# myerson FlexPress...

automated digital injection system



## **Instruction Manual**



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#### Installation of the HEAT GUARD

To prevent damage, the **Myerson FlexPress™** has been shipped with the heat guard not installed. To install the heat guard, place the heat guard over the corner posts with the warning label UP. Install the (4) black acorn nuts finger tight. The acorn nuts are simply holding the heat guard down, so they do not need to be wrenched tight.

The heat guard can be removed periodically for cleaning. Just follow the above steps in reverse order to remove the heat guard.

Thank you for your purchase. Feel free to call **Myerson** with any questions.

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### section 1~components

The following is a list of components that are included in the **Myerson Flexpress™** Digital Injection Systems:

Description	Professional Kit 120v - FP-0101 230v - FP-0103	Advance Kit 120v - FP-0100 230v - FP-0102
Myerson Flexpress™	х	х
(1) Injection Flask BS-0104	х	х
(1) 6 Pack <b>Myerson DuraFlex™</b> Medium Cartridges	х	x
(1) 6 Pack <b>Myerson DuraCetal®</b> Medium Cartridges	х	х
(1) 6 Pack <b>Myerson VisiClear®</b> Medium Cartridges <b>VC-MD-6PK</b>	х	х
Power Cord	х	х
Air hose	х	х
(1) Thermoplastic Model Separator MS-0200	х	х
TMS Swabs (10) MS-0202	х	х
TMS Trays (10) MS-0201	х	x
Release Compound BS-0105	×	х
Polishing Kit FN-0200	х	
Bur Finishing Kit AP-0224	x	
(1) Stone Removal Tool SC-0100	х	
(1) 25lb. Universal Stone UNISTONE-25LB	x	

### section 2 ~ storage & handling

The **Myerson Flexpress** Digital Injection System should be stored in a cool dry place. The unit should not be used in an environment exceeding 40°C (104°F). Keep all combustibles away from unit while in use. Never place anything on the top of the unit.

### section 3 ~ basic operation

Place the **Myerson Flexpress** Digital Injection System on a clean dry surface. Insert the power cord into the receptacle on the side of the unit and plug the other end into a grounded 120V or 230v outlet.

To turn on the unit, press the rocker switch located on the left side of the unit above the power cord receptacle. The control panel will illuminate briefly then turn back off. The **Myerson Flexpress** is now in Standby mode. To turn on the controller press the **ON/STBY** button (lower left button). Below is what you should see in the blue LCD display.



From the Main Menu you can select any of 6 options by using the **UP & DOWN** arrow keys. Below is the list of options & a description for each:

- 1. Run Stored Profile Myerson, LLC pre-programs the Myerson Flexpress™ with processing parameters for myerson DuraCetal, myerson DuraFlex and Myerson VisiClear. By selecting the pre-programmed material, the Melt Temp, Melt Time and Hold Time are already set for you. This is the recommended option to use when processing cases using the Myerson Flexpress. There is also (3) "Spare" locations for the customer to save their own settings.
- 2. **Rerun Last Profile** By selecting this option the **Myerson Flexpress**™ will run the last set profile. This option is great when processing several cases of the same material.
- Run Repeat Recyle- By selecting this option, the FlexPress remains hot once a cartridge is injected. This allows the next injection to start faster thus saving time in between cycles. Use this option to process several cases of the same material.
- Edit User Profiles- This option is where you can create your own processing profiles and save them for future use. The Myerson FlexPress is capable of storing up to 7 unique processing profiles.
- 5. **Edit User Settings** This option allows you to change settings such as temperature units (C/°F), turn off/on alarms, languages, etc.
- 6. **Configure from PC** This option is used by repair personnel in the event of a warranty repair of the **Myerson FlexPress**.

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### section 4 ~ editing user profiles

The Myerson FlexPress allows the user to save up to 7 custom processing profiles for easy switching between materials. The following procedure outlines how to create and save profiles in the Myerson FlexPress Digital Injection System. Note: Myerson, LLC does not provide process settings for materials other than Myerson, LLC supplied materials. Refer to the manufacturer supplied information for processing settings.

- From the main menu, use the UP/DOWN buttons until "Edit User Profile" is displayed. Press the ENTER button to select.
- 2. Using the **UP/DOWN** buttons until the **"Spare"** location to be edited is displayed. Press the **ENTER** button to select.
- 3. The first parameter to be modified is the "Name" of the spare profile. Press the ENTER button and a flashing cursor should appear. Using the LEFT/RIGHT buttons to move the cursor to the character location you wish to modify. Once the cursor is in position, use the UP/DOWN buttons to scroll through the available characters. Press the ENTER button when finished.
- 4. Press the **DOWN** button and the "Melt Temperature" parameter will be displayed. Press the **ENTER** button and a flashing cursor will appear. Use the **UP/DOWN** buttons to change the Melt temperature to the desired value. Once finished press the **ENTER** button.
- 5. Repeat step 4 for the "Melt Time" and "Hold Time" parameters.
- 6. Once satisfied with the changes, press the **LEFT** button. The screen should display **"Saving Changes"**. The profile you just created will now appear in the **"Run Stored Profile"** option in the main menu.

### section 5 ~ Processing using the "Run Stored Profile"

#### (Recommended Option)

- 1. From the main menu use the **UP** or **Down** buttons until the "Run Stored Profile" is displayed then press the enter button.
- 2. Next use the **UP/DOWN** buttons until profile you wish to run s displayed.
- After selecting the profile the display will show the profile name.
   Pressing ENTER will scroll between profile name, melt temperature, melt time and hold time. It is recommended to check the setting before starting a profile.
- 4. Press the **START** button and the machine will begin running the profile. If the machine is at room temperature, it will take approxi mately 15 minutes to reach the processing temperature.
- 5. Prepare the cartridge by scoring a "+" using a utility knife. (See the illustration to the right. This will create an even "Burst" of the cartridge
- Next, coat the sides of the cartridge with a light coat of release compound. This will prevent the cartridge from sticking to the walls of the heating chamber.
- 7. When the Myerson Flexpress has calibrated itself at the Melt Temp an alarm will sound and the upper display will read "LOAD" signaling you to load the cartridge. At this time insert the cartridge into the heating chamber, center the flask and tighten using the flask strap and knobs. If you are not ready to start the profile at this time and want to turn off the alarm, press the UP button. This will silence the alarm, but the Myerson Flexpress will remain calibrated until you press START or put the unit in standby by pressing the STBY button.
- 8. Press the **START** button to begin the profile. Now let the **Myerson Flexpress** do the rest. The unit will begin counting down the Melt Time and once it expires the unit will automatically inject the material into the flask. The piston will stay in the up position for the duration of the Hold time then release.
- 9. The upper display will read "DONE".
- 10. You can now remove the flask strap and knobs.
- 11. Grasp the flask using heat resistant gloves and press the **EXTEND/RETRACT** button. This will extend the piston and push out the remaining cartridge attached to the flask.

- 12. Press the **EXTEND/RETRACT** button again to retract the piston.
- 13. The **Myerson Flexpress** is now ready to process another case. Repeat steps 1-9 for your next injection.

# section 6 ~ processing using the "Re-run Last Profile"

- 1. From the main menu use the **UP or DOWN** buttons until the cursor is to the left of "Rerun Last Profile" then press the enter button.
- 2. The display will show the profile name and profile settings of the last injection. If this is not the profile you wish to run, press the LEFT arrow button to return to the main menu.
- 3. The **Myerson Flexpress** is now ready to process your case. See steps 5-13 of Section 5 for a complete injection.

# section 7 ~ processing using the "Run Repeat Cycle"

By selecting this option, the **FlexPress** remains hot once a cartridge is injected. This allows the next injection to start faster thus saving time in between cycles. Use this option to process several cases of the same material.

- From the Main Menu, press the UP/DOWN buttons until "Run Repeat Cycle" is displayed. Press ENTER to select this mode.
- 2. Using the UP/DOWN buttons, select the profile you wish to process. Press ENTER to select the profile.
- Verify the profile parameters by using the UP/DOWN buttons. Once satisfied the parameters are correct, press START to begin the cycle.
- 4. The FlexPress will now operate the same as running a standard profile. Once the cycle is complete and you have removed the flask and cartridge, the FlexPress will begin a new cycle. To exit the Repeat Cycle mode, press the ON/STBY button and select YES. The FlexPress will go into Standby mode. To start a new cycle or change controller settings, press the ON/STBY button again and the main menu will be displayed.

# section 8 ~ myerson DuraFlex partial injection procedure

The following procedure outlines the steps necessary to create **Myerson DuraFlex** Partials with the **Myerson Flexpress** Digital Injection System.

 Evaluate the model for major undercuts and block out the undercuts. Due to the flexibility and adjustability of the material, very little if any blocking out will be needed.



Paint the model with Myerson Thermoplastic Model Separator MS-0200.



3. Wax and set up the teeth just as you would for an acrylic partial.



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4. Add the clasps to the partial. **Myerson, LLC** recommends using 12 gauge sprue wax for creating clasps.





- 5. Coat the inside of the flask with a petroleum jelly. This will prevent the stone from adhering to the flask.
- 6. Invest the partial using regular Buff stone. When stone sets, place sprues using 3/16" (4.75mm) utility rope wax. Extend the sprue to the injection port in the flask.





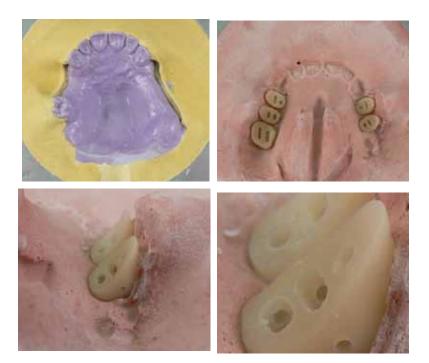
 Coat the stone with stone separator and bolt the top half of the flask in place. The utility wax should fill the injection port of the flask. This will keep the stone from leaking out during the second half of the investing process.



8. Pour up the flask using **Myerson, LLC's** Investing Stone **INVSTONE-25LB**. This stone has been designed to prevent the teeth from shifting during injection. Notice the stone is not protruding from the widow in the flask.



- 9. When the last half of the stone is set, remove the bolts but leave the flask together and place in boiling water.
- 10. Once the wax has been removed, remove and place holes in the denture teeth. The holes in the teeth are very important. They create the mechanical retention necessary to lock the teeth in place as well as allow air to escape as the Myerson DuraFlex is injected. Once the holes have been created, the teeth need to be placed back into the proper locations. A small dot of Super Glue on the incisal area of the teeth will hold them in place as the material is injected. Bolt the two halves together.



- 11. Next, turn on the **Myerson Flexpress** by pressing the **ON/STBY** button. Select the method of processing referred to in sections 4-6.
- 12. When the Myerson Flexpress has reached the preset temperature, a buzzer will sound. At this time, insert the desired Myerson DuraFlex cartridge into the heating chamber with the crimped end down. A light coat of release compound BS-0105 on the cartridge will help eliminate the cartridge getting stuck in the heating chamber. Press the start button this will start the injection cycle.



13. Place the flask onto the **Myerson Flexpress**, centering the sprue hole of the flask over the center of the heating chamber. Lock the flask in place using the flask strap and knobs.



- 14. When the timer expires, the Myerson Flexpress will automatically inject the Myerson DuraFlex cartridge. The piston will stay in the up position according to the hold time. Once the piston retracts, it is safe to unscrew the hold down plate and remove the flask.
- 15. To remove the flask, loosen the hold down knobs and remove the flask strap. Using heat resistant gloves, grasp the flask and press the **EXTEND/RETRACT** button (lower right button). This will extend the piston and push the crushed cartridge and flask out.
- 16. Press the **EXTEND/RETRACT** button again to retract the piston. The **Myerson Flexpress** is now ready for another injection.
- 17. After the appliance is divested, it can be placed in a stone remover to eliminate any extra stone that is adhering to the appliance. Notice how the Thermoplastic Model Separator MS-0200 has created a smooth, clean surface on the underside of the appliance.



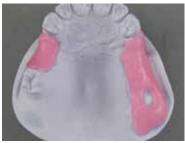
18. This is the finished **Myerson DuraFlex** case. Ready for try in.



# Section 9 ~ myerson DurAcetal framework injection procedure

The following procedure outlines the steps necessary to create **Myerson DuraCetal** frameworks with the **Myerson Flexpress** Digital Injection System.

 Block out the saddles on the model. This is in preparation for the acrylic that will be placed later. The thickness used is 1 to 1.5 mm thick. You will notice the large tissue stop cut out of the wax. Stability is the reason for the large tissue stop.



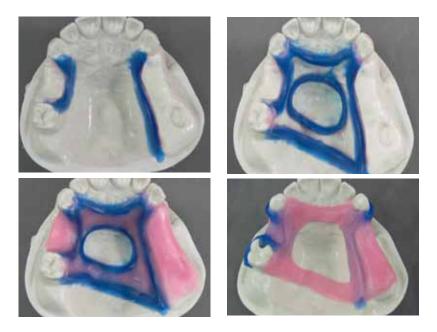
 Below is the duplicated model. This model has been duplicated using Myerson Universal Stone UNISTONE-25LB.
 The expansion stone accounts for the shrinkage that occurs when Myerson DuraCetal cools.



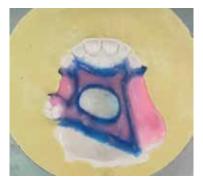
3. Place Myerson's Thermoplastic Model Separator MS-0200 on the duplicated model.

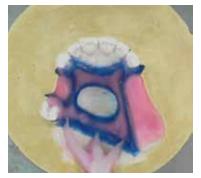


4. Wax up the framework.



- Coat the inside of the flask with a petroleum jelly. This will prevent the stone from adhering to the flask.
- 6. Invest the framework using regular Buff stone. When stone sets, place sprues using 3/16" (4.75mm) utility wax. Extend the sprue to the injection port in the flask.





- 7. Coat the stone with stone separator and bolt the top half of the flask in place. The utility wax should fill the injection port of the flask. This will keep the stone from leaking out during the second half of the investing process.
- 8. Pour up the flask using **Myerson, LLC's** Investing Stone **INVSTONE-25LB**. Notice the stone is not protruding from the widow in the flask.



- 9. When the last half of the stone is set, remove the bolts but leave the flask together and place in boiling water.
- 10. Once all the wax has been removed, bolt the two halves together.





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- 11. Next, turn on the **Myerson Flexpress** by pressing the **ON/STBY** button. Select the method of processing referred to in sections 4-6.
- 12. After the appliance is divested, it can be placed in a stone remover to eliminate any extra stone that is adhering to the appliance. Notice how the Thermoplastic Model Separator MS-0200 has created a smooth, clean surface on the underside of the appliance.





13. Here you have your finished **Myerson DuraCetal** appliance. The holes in the saddle areas were created using a standard round bur. This will allow the acrylic to mechanically retain to the **Myerson DuraCetal** framework.



# Section 10 ~ myerson warranty & returns

Myerson offers a three (3) year limited warranty for US and Canada against defects in material and workmanship. If you would like to submit a product for warranty return, please contact a Myerson distributor or Myerson. Include only the defective product submitted for warranty replacement; also include a letter describing in detail the problem, date of purchase of the product, as well as a return address and contact name. Myerson, LLC is not responsible for return shipment costs. Myerson will refurbish or replace product found to be defective of material or workmanship. If after the three (3) year warranty you are experiencing a problem with a product, please contact a Myerson distributor or Myerson.

### Section 11~ technical data

Power Supply 120VAC 50/60Hz or 230VAC 50/60Hz

Max Melting Temp 608F (320C)

Dimensions
 H: 17in, W: 11in, D: 10in (43cm,28cm, 25cm)

Weight 29lbs (13.15 kg)

Air Pressure 100 psi Recommended; 150 psi Maximum

• Fuse 10 amp, (5x20mm)

# Section 12 ~ preventive maintenance & cleaning

Use only approved materials in the **Myerson Flexpress** Digital Injection System. The use of other materials may cause the unit to fail and will void the manufactures warranty. See Section 10 for warranty information.

Keep heating chamber and flask area free from dirt and other foreign debris to prolong the life of the unit.

#### **Cleaning Heating Chamber- Standard Injection Cycle**

After every injection, use the included stainless steel cleaning brush to remove any material that may be left in the heating chamber. Run the brush up and down the heating chamber several times. Then press the EXTEND/RETRACT button to push the loosened material to the top of the machine and blow off with compressed air. You may need to repeat this step several times until the heating chamber is clean.

#### **Cleaning Heating Chamber- Repeat Cycle**

When using the repeat cycle mode you will not be able to extend or retract the piston to push out the material. Use the cleaning brush as described above and blow compressed air into the heating chamber to remove the loosened material. Once the repeat cycles have been completed, clean the heating chamber again following the standard cleaning instructions above.

The rest of the unit can be cleaned with a damp rag and mild soap solution. Turn off and unplug the unit before cleaning. Always keep the unit in an upright position.

### Section 13 ~ Service & Repairs

For service and repair of the **Myerson Flexpress** Digital Injection System, please call **800.423.2683** or go to myersontooth.com.

For technical support contact Kris Schermerhorn CDT at 800.874.1047 or email at Kfuldek@msn.com

# Section 14 ~ Declaration of Conformity

Use only approved materials in the **Myerson Flexpress** Digital Injection System. The use of other materials may cause the unit to fail and will void the manufactures warranty. See Section 10 for warranty information.

Keep heating chamber and flask area free from dirt and other foreign debris to prolong the life of the unit. Periodically clean the heating chamber with the cleaning brush. The rest of the unit can be cleaned with a damp rag and mild soap solution. Turn off and unplug the unit before cleaning.

Always keep the unit in an upright position.

# Section 15 ~ important safety warnings

When using the **Myerson Flexpress** Digital Injection System, always follow basic safety precautions to reduce the risk of accidental injury due to burns or electrical shock.

Wear long sleeves, long pants, heat-resistant gloves, and safety goggles when using the unit. Do not expose heat-resistant gloves to hot metal areas for extended periods of time.

Keep out of the reach of children. Do not place unit where cord can be tripped over. Keep unit away from flammable material. It is normal for the unit to become quite warm during use. **Do not leave unit unattended with the power on**.

The **Myerson Flexpress** Digital Injection System is for indoor use only. Do not use outdoors or in wet or damp locations. Never immerse unit in water or other liquids. Use only on a clean, dry work surface. Excessive dust and dirt will reduce the life of the unit.

Use only recommended accessories and materials with this unit. Using materials other than those recommended by **Myerson, LLC** may result in accidental injury and permanent damage to the unit. When not in use, unit should be stored in a dry secure location out of the reach of children.

Manufacturer assumes no responsibility for consequential or indirect damages from the use of this product.

Use this product only as specified in this manual. Using this device in a manor not specified may result in injury or hazards.

WARNING Do not turn off power when cooling fan is running.



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