sintering.



Caution: Always make sure **NO** objects are placed below the lift aluminum tray and table.

4.3 Electric Connection

The electrical connection is to be made via a socket outlet with grounding contact providing 220-240 V- 110-115 V and 50-60 Hz.

The electrical socket outlet must be located close to the furnace and be easily accessible.

NOTE: When using an extension cord or a multiple socket outlet, do not exceed the respective max. electrical load rating.

▷ Connect the supplied mains cable to the socket intended for this purpose at the rear of the furnace. Use the original cable supply by Shenpaz, Max length 1.5 m

WARNING:

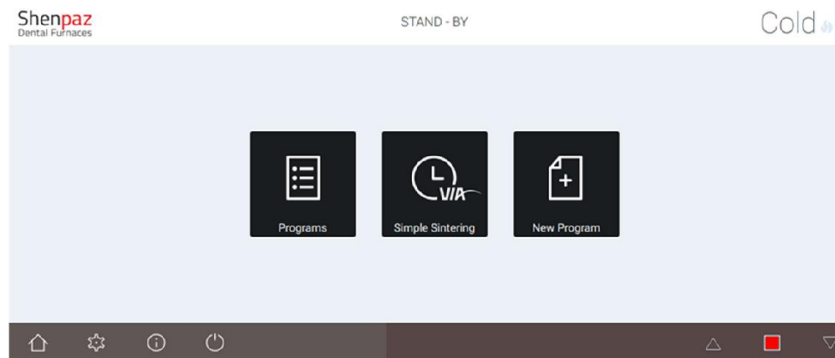
The mains cable may not be damaged!

▷ Do not place objects on the mains cable.

▷ Lay the mains cable in such a manner that nobody can step on or trip over it.

5. Start a sintering program

1. Place your restoration into the tray on the table of the furnace.
2. Choose or create the relevant program.
3. Action one of the 3 options of programming, edit the program or checks the program.



On the Graph screen press  to start the program.

From this point, you will be able to follow the cycle on the graph screen and see the remaining time of the cycle.



TIP:

Insufficient sintering results may be due to faulty temperature control or bad programming!

▷ Check the thermocouple for damage.

By pressing the Flame icon on the right top corner of the graph screen while the cycle is running you may switch screen view between the parameters and the Graph screen.

6. Intended Use

SINTRA PRO 90 Zr / SINTRA PRO 120 Zrf are high-temperature furnaces for sintering milled ZrO₂ units up to 1650°C. The SINTRA PRO series has two models: SINTRA PRO 90 Zr with a muffle dimension 90ø x 100 mm and 3 MoSi₂ heating elements; and SINTRA PRO 120 Zrf with a muffle dimension 120ø x 100 mm and 4 MoSi₂ heating elements. The furnaces are lift bottom loading furnaces. These high-temperature furnaces have been specially developed for sintering most of the standard Zirconia products on the market. Only the Zirconia materials whose properties and sintering temperatures are known may be used in the furnace.

Any other or further-going use, such as the processing of other products than those intended for, as well as the handling of hazardous substances or materials hazardous to one's health, does not apply as under the intended use.

As to the materials being used in the furnace, it must be known whether they are aggressive to or even could lead to destruction of the insulation of the heating elements. It is prohibited to remove safety devices, bypass them or put them out of operation. To avoid deterioration of the heating elements, we recommend the use of the degassing function that is included in the furnace.

Unauthorized modifications/alterations of the machine shall also void the warranty.

The set-up instructions and the safety regulations must be followed, otherwise the furnace is considered as not being used as intended for, and any and all claims against Shenpaz shall become void.

7. User interface

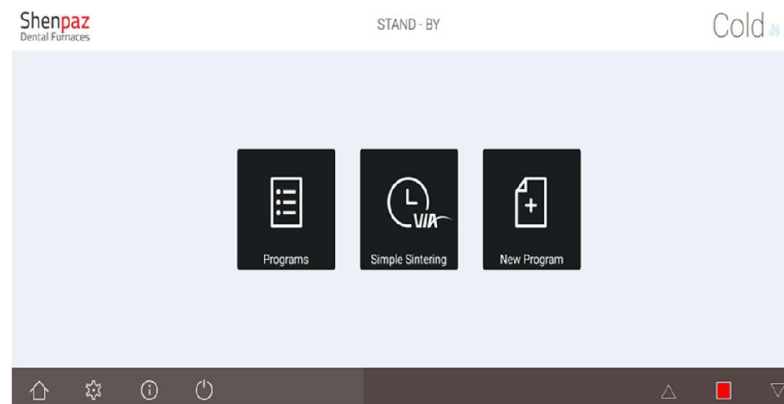


Figure 1- Main screen



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When the furnace is turned on, to lower the table, press the down arrow.
 By pressing the appropriate arrow (up or down), you may open or close the lift.
 When activated, the arrow will change color to green. When stopped only the stop button will be lit (red).

Note: Should the temperature be higher than the default value, the lift arrows will disappear until the temperature is below the default value.



Figure 2- Lift start

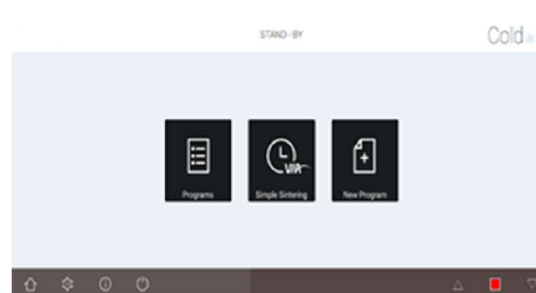




















Figure 3- Lift stop

7.1 Display screens overview and programming possibility

The display is an intuitive touch screen. For editable fields, pop-up keypads will open. The below table lists the function of the display's icons:

	Home: Returns to homepage
	Settings: Access to furnace's internal settings
	Info: Provides information on the S/W version
	Save: Keep in memory the programs and parameters
	Ramp: Set or Indicate the Speed of heating up or cooling down
	Target temperature: Set or indicate the furnace temperature

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	<p>Time: holding time for the particular Step</p>
	<p>Located in the right corner the running cycle screen. Blue: Not in cycle, cold and cold mode. Red: Firing mode. Pressing this icon; switches between parameter and graph screens.</p>
	<p>Exit button / to shut down the furnace it is recommended to use this button</p>
	<p>Next screen</p>
	<p>Previous screen</p>
	<p>Deletes: step/program/value</p>
	<p>Edit program or view a program in graph before starting cycle</p>
	<p>Search a specific program or cycle by name letters or number</p>
	<p>Start Cycle / from the graph screen only</p>
	<p>Stop cycle / from the graph screen</p>
	<p>Lift down interchangeable with Stop</p>
	<p>Lift up interchangeable with stop</p>

7.2 Navigating the Touch Screen: Sintering, programming & editing

MAIN SCREEN

After turning on the furnace by flipping the main switch at the back of the furnace, the Logo “SHENPAZ” will appear for few seconds, followed by the main screen.

There are 3 options to begin operating the furnace and run a cycle:

- Add a new program
- “VIA SIMPLE SINTERING “ Wizard
- Select from existing preset programs

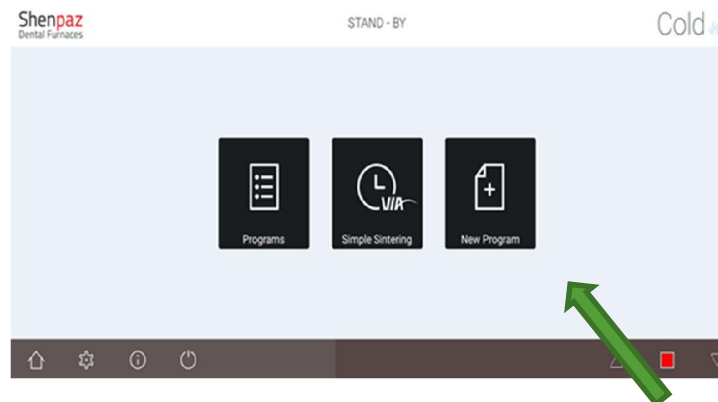


Figure 6 - Main screen

NEW PROGRAM

Create a new program that is not in the furnace preset database program. Select the icon “New Program” from the Main screen.

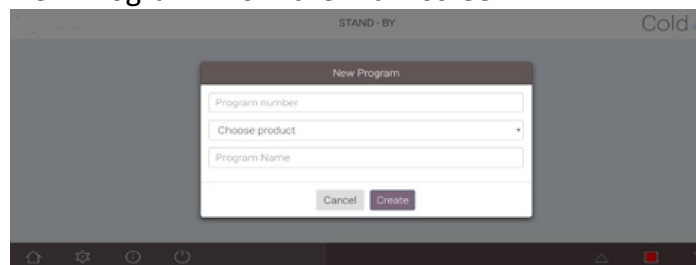


Figure 7 – create new program

There are two methods to create a new program. One is to create a program from the beginning by referring to preset brands or adding a new brand. The second method is to copy a preset program, rename and modify the program.

1. Creating a new program Step-by-step:

- a. Select a free program number and the ZRO₂ brand from pre-listed brands, assign a new name. (If an existing program number is chosen, by default the furnace will assign to you the next free slot in the furnace.)
NOTE: If the new ZrO₂ brand is not listed, please refer to image 13 – Advanced settings/Products.
- b. After creating a name, manually enter all new parameters. (Figures: 7-8)
- c. Note that by choosing the fast cycle on the right of the screen additional parameters for the fast opening will appear on the screen.

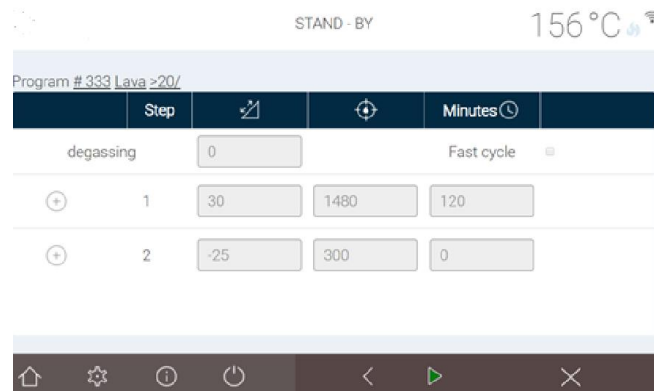


Figure 8 – Normal cooling/ normal programming

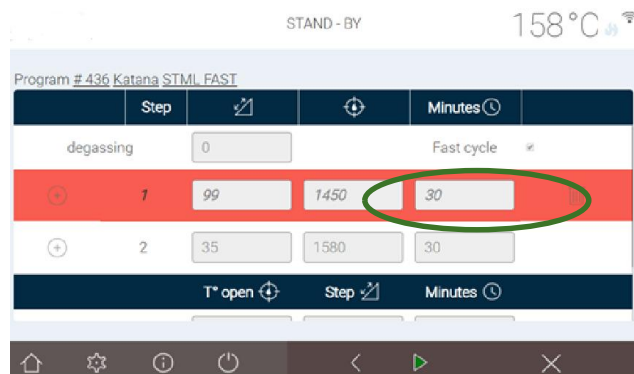


Figure 9– fast cooling/ fast programming

With fast cooling:

While this option is activated (check box in selected) two additional rows will open below the screen to select the opening parameters.

Those parameters will temper the opening of the lift according to temperature distance and time.

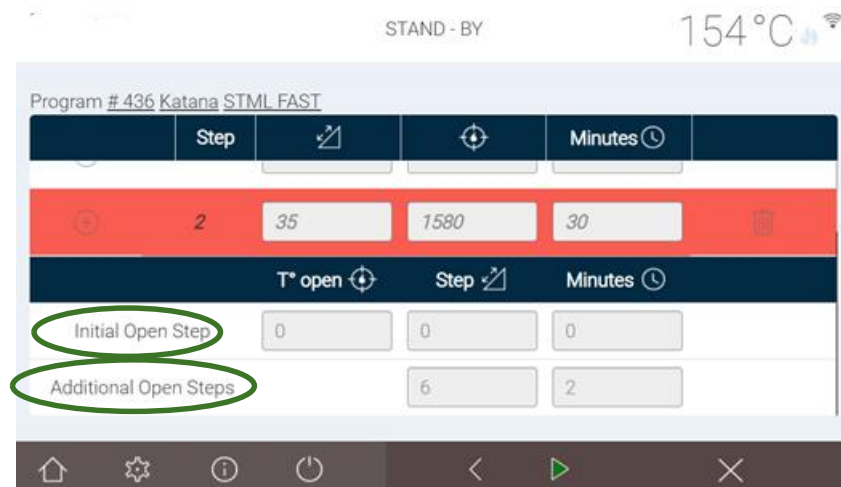


Figure 10– fast cooling/ programming parameters

a) **Initial open step** will be the first opening temperature and the distance of the first step and the holding time following this first movement.

b) **Additional open step** will define how long following the step will be holding after the second opening distance.

This programmable step loop will be operating until the door will be fully open.

Note: the fast opening will take place instead of the original cooling of the cycle. or in combination.

FAST COOLING meaning: Activation of an internal cooling system that shortens the overall full sintering cycle. This function is preset in the relevant programs in SINTRA PRO 90 Zr/ SINTRA PRO 120 Zrf partially in some program according to the preset, the lift will open according to the fast opening preset parameters, note that those cycle are performed without tray , (the tray will explode in a fast cooling).

TIP: When using fast cycle do not use the tray. The tray will undergo thermal shock and explode under fast cooling. Instead place the restoration only on the lid.

The SINTRA PRO 90 Zr/SINTRA PRO 120Zrf allow you to program without restrictions in any profile of cycle from one step up and one step down to an unlimited quantity of steps according to the different requirement of the ZR manufacturer, or user need.

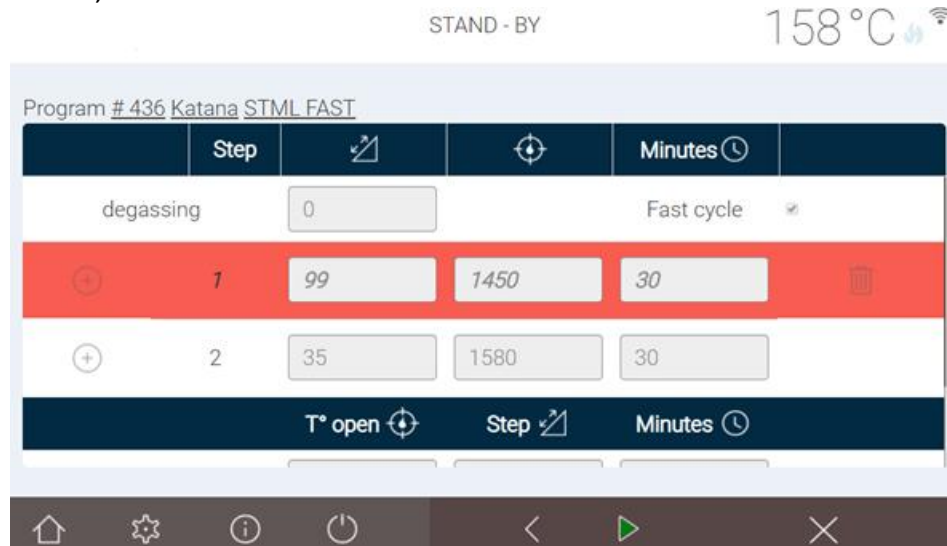


Figure 11– Create and modifying a program



Figure 12 – editing parameters

In case of error, the field will appear in reddish color, thus indicating to the user that the parameter setting is not within range of the furnace or value is missing.

If you're not programming your cooling phase, the furnace will complete the program by automatically adding the default cooling phase (natural cooling).

When creating a new program but a prelisted brand was not selected, the cycle brand remains named “DEFAULT”, unless edited.

HOW TO ADD AN UNLISTED ZRO BRAND

Creating a new program under non-listed ZrO brand name

- a. The new Zr brand will need to be added to the preset brand list.
- b. To add a new brand, open the advanced setting sheet.
- c. Under password: admin
- d. Press on the product button in Advanced screen

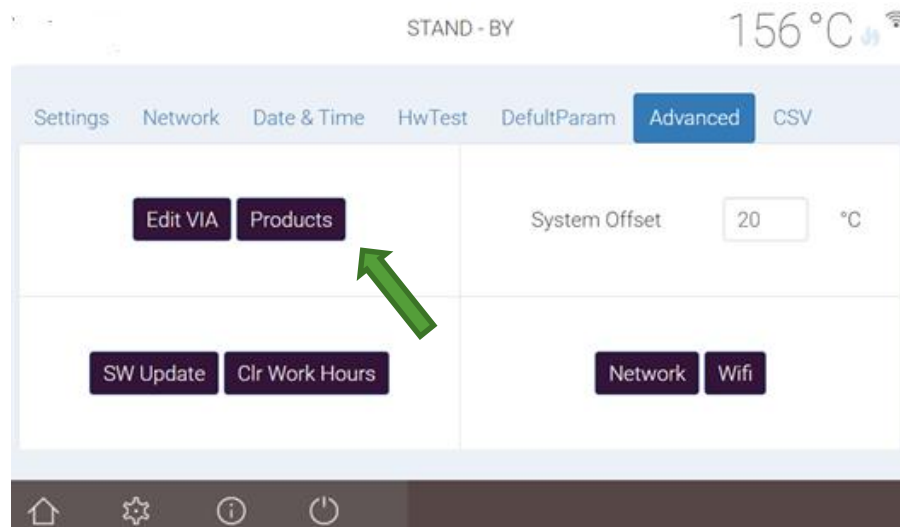


Figure 13– Advanced setting

1. Select “Products”.
2. In the below screen (Figure 14), a brand can be added by selecting “+” or removed by selecting the “Trash” icon
3. After assigning a name, press ACCEPT and the new Brand has been added to the list.
4. Go back to Opening screen by pressing “home” icon
5. Select “NEW PROGRAM”
6. Follow the programming screens to create your new program.

STAND-BY <100

#	Product Name
1	Default
2	Alcite
3	Amann
4	Bloxzir
5	Bom
6	Dental Direct
7	Katana
8	Kingoh
9	Lava
10	Luxon
11	Opera

Figure 14– list of preset brands

2. Creating a new program by copying and existing program

- a. Choose the existing program of your choice.
- b. Press the “Copy” button
- c. The system will automatically assign a next available program number
- d. Once the program is created, the parameters and name can be modified.

3. Using the VIA SIMPLE SINTERING WIZARD

By selecting the icon “VIA – simple sintering” in the Main Screen, you will access the SHENPAZ easy sintering Wizard. A limited list of tested ZrO₂ brands are preset under VIA.

VIA STAND-BY 156°C

Product Name: Katana

Tray	Speed	Coloring	Quantity
<input checked="" type="radio"/> 1	<input type="radio"/> Normal	<input type="radio"/> Yes	5
<input type="radio"/> 2 / 3	<input checked="" type="radio"/> Fast	<input checked="" type="radio"/> No	

Program Number: 436

Figure 15 - VIA Simple Sintering screen

Once an available ZrO₂ brand from Product Name is selected, there are only 4 parameters to be entered:

TRAY – select from a choice of 1,2 or 3 trays

COOLING – select normal or fast*

COLORING – select YES or NO depending if using a colorant

QUANTITY – enter total quantity of crowns. **TIP: IF quantity exceeds the recommended quantity per number of trays or type of COOLING selected, the value may not be accepted and a recommended program will not be available.**

The VIA recommended program will appear in the Program Number field. (see figure 15). To review the programs and to move to next step press the arrow.

By pressing the arrow, the list of programs under the Brand name (eg. Katana) will appear. The VIA recommended program name is highlighted.

STAND-BY <100

#	Product	Program Name	locked
336		STMI ultra fast	
337		STMI /colored	
338		STMI /no color/>20	
339		STMI /no color/>50	
340		UTMI FAST	
341		UTMI /1.515/<20	
342		UTMI /1.515/colored >20	
343		UTMI /1.515/colored <50	
346		Zirconia single/speed/<10	
347		Zirconia /colored/<20	

Navigation icons: Home, Settings, Info, Power, Search, Add, Edit, Stop, Play

Figure 16 - Program list by Brand

Once reviewed by the operator the sintering program can be launched by pressing the arrow or review the parameters by selecting the “pencil” icon.

Start the program by pressing the Start icon.

NOTE: VIA program preset cannot be modified- if a fast cycle is used please do not use the tray in this cycle only the lid with SINTRA PRO 1650 ZR and only the table insert with the SINTRA PRO 1650ZRF.

4. PRESET PROGRAMS (from list)

- Select the icon “Programs”, you access the preset list of programs in the furnace.
- Scroll or search by letter name or number to the requested program you wish to run.

#	Product	Program Name	Date	Favorites
37	Ethetic Fluorescent Full-Contour Zirconia	Bridge	01.01.2000	*1
38	Lava 3M [™] Lava [™] Esthetic Ethetic Fluorescent Full-Contour Zirconia	Bridge	01.01.2000	*1
39	Lava 3M [™] Lava [™] Esthetic Ethetic Fluorescent Full-Contour Zirconia	Single	01.01.2000	*1
40	Lava 3M [™] Lava [™] Esthetic Ethetic Fluorescent Full-Contour Zirconia	Bridge	01.01.2000	*1
112	Katana KAZANI	utml	01.01.1970	*1

Figure 16 – CHOOSING PROGRAM FROM LIST

- Highlight the chosen program, press the icon” pencil” and the program parameters will appear on the next screen. **TIP:** Only on editable cycle the Pencil icon will appear.
- After reviewing the parameters, press arrow to begin the sintering program.

5. EDITING A PROGRAM

The parameters screen shows the programs parameters for your review and modification if desired. The parameters can be modified only if the program is not locked. Locked programs are password protected. (Cannot be modified or erase, ALL VIA PROGRAMS ARE NOT MODIFIABLE).

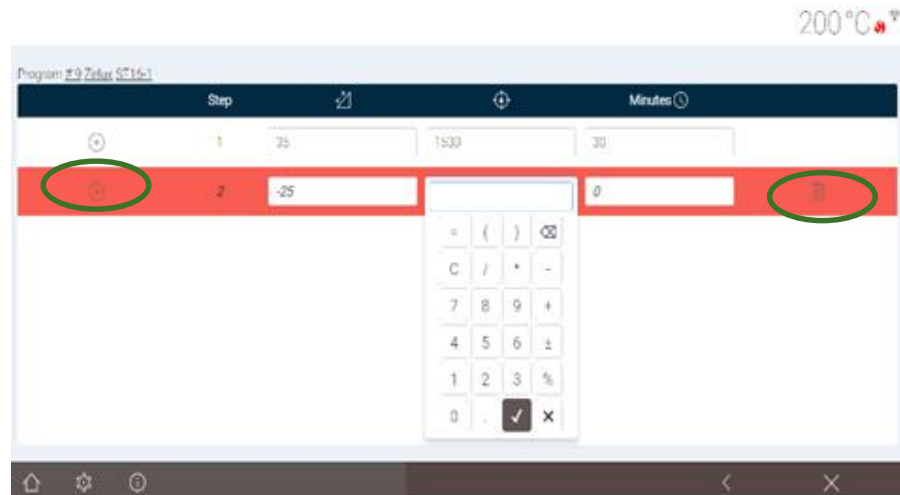



Figure 17- Editing screen

Modifications are simply performed by selecting a field. A keyboard pop-up will appear, modify value and save the program change to memory by pressing the Save icon in bottom right corner. 

When editing, the “+” at the beginning of each row allow you to add an additional row with 3 new parameters: Ramp, high temp. and delay.


In the same way, it is possible to delete an unwanted row by pressing on the trash can on the right of the row.

If you want natural cooling, only the first row is mandatory to create a program.

Missing parameters will be complete by the Software automatically (if possible).

While the cycle is ready you can save your programming with the “Save” icon 

If the “Save” icon doesn’t appear it is a sign that this program cannot be modified.

To start the program press on the “start” arrow  , a program graph screen will appear. Press the “start” icon to begin sintering cycle.

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Figure 18- cycle graph

To navigate between the screen “graph” and the parameters screen, you need to press on the red flame on the top of the screen.

SETTINGS SCREEN

The Settings screen allows the user to change the settings of the furnace.

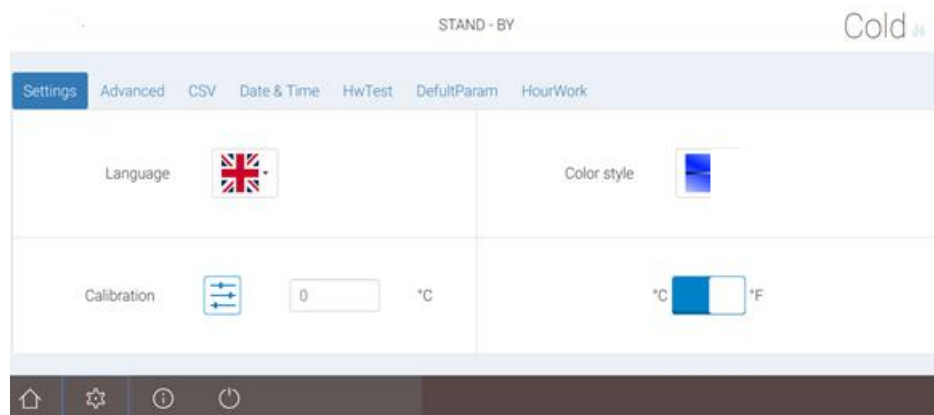


Figure 19 - Settings screen

LANGUAGE – a drop box is opened with a list of languages. By choosing the relevant flag, the factory preset language may be changed.

TEMPERATURE SCALE – change the temperature scale from Centigrade to Fahrenheit.

OFFSET - This setting allows you to add or remove a constant temperature value to the furnace in case it is observed that the furnace temperature is lower or higher than the requested. This feature is used to adjust and rectify to the correct requested temperature value. Limitations: up to 15 Degrees Max

COLOR STYLE– The user may choose a set of colors for his screen. A drop box will show and allow the user to modified colors.

DATE & TIME

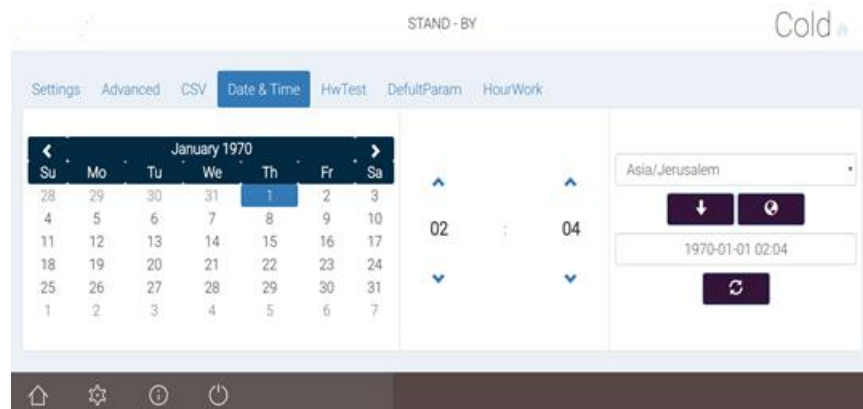


Figure 20- time setting

ADVANCED – This section will give you access to:

- Edit VIA programs
- Products - Add/Create/Remove products
- Connect to Network or WIFI for pairing with other devices
- CSV - Update Software versions via PC only
- Edit/Set furnace temperature offset. **DO NOT CHANGE THIS VALUE WITHOUT AUTORIZATION FROM MANUFACTURER OR AUTHORIZED SUPPORT TECHNICIAN.**
- See all preset setup
- Check with furnace Hardware test and automatic check
- Hours work

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All functions performed from this screen is password protected.

To access to advanced section, you will need to use the password: admin

Once the password is accepted, the “Advanced” screen will open.

From this screen which appears on the PC or other chosen device after pairing, you can do the following:

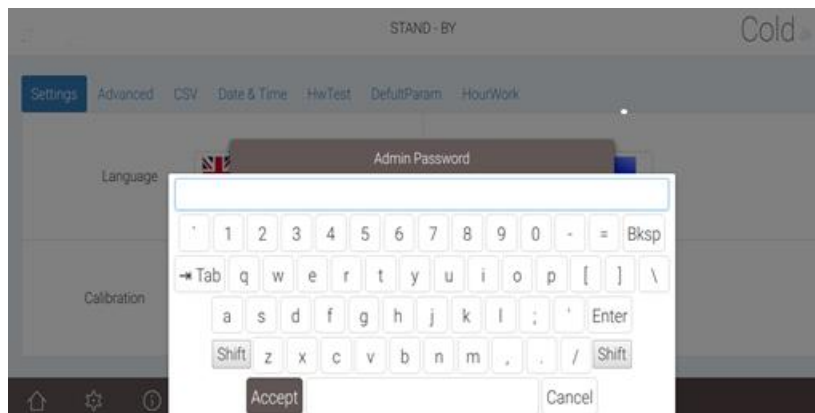


Figure 21 - Enter password screen and press OK

1. In Admin password pop-up screen, place cursor into empty field.
2. Keyboard will appear, type password, press Accept.
3. Admin password screen will appear with hidden password, press OK.
4. Advanced setting is opened for editing.

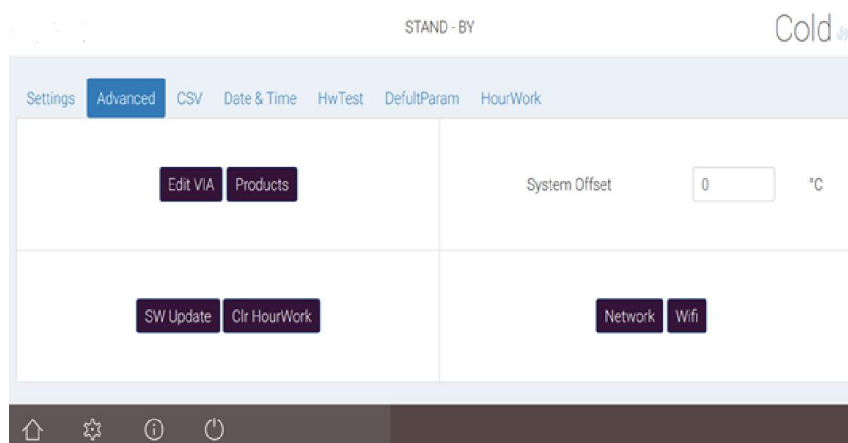


Figure 22 - Advanced Screen

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STAND - BY Cold

Settings Advanced CSV Date & Time **HwTest** DefaultParam HourWork

Test all	Time ↕	Value ⌵	Result ⌵
Lift up	27		28
Temperature	1500° : 0	1600° : 0	IN PROCESS
Lift down	6	**	IN PROCESS
Degazing	OFF		

Figure 23 Advanced Screen: Automatic and Hardware tests

Settings Advanced CSV Date & Time HwTest **DefaultParam** Work Hours

Tests	Value ⬆	Unit ⌵	range
Degas start temp	150	°C	0-500
Degas open time	30	Sec	1-120
Degas lift open	2	CM	1-25
Degas delta temp	100	°C	0-500
Standby temp	150	°C	0-800
Lift open temp	150	°C	0-800

Figure 24 Advanced Screen: Setup limits

stage: 1 Ramp Cold

#	Product	Program Name	Date	Favorites
38	Lava 3M Lava Esthetic Esthetic Fluorescent Full-Contour Zirconia	Bridge	01.01.2000	*1 🔒
39	Lava 3M Lava Esthetic Esthetic Fluorescent Full-Contour Zirconia	Single	01.01.2000	*1 🔒
40	Lava 3M Lava Esthetic Esthetic Fluorescent Full-Contour Zirconia	Bridge	01.01.2000	*1 🔒
112	Katana KATANA	utml	01.01.1970	*1

Figure 25 EDIT VIA SCREEN

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In this screen Shenpaz personnel modifies and adapts the Via preset to different Zr products and load the programs.

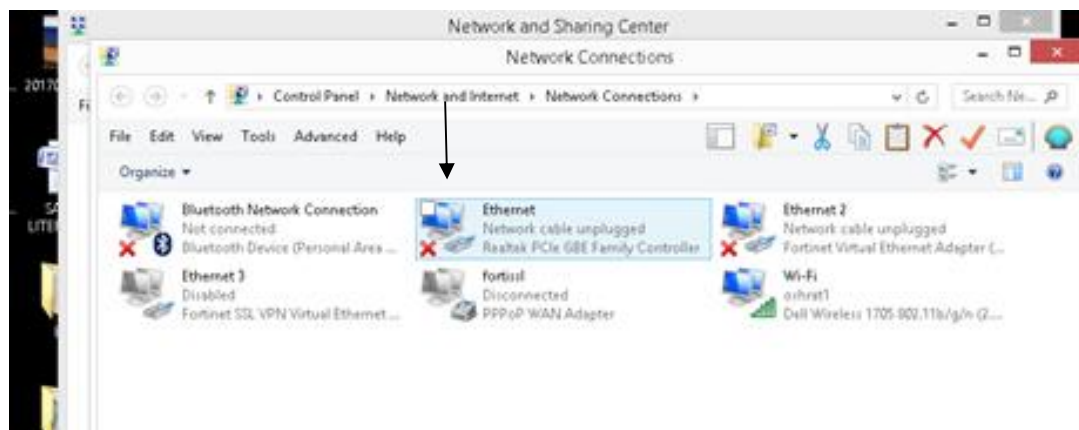


Figure 26 - Advance setting screen: Product list

By pressing the + icon add a new brand product to the list.
By pressing the trash can the product select will be delete.

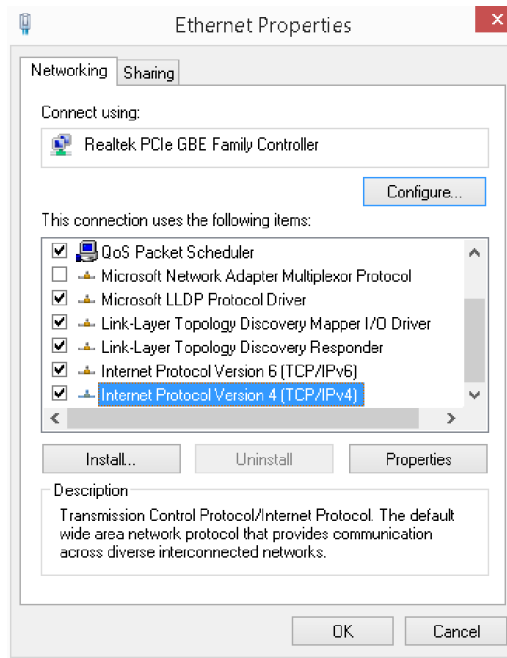
7.3 Connecting & Pairing furnace to a device via Network

Connect your furnace to a PC to upload new software and programs.
Set the adaptor or the computer with the following setting
Open the network connections on the PC:



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Choose and open Ethernet connection.



Press internet protocol version 4(TCPIP/ V4), then press on Proprieties. and set detail as follow:



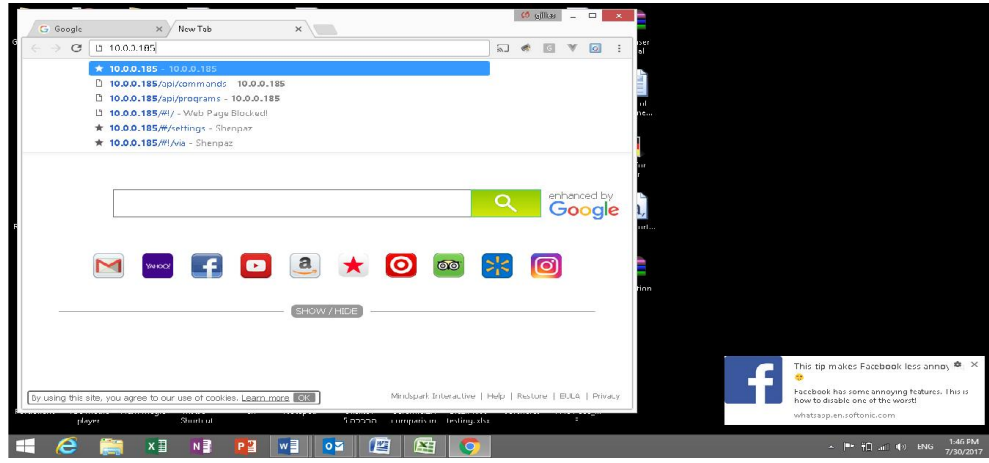
Type in your PC, the set IP address 10.0.0.186.

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It is highly recommended to not modify the preset IP address.

In case of change, the manufacturer will not be able to remotely support the furnace.

If the address is changed by the user, please keep it in a safe place for future use and as it will be required by the to support team if needed.



You are now connected to your furnace and you can see and operate your furnace from the PC or other device of choice.

Network Preset (for IT manager use only).



Those are the internal preset the furnace under Network.

7.4 How to upload sintering program files

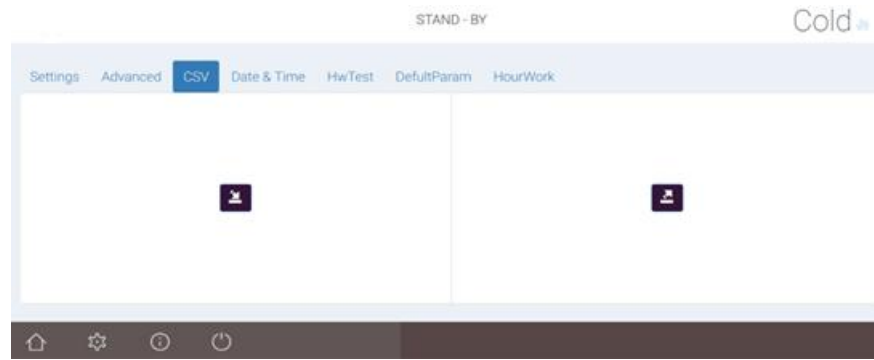


Figure 27- Upload programs and download in a computer

Uploading of sintering programs files can only be done via a PC or other device that have the above (figure 27) screen image.

By pressing on your PC or other pairing device on CSV icon **CSV** you can load or download a CSV file.

The new program will be uploading to the furnace by pressing the icon above.

The PC will confirm that the file was uploaded.

By pressing the second Out Icon you may copy the program from the furnace to the PC.

The file will be stored in the Document \Download \CSV –export.

7.5 How to upload Software

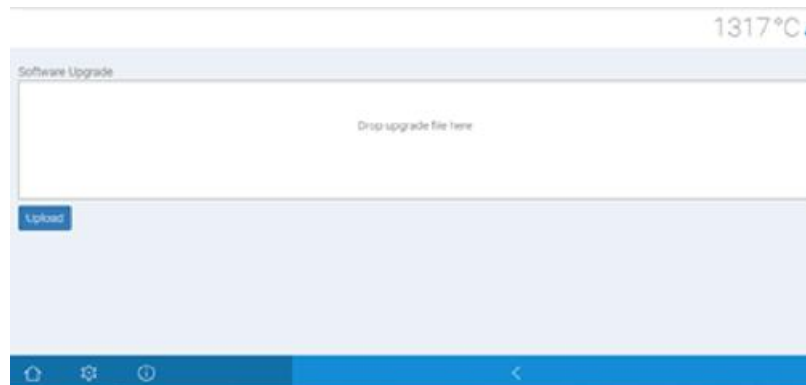
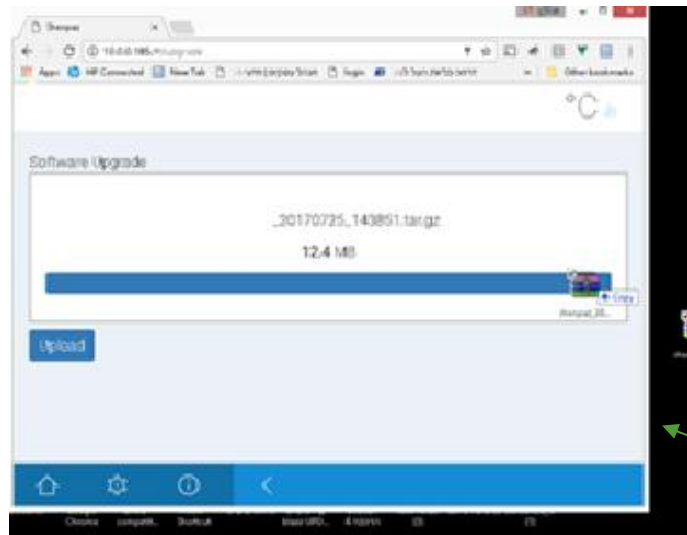


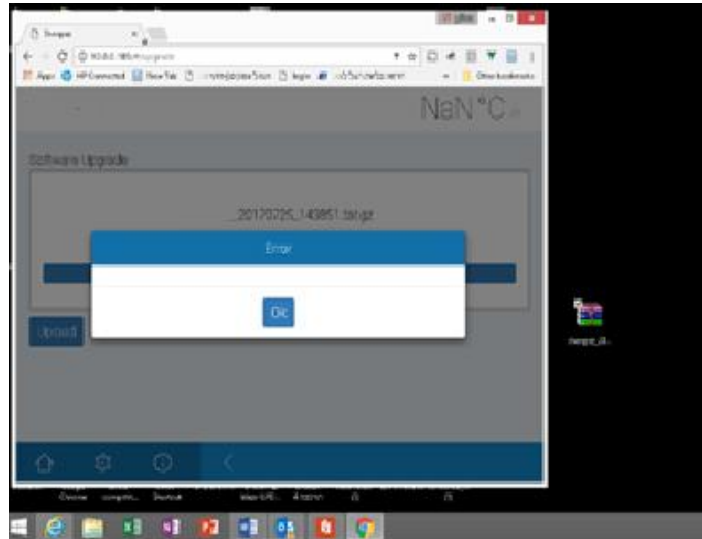
Figure 28- software upload

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- Open a Chrome or Safari browser and write inside the address line 10.0.0.185
- Press SW update in your image furnace in a PC- into the advanced setting.
- Drop the SW sent to you into the upload box (you must get the SW file before from your dealers).
- Press the upload button under the upload SW button upload the furnace will reboot automatically with the new software.



In case of error, the following error screen will appear and a sound will be audible. Check that file has content and not empty and restart the process until the furnace reboot itself automatically. If error message is repeated, file might be corrupted, contact your dealer or Shenpaz technician to get the Update file.



8. Special Functions

8.1 Recovery function

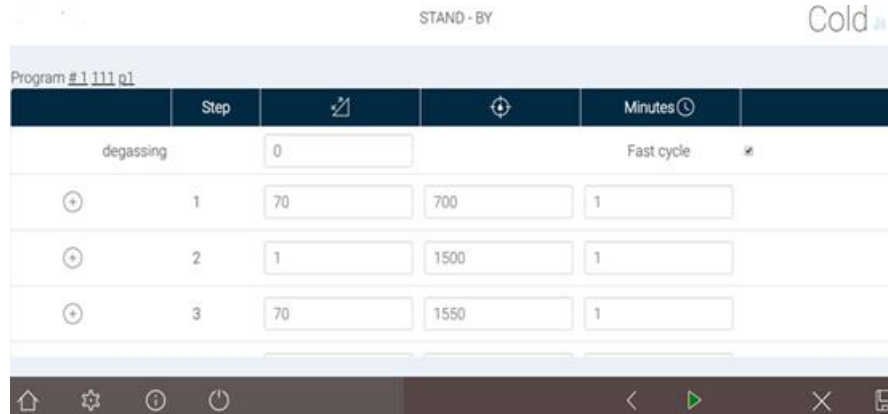
In SINTRA PRO sintering furnace series, the recovery function is always an advantage. In case of electrical failure, your furnace remembers the status and position within the cycle and will be recovered to complete the full cycle without delay limitation in time.

If you wish to stop the recovery, press on the “stop” button on the bottom of the graph screen.

Note: the door will open only below the limit defined in the setting of opening temperature value.

8.2 Degassing

The degassing function allows to clean the muffle and accumulated impurities from the routine operation of the furnace. By selecting to use this function, the user will prolong the lifespan of the heating elements, especially recommended if using colorants.



8.3 SHUT-OFF button

It is highly recommended to logoff the furnace at the end of standard use. It safely shuts down the furnace's electronics.

8.4 Modular Sintering Table

The Modular Sintering Table is designed in 2 parts; the base and the insert. The Modular Sintering Table is delivered only with the SINTRA PRO 120 Zrf model.

This part is a consumable part subject to wear and tear. An advantage is that only the insert can be exchanged and not the entire table.

While using the fast cycle, the insert is used as a fast cycle table and beads can be placed into it and the restoration is placed on the insert directly without lid or tray.

In the furnace, inserts can be stacked one on the other up to 3 units, thus reducing the size of the chamber, by this action, the speed of the temperature ramp is increased, hence shortening the sintering cycle.

By removing the insert, the trays can be stacked up to 3 units on the table base for maximum capacity.

Do not place more than 3 unit together of trays or insert.

TIP: The total height should not exceed 100mm.

9. Maintenance and cleaning

Before carrying out furnace maintenance, or in the event of a mechanical failure, switch off the electrical supply by the POWER switch located at the back of the furnace, and disconnect the power supply cord.

- Opening of the furnace may only be carried out by a technician recommended by your furnace supplier.
- Check the air flow only when the furnace is cold.

Note: if transport is required use original box and foam, and remove any tray support or table from the muffle area.

Unauthorized opening of the furnace will invalidate the warranty. The manufacturer empowers your supplier to carry out certain repairs and maintenance.

9.1 Cleaning

- a) Turn off the furnace from the main switch (located on the rear panel).
- b) Disconnect the furnace from the electricity. In case the furnace's surface is hot – leave it unplugged until the furnace cools down completely.
- c) Clean the furnace using dry cloth only.
- d) DO NOT clean the furnace using any cleaning agents, but with a dry cloth only.
- e) Once every 2-3 months according to the use, performed a cleaning & maintenance cycle. A pop-up message, "Periodic maintenance", program no. 3 will be shown when a cleaning cycle is required. 3 deg/min. to 1600 degrees holding for 4 hours. This will recreate a coating on the heating elements and will protect them for many years.

10. Warranty and service

Shenpaz Dental Ltd. warrants that the non-consumable parts of this product including, but not limited to, the muffle are not defective for a period of one (1) year.

Consumables parts such as trays and sintering tables are not covered by warranty.

In the event that this product proves defective within a period of the one (1) year of work from the date of shipment to Buyer, Buyers' exclusive remedy shall be at Shenpaz's decision; either replacement of the product or repair of defective part or component, free of charge.

11. Disclaimer

DISCLAIMER of Consequential Damages: Shenpaz Dental Ltd. hereby disclaims any liability for loss or damage, direct or consequential that results from the use of this product.

Note & warning: Shenpaz is dedicated to supply the most tested and updated cycles parameters, and programs for brands listed. But these products change and upgrade all the time. The dental laboratory technician is entirely responsible for checking the cycles parameters before launching a program.

Disclaimer of ALL other Warranties:

THERE ARE NO OTHER WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, CONNECTED WITH THE SALE OF THIS PRODUCT. SHENPAZ DENTAL LTD. SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY.

*We thank you for choosing the SINTRA PRO 1650 Pro ZR/SINTRA PRO 1650 ZRF, Zirconia sintering furnace for your laboratory needs.
For any questions or additional support, please contact us and we will look forward to assisting you.*

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Fax: +972 4 6042040

Email: info@shenpaz.com

12. Appendices: preset programs list

Program No.	ZrO Brand name	Program Name
1	Default	Ramp Rate Calibration
2	Default	Temperature Calibration
3	Shenpaz	Periodic Maintenance
292	Argen	Esthetic /Ultra single
293	Argen	Esthetic /Speed anterior
294	Argen	Anterior Standard
295	Argen	Z Esthetic/ Ultra Standard
296	Argen	Z Esthetic/ roundhouse Bridge
297	Argen	HT+/STML Standard
298	Argen	HT+/Long cycle
299	Argen	HT+/Short Cycle
300	Pritidenta	Single fast/ <10
301	Pritidenta	<50 no color
302	Pritidenta	<20 no color
303	Pritidenta	Bridge <20
304	Pritidenta	>20<50 colored
305	Pritidenta	Bridge >50 colored
306	Zirlux	<50 no color
307	Zirlux	<20 no color
308	Zirlux	Single fast/ <10
309	Zirlux	Bridge <20
310	Zirlux	>20<50 colored
311	Zirlux	Bridge >50 colored
312	Bruxzir	Shaded single/ speed
313	Bruxzir	Shaded single/ multicolor
314	Bruxzir	Shaded multiple/ multicolor
315	Bruxzir	Shaded Multiple/multicolor
316	Bruxzir	White fast color <10
317	Bruxzir	Bruxzir <20
318	Bruxzir	White colored >20

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319	Bruxzir	White colored >50
320	Opera	Zr Single fast
321	Opera	Zr colored <20
322	Opera	Zr Multi >20
323	Opera	Zr Multi >50
324	Opera	Zr Single ML
325	Opera	Zr Single ML
326	Opera	Zr Multi ML
327	Opera	Zr Multi ML
328	Lava	Single fast/ <10
329	Lava	Bridge colored >10
330	Lava	2 trays
331	Lava	2 trays >21
332	Lava	1 tray /colored/ <10
333	Lava	>20/
334	Lava	Single >50
335	Lava	Bridge>50 colored
336	Katana	STML ultra fast
337	Katana	STML/colored
338	Katana	STML/no color/>20
339	Katana	STML/no color/>50
340	Katana	UTML FAST
341	Katana	UTML/1515/<20
342	Katana	UTML/1515/colored >20
343	Katana	UTML/1515/colored <50
346	Upcera	Zirconia single/speed/<10
347	Upcera	Zirconia / colored/<20
348	Upcera	Zirconia /<50
349	Upcera	Zirconia />50
350	Upcera	Zirkonia /colored/<10
351	Upcera	Zirkonia Bridge/<20
352	Upcera	Zirkonia \colored \<50
353	Upcera	zirkonia Bridge/colored \<50
354	Bsm	Aconia/single/speed

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355	Bsm	Aconia/<10/colored
356	Bsm	Aconia/<50/no color
357	Bsm	Aconia/>50 / no color
358	Bsm	Aconia/colored /<10
359	Bsm	Aconia/no color/<20
360	Bsm	Aconia/colored /<50
361	Bsm	Aconia/colored />50
362	Amann	Zirconia single/speed/<10
363	Amann	Zirconia / colored/<20
364	Amann	Zirconia /<50
365	Amann	Zirconia />50
366	Amann	Zirkonia/colored/<10
367	Amann	Zirkonia Bridge/<20
368	Amann	Zirkonia\colored/<50
369	Amann	zirkonia Bridge/colored /<50
370	Kingch	Zirconia single/speed/<10
371	Kingch	Zirconia / colored/<20
372	Kingch	Zirconia /<50
373	Kingch	Zirconia />50
374	Kingch	Zirkonia/colored/<10
375	Kingch	Zirkonia Bridge/<20
376	Kingch	Zirkonia\colored \<50
377	Kingch	zirkonia Bridge/colored \<50
378	Vita	Zirconia single/speed/<10
379	Vita	Zirconia / colored/<20
380	Vita	Zirconia /<50
381	Vita	Zirconia />50
382	Vita	Zirkonia/colored/<10
383	Vita	Zirkonia Bridge/<20
384	Vita	Zirkonia\colored \<50
385	Vita	zirkonia Bridge/colored \<50
386	Dental Direct	DDX/cubex/bio <10
387	Dental Direct	DDX/cubex/bio <10 colored
388	Dental Direct	DDX/cubex/bio <20

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390	Dental Direct	DDX/cubex/bio <10 colored
391	Dental Direct	DDX/cubex/bio <20
392	Dental Direct	DDX/cubex/bio <20 colored
394	Zirkon Zhan	Prettau speed
395	Zirkon Zhan	Prettau <colored/20
396	Zirkon Zhan	Prettau >20
397	Zirkon Zhan	Prettau/ >20
399	Zirkon Zhan	Prettau
400	Zirkon Zhan	Prettau/ colored >50
401	Zirkon Zhan	Prettau
402	Aidite	Zirconia single/speed/<10
403	Aidite	Zirconia / colored/<20
404	Aidite	Zirconia /<50
405	Aidite	Zirconia />50
406	Aidite	Zirkonia/colored/<10
407	Aidite	Zirkonia Bridge/colored /<20
409	Aidite	zirkonia Bridge/colored /<50
410	Straumann	Zirconia single/speed/<10
411	Straumann	Zirconia / colored/<20
412	Straumann	Zirconia /<50
413	Straumann	Zirconia />50
414	Straumann	Zirkonia/colored/<10
415	Straumann	Zirkonia Bridge/<20
416	Straumann	Zirkonia\colored \<50
417	Straumann	zirkonia Bridge/colored \<50
418	Luxen	Zirconia single/speed/<10
419	Luxen	Zirconia / colored/<20
420	Luxen	Zirconia /<50
421	Luxen	Zirconia />50 colored
422	Luxen	Zirkonia/colored/<10
423	Luxen	Zirkonia Bridge/<20
424	Luxen	Zirkonia\colored \<50
425	Luxen	zirkonia Bridge/colored \<50