

*Wax Pattern Assembly Handbook: 11
Catalog and Price List*

*Wax
Connections*

*The BEST way to
seal patterns*



Wax Connections has been leading the investment casting industry since 1993, producing pattern sealing equipment.

Our equipment is manufactured in the USA.



www.waxconnections.com

What can we do for you?

What are you looking for? To assemble patterns with higher production rates, less scrap, and eliminate fatigue. You can do all this using our wax pattern equipment.

Big savings start when you switch to the right tools. Wax Connections has engineered a line of equipment to replace the eyedroppers and hot plates.

When you match these methods to one of our Wax Applicators you get serious savings. Getting rid of those old methods creates considerable savings.



About The Company

- We have been in business since 1993
- Our products are used by over 150 companies in 9 countries
- We are a direct sales manufacture
- Full maintenance and repair service on all our equipment

Wax Applicator Unit

Wax Connections Inc.

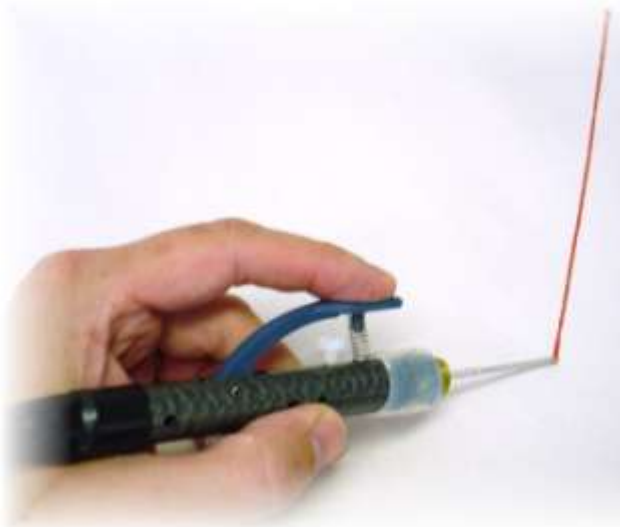


The wax applicator is a wax pattern assembly tool. Used to replace those old fashion eyedroppers and tins of melted wax, with a piece of equipment that gives the operator control.

Controlling the flow of wax will cut the amount of rejects, eliminating scrap and increasing profits.

What will the wax applicator do for you?

- Reduces mold scrap, up to 3% in one company
- Reduces labor time and cost
- Produces predictable wax seams
- Improves process control
- Provides a quick return on investment
- Produces stronger assemblies
- Provides a tool to develop engineered seam designs



Features

- ***New*** Voltage regulating circuitry
- ***New*** Control console constructed of 6061 Aluminum
- ***New*** Double sealing silicon tank seal
- ***New*** Solid state circuitry
- Portable and Compact design to minimize table space
- Hand held applicator hose, like writing with a large pen
- Controlled flow of seam wax to the pattern
- Controlled temperature of the wax at the seam
- Continuous flow of wax with the press of a lever
- Interchangeable tips for bead size control
- Specialty tips for hard to access areas

Wax Applicator Unit

Wax Connections Inc.



Wax Connections benefits

Faster, neater, cleaner output

Less fatigue, mess, mistakes

No rejects, no waste

Big, solid cost savings

Specifics

- Dimensions 14" x 8" x 8"
- 2-liter wax capacity
- Tank temperature control to 190EF
- Air pressure regulation 0 to 10 PSI, normal op. 5 PSI
- Switch able modes, standby (tank heat) and apply.
- Inputs, 115 VAC 15 PSI

Voltage Regulated Unit

- Maintains voltage precisely to the dispensing hose and tip, when there are large fluctuations in your plants line voltage.
- Lever operated hand held dispenser
- Voltage regulated hose temperature
- Variable needle temperature
- Unit includes (1) Applicator Hose, and (1) 18 GA. Tip assembly

#CV211505



Remote Controlled Unit

- Same unit as CV211505 with solenoid controls
- Solenoid controlled wax dispenser
- Set hose temperature
- Variable needle temperature
- Unit includes (1) Applicator Hose, and (1) 18 GA. Tip assembly

#CR211505



Wax Applicator Hose

Wax Connections Inc.

Specifics



- Length of Hose varies between models.
- Handle 5/8" diameter, lever operated by finger
- Adjustable flow via flow control screw
- Fixed heat set @ nominal 185EF
- Quick disconnect from control unit

Features

- Hand held dispenser, like writing with a large pen
- Adjustable flow of seam wax to the pattern
- Continuous flow of wax with the press of a lever
- Interchangeable tips for bead size control
- Fully repairable at our in house location



↻ Wax Applicator Hose (Voltage Regulated) #HT621000

- Lever actuated flow
- Hose length 62"
- Flow control adjusting screw in handle
- Accepts interchangeable tips
- Very flexible feed hose
- *Used on CV211505 control units
(Units are marked with a blue sticker at disconnect, hoses are marked with a blue band by the din plug.)



↻ Wax Applicator Hose (Old Standard) #HL741000

- Lever actuated flow
- Hose length 72"
- Flow control adjusting screw in handle
- Accepts interchangeable tips
- Very flexible feed hose
- *This model used on control units prior to the CV211505 control tanks.



↻ Wax Applicator Hose (Solenoid) #HS741000

- Solenoid actuated flow
- Ideal use for automated processes
- Hose length 72"
- Flow control adjusting screw in handle
- Accepts interchangeable tips
- Very flexible feed hose

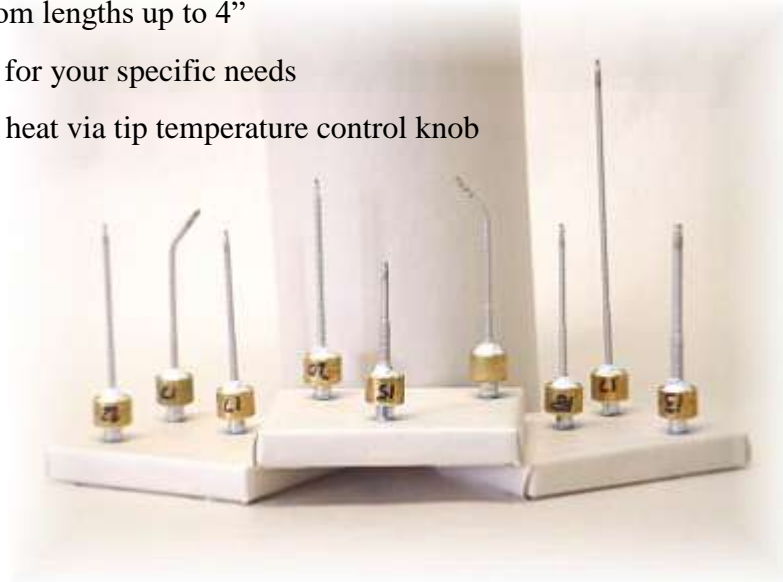
When ordering a control unit it is a **good idea** to have a extra hose in storage. In the event the applicator hose that came with your unit needs maintenance. See page (10)

Interchangeable Tip Assemblies

Wax Connections Inc.

Features

- Interchangeable tips for bead size control
- Different lengths and sizes make it easy to get into those hard to reach patterns.
- Order custom lengths up to 4"
- Order bent for your specific needs
- Adjustable heat via tip temperature control knob



Basic Tips	Length	Part Number
19 GA Needle (.026" I.D.)	2.0"	NS192000
	1.6"	NS191600
	1.2"	NS191200
18 GA Needle (.032" I.D.)	2.0"	NS182000
	1.6"	NS181600
	1.2"	NS181200
17 GA Needle (.041" I.D.)	2.0"	NS172000
	1.6"	NS171600
	1.2"	NS171200
15 GA Needle (.053" I.D.)	2.0"	NS152000
	1.6"	NS151600
	1.2"	NS151200
13 GA Needle (.070" I.D.)	2.0"	NS132000
	1.6"	NS131600
	1.2"	NS131200
20 GA Needle (.023" I.D.)	2.0"	NS202000
	1.6"	NS201600
	1.2"	NS201200
22 GA Needle (.016" I.D.)	2.0"	NS222000
	1.6"	NS221600
	1.2"	NS221200

Interchangeable Tip Assemblies

Wax Connections Inc.

Optional Tip Assemblies

Part Number

Custom Length Needle, 2.0" to 4.0"

NSxxXX00

- Specify GA needle, from 17, 18, 19, 20, and 22 GA., put in part number in place of **xx**
- Specify the length in tenths of an inch, put length in part number in place of the **XX**

Example- **NS173500** this number would be for a 17 GA needle 3 ½ inches long.



Custom Bent Needle, 2.0" to 4.0" Bent Ends

NBYyXX00-xx

- Specify GA needle, put in part number in place of **YY**
- Specify total length including bent portion of needle, put in part number in place of **XX**
- Specify angle of bend in 15 degree increments, Put in part number in place of **00**
- Specify the length of the bend portion in tenths of an inch, put in part number in place of **xx**

Example- **NB174045-05** this number would be for a 17GA needle 4 inches long with a 45 degree bent ½ of an inch from the discharge end.



13 GA Needle, Brush Tip

BT132000

- The brush tip is a 13 GA needle; copper braiding is used as the brush. The brush sticks out of the end of the tip approximately ¼ and fans out to approximately ¼.



Accessories

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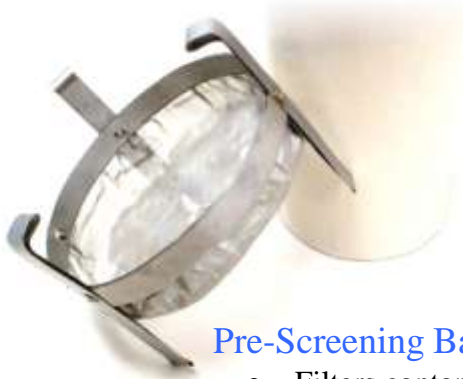


We have already done the work of looking for the correct parts. The air supply will cut down set-up time for the wax applicator unit. Connect the air fittings and it's done.

Air Supply Kit

#RK3000

- Recommended for use on our units
- Includes all equipment to hook-up to air source.
(Regulator, Mounting Bracket, 30-PSI Gauge, Fittings, and 5' Hose)



The Pre-screening suspends pelletized wax until it melts, this eliminates the solid material from settling in front of the pick up filter in the bottom of the tank.

Pre-Screening Basket

#WB150

- Filters contaminants from wax as you pour new wax into tank.
- Made of 304 stainless steel
- Can be cleaned in a dewax oven



Use this step down transformer to plug your Wax Applicator directly into 220Vac. Hard wired with a European Shucko plug.

Step Down Transformer

#CV500VAST

- 220Vac to 120Vac
- 500 Va
- CE Approved

These accessories highly recommended for use with our control units.

Maintenance Services

Control Unit Maintenance / Repair

#CR0000

Basic diagnostics*

- If your Control Unit is not working or you feel that it doesn't perform as well as new. Send it back and we will fix it.
- Service is recommended annually.
- We check the unit for proper internal adjustments, and peak performance.
- This service will insure your unit is performing at its optimal level.

*Replacement parts extra.



Applicator Hose Maintenance / Repair

#HR7XX000

Disassembly, cleaning, valve replacement and core heater replacement*

- Do your hoses flow wax slower than normal?
- Maybe your hose doesn't heat anymore?
- This service should be performed semi-annually to increase product life, and reduce down time.

*Cannot replace melted handle, or outer black sleeving, but in most cases hoses **can** still be repaired.



Its simple to have your equipment repaired. Call or fax a P.O. number to us and ship it back.

Maintenance is very important in keeping this equipment running and performing, at a level that results in efficiency.

Heated Tweezers

Wax Connections Inc.



#TH02450
(Straight Tweezers Set)



#TH02451
(Curved Tweezers Set)

Tweezer Features

- Tweezers Sets are used to insert a chaplet (small wire) into a pattern, to hold the core into position. Using our tweezers sets will eliminate having an open flame at the work center.
- Curved Tweezers have smooth teeth, best suited for small diameter wire
- Straight Tweezers have serrated teeth, best suited for larger diameter wire
- Tweezers stay cool until a control pedal is pressed applying power.
- Tweezers use resistance heating, will only work with platinum pins.
- Universal Plug Fits Power Supply

Power Supply

- Universal Plugs to Fit
 - Tweezers Sets
 - Foot Pedals
- Variable power output controlled by knob on unit.
- 120v input, 12v and 24v dc outputs.
- Units are designed to be stackable to reduce bench space.
 - On top of each other
 - Or multiples of two under a wax applicator unit.



#UP115
(Power Supply)

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#UF115
(Foot Pedal)



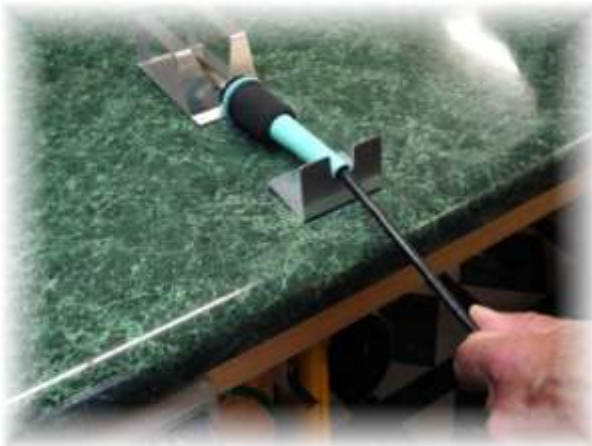
Hot Iron Holder

Wax Connections

Safety Counts

The hot iron holder prevents the operator from pulling the iron into their lap, or from grabbing the tip of the hot iron.

The holder is simply to mount using heavy-duty double-sided tape; it can be mounted to almost any bench top.



Our hot iron holders will save the fast working operator from an **unexpected injury**. A hot iron can get pulled into the operators lap from them turning in their chair and getting caught on the cord, or from someone passing by tripping on a cord hanging off the table.

The holder works with our hot iron and basically all other types of soldering irons.

#HH100

(Hot Iron Holder)



Hot Knife

Wax Connections

Unit Specifications

Power supply: 120Vac
6Vac Output
8" x 7" x 4"

Handle: 7" long x .37 diameter
w/a 60" cord

Picture is shown with hot knife on top and a standard exacto knife on bottom for size comparison.



When your process calls for a small exact melt line, the Hot Knife is the tool you need.



Then this HOT Knife is just what you need.



Tip Number: **W1**
Add to part number
when ordering



Tip Number: **F1**
Add to part number
when ordering

The **NEW** Hot Knife is an excellent pattern-working tool. With its unique features, the operator will have complete control of the heat going to the tip, preventing damage to the pattern.

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Controls on the Hot Knife are simple

- ◆ The unit's temperature is controlled by the operator using a foot pedal to switch between high and low settings.
- ◆ Set the low setting to a temperature just below the desired temperature that will melt the wax.
- ◆ Then set the high setting to the temperature you need to cut your way through the wax. With the extra power from the high setting your tool will not cool.



KP611500-__
Hot Knife

Wax Cutter

Wax Connections Inc.

Unit Specifications

Power supply: 120Vac
Base Dimensions: 16" x 8"
Gate Length Gauge: 2.5" to 15.5"
Material Thickness: 0" to 2"

- Do you want a way to cut your wax gating material with ease?
- With a maintenance free tool that has NO moving blades to get gummed up?
- Have the ability to cut your wax gates in any cell or in its own area.
- Small Compact design to minimize bench space.
- Specialized features to compliment any Wax Room



Operating the Wax Cutter

- ◆ Adjust temperature controller to desire temp.
- ◆ Adjust your gate length gauge to desired dimension.
- ◆ Hold your wax gate against the stop block, on left side of unit.
- ◆ Push down on the cutter.



**Search youtube for our videos:
To see the wax cutter search this heading.**

Wax Connections Inc. - Wax Gating Cutter



**#WC100
Wax Cutter**

Details

- Design to your specifications, or choose from a previously designed unit.
- 220Vac or 120Vac
- .090 Aluminum wall tanks
- Aluminum cabinet construction
- Off the shelf heaters
- Digital temperature controls

Dip Tanks

Wax Connections Inc.



12 x 6 x 3 DT

- 12" x 6" x 3" deep dip tank
- 300 degree upper limit safety shut off
- 1 ¼" long threaded leveling feet.



9 x 2 DT

- 9" x 2" deep dip tank
- 300 degree upper limit safety shut off
- 1 ¼" long threaded leveling feet.



6 x 2 DT

- 6" x 2" deep dip tank
- 300 degree upper limit safety shut off
- 1 ¼" long threaded leveling feet.



Details

- Design to your specifications, or choose from a previously designed unit.
- 220Vac or 120Vac
- ½" aluminum top plates
- Aluminum cabinet construction
- Off the shelf heaters
- Digital temperature controls
- Call or Email your list of requirements to discuss a quote.



Hot Plates

Wax Connections Inc.

12 x 10, 12 x 5 HP

- Dual zones: Lower plate 12" x 10", Upper plate 12" x 5".
- Large lower plate is preset at 7.5 degree angle, allowing wax to drain.
- Smaller upper plate drains onto the lower plate. This surface can hold your individual cups of wax.
- Separate temperature controllers for each zone.
- 1 ¼" long threaded leveling feet allowing adjustment to the drain.

*Tray bolted to upper plate not included on standard model.

10 x 8 HP

- Hot plate 10" x 8"
- Top plate is preset at 0 degree, wax drainage flows via feet adjustment.
- 2 ¼" long adjustment feet in the rear, 1 ¼" long feet in the front, allowing adjustment to the drain.

12 x 10 HP, 6 x 2 DT

- Hot plate 12" x 10"
- Dip tank 6" x 2" deep
- Large lower plate is preset at 7.5 degree angle, allowing wax to drain.
- Separate temperature controllers for each the hot plate and the dip tank.
- 1 ¼" long threaded leveling feet allows adjustment to the drain.



Don't expect a laboratory hot plate to perform or last like a unit designed specifically for use in the investment casting process. Nothing else compares.

www.waxconnections.com



Wax Oven

Wax Connections Inc.

Features

- Solid State Electronics
- Adjustable Temperature, Range 0F to 110F
- Operates at 120 VAC
- 8" x 8" x 8" unit dimensions

#WO120

Wax Oven

- Regulated heat brings your extruded wax up to a workable temperature.
- Designed for industrial use
- Aesthetics match Wax Connections design.



Gradually bring the temperature of extruded wax up to a soft workable form.

- Use this unit to heat your wax extrusions before working on your runner and gating systems. Allows you to hand form and fill around sections.
- This unit warms the wax extrusions from above.
- Uses standard food serving trays to hold your extrusions.
- Slide the tray into the unit, leave to warm. -When a piece of wax is needed slide the tray out and the extrusions are warm but not melted.

Bench Tools

Wax Connections Inc.

Why buy your bench top supplies from three or four different companies when you can get everything you need from one place? This will eliminate paperwork and the headache of dealing with sales persons who don't even know the business.

Dental Tool



Pattern Scrapers

Features

- The scrapers have a .03 cutting wire

#SF37
3/8 Flat Top



#SF25
1/4 Flat Top



#SR37
3/8 Radius



#SR25
1/4 Radius



Wax Connections

*The BEST Way To
Seal Patterns!*

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