



## Product Catalog



## Solutions for Your Difficult Soldering Needs

- Resistance Soldering Systems
- Resistance Thermal Wirestripping Systems
- Mid-Range and Heavy-Duty Soldering Irons
- Little Dandy® Pencil-Style Soldering Irons
- Solder Pots
- Paragon® Soldering Iron Tips
- Dri-Wick® Desoldering Braid

[www.assemblytech.com](http://www.assemblytech.com)

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## ASSEMBLY TECHNOLOGIES INTERNATIONAL

Assembly Technologies International (ATI) is the exclusive manufacturer of American Beauty Soldering Equipment. Our company has roots dating back more than a century, when the grandfather of our company's founder established a firm that became the world's largest maker of electrical heating devices. In the early 1900's a customer was so impressed with the soldering iron he had purchased that he declared the product to be "a true American Beauty." The name stuck and the unparalleled reliability of our line of soldering products has since withstood the test of time.

Our current family of employees is dedicated to upholding this fine tradition. A trained quality inspector examines each tool before it leaves the factory. A veteran product specialist is on hand to offer advice on specific applications. Each manufacturing associate is cross-trained on the assembly of every American Beauty product. Our customer service representatives work tirelessly to create and keep satisfied customers.

These are just a few of the reasons why American Beauty is known as the highest quality soldering product. Please put Assembly Technologies International and our line of American Beauty soldering products to the test. We look



**ATI is headquartered in suburban Detroit, Michigan. The facility is home to ATI's administrative offices, manufacturing and assembly operations, and warehouse.**

forward to providing you with the best solutions for your difficult soldering needs.



## Continuing a Tradition of Excellence

The core of the American Beauty family of soldering products is the soldering iron. The American Beauty Soldering Iron is a "throw-back" to the day when people took pride in the tools they used and companies took pride in the tools they manufactured.

American Beauty Soldering Irons, whether a handy, light-weight 20 watt Little Dandy or a 550 watt robust heavy-duty iron, share a common feature: QUALITY. They are backed up by a 3-year warranty. It's the type of quality commitment that is only developed after over a century of experience and the continued desire to make a tool that will last. This is the same quality that you will find in all American Beauty soldering products, including resistance soldering systems, desoldering braid, solder pots, solder stations and related accessories.

### Commitment to Quality

The following quality initiatives back American Beauty products:

#### **NEW 3-YEAR WARRANTY POLICY**

Consumable items - tips, elements, electrodes, etc., not included. See website for more details.

**Free Technical Support**

**A Full-time Engineering Team Dedicated to Product Quality Improvements**

**Hassle-Free Customer Service**

**A Website Featuring Extensive Product Information and Helpful Tips**  
[www.assemblytech.com](http://www.assemblytech.com)

**Made in the U.S.A.**

# RESISTANCE SOLDERING

## THE BASICS: WHAT IS RESISTANCE SOLDERING?

Resistance Soldering is the name applied to a technique where the heat to melt solder is instantaneously generated by passing a high amperage electrical current through a resistive material. There are three key components of resistance soldering:

- 1) A specialized step-down transformer that will generate the appropriate current
- 2) A resistive material to generate the heat
- 3) The ability to complete an electrical circuit

## THE ADVANTAGES: WHY SHOULD I TRY RESISTANCE SOLDERING?

1. Heating is instantaneous and confined to solder connection. This helps the user to easily create a more professional solder joint.
2. Resistance soldering is **many times faster** than soldering with traditional irons.
3. Resistance soldering handpieces cool extremely fast, reducing risk of serious injury.
4. Resistance soldering electrodes and elements last 2-3 times longer than traditional soldering iron tips, greatly reducing replacement costs.
5. Systems are easily customized to particular applications, helping to achieve optimum soldering results with minimum effort and training.
6. Footswitch allows the ability to "cold fixture," creating a free hand for the operator.
7. Perfect for work in confined spaces.
8. Handpieces are considerably lighter than a soldering iron, thereby reducing operator fatigue.
9. More efficient use of electricity creates savings on power consumption costs.
10. Many difficult soldering applications, including heatsink problems, are best solved with the concentrated and controlled heat that resistance soldering systems provide.

## THE CHOICE: AMERICAN BEAUTY!

American Beauty Resistance Soldering products are proudly made in the USA and have proven themselves in industrial settings for over 50 years. We offer the widest selection of handpieces and electrodes, the best technical expertise and assistance, and the safest and most durable power units. We understand and appreciate that you are often paying a higher upfront cost for this type of soldering system and therefore we work very hard to help you realize all of the benefits and savings involved.



**Solutions for Your Difficult Soldering Needs**



# TWEEZER-STYLE RESISTANCE SOLDERING SYSTEMS

## Light Capacity Tweezer-Style Resistance Soldering System - Model 10501

**Common Applications:** Micro miniature setups, wire processing, terminations, small connections.

**Components:** Models 105A3, 10541 & 10519

**Specifications:**

- 100W (2.65VAC) Power unit with Infinitely Variable Output control, Pilot light, 1 AMP Circuit Protection & Heavy-duty aluminum case, Available in 110 or 220V.
- Durable, User-friendly handpiece with four foot (1.22m) AWG 14-2 HPN cord set.
- Copper clad, stainless steel electrodes, 5/64" (1.98mm) Dia., 1½" Lgth. Easily customizable with approx. 3/8" opening upon shipping.
- Rugged, Industrial Footswitch with 6 foot (1.83m), three-wire cord and NEMA 5-15 P/R piggyback plug.

**Weight:** 5.50 LBS (2.50 KGS)

**Replacement Electrodes:** Model # 10542

## Standard Capacity Tweezer-Style Resistance Soldering System - Model 10502

**Common Applications:** Wire processing, terminations, fiber optics, standard connections, electrical, electronics work.

**Components:** Models 105A12, 10541 & 10519

**Specifications:**

- 250W (2.8VAC) Power unit with Infinitely Variable Output control, Lighted Rocker, 3 AMP Circuit Breaker & Heavy-duty aluminum case, Available in 110 or 220V.
- Durable, User-friendly handpiece with four foot (1.22m) AWG 14-2 HPN cord set.
- Copper clad, stainless steel electrodes, 5/64" (1.98mm) Dia., 1½" Lgth.
- Easily customizable with approx. 3/8" opening upon shipping.
- Rugged, Industrial Footswitch with 6 foot (1.83m), three-wire cord and NEMA 5-15 P/R piggyback plug.

**Weight:** 9.25 LBS (4.20 KGS)

**Replacement Electrodes:** Model # 10542

## High Capacity Tweezer-Style Resistance Soldering System - Model 10504

**Common Applications:** Antenna leads and semi-rigid coaxial cable, connections up to 1/4" (6.5mm), heavy gauge wire, terminals, lugs, posts, heavy-duty soldering.

**Components:** Models 105A12, 105127 & 10519

**Specifications:**

- 250W (2.8VAC) Power unit with Infinitely Variable Output control, Lighted Rocker, 3 AMP Circuit Breaker & Heavy-duty aluminum case, Available in 110 or 220V.
- Durable, User-friendly handpiece with four foot (1.22m) 10 AWG High Strand DLO cord set.
- Copper clad, stainless steel electrodes, 1/8" (1.98mm) Dia., 3" Lgth.
- Easily customizable with approx. 1" opening upon shipping.
- Rugged, Industrial Footswitch with 6 foot (1.83m), three-wire cord and NEMA 5-15 P/R piggyback plug.

**Weight:** 9.75 LBS (4.42 KGS)

**Replacement Electrodes:** Model # 10594



# PLIER-STYLE RESISTANCE SOLDERING SYSTEMS

## Standard Capacity Plier-Style Resistance Soldering System - Model 10506

**Common Applications:** Wire Harness Assemblies for Larger AWGs. Copper Tubing, Semi-Rigid Coaxial Cable, Microwave Cable Connections and Terminal Attachments all up to 3/16". Some Refrigeration Work.

**Components:** Models 105A12, 105158 & 10519

**Specifications:**

- 250W (2.8VAC) Power unit with Infinitely Variable Output control, Lighted Rocker, 3 AMP Circuit Breaker & Heavy-duty aluminum case, Available in 110 or 220V.
- Durable, User-friendly handpiece with four foot (1.22m) AWG 14-2 HPN cord set. Appropriate for application up to 3/16" (4.72mm) diameter.
- Two carbon block electrodes provide more intense heat than tweezer-style handpiece Model 105127.
- Rugged, Industrial Footswitch with 6 foot (1.83m), three-wire cord and NEMA 5-15 P/R piggyback plug.

**Weight:** 9.75 LBS (4.42 KGS)

**Standard Replacement Electrodes:** Model # 105159

## High Capacity Plier-Style Resistance Soldering System - Model 10507

**Common Applications:** Copper Tubing, Semi-Rigid Coaxial Cable, Microwave Cable Connections and Terminal Attachments all up to 1/2". Larger Military Connectors. Motor Stators and Electrical Motor Builders.

**Components:** Models 105B2, 105258 & 10519

**Specifications:**

- 1,100W (5.8VAC) Power Unit with 23 Unique Output Settings, Lighted Rocker, 10 Amp Circuit Protection & Heavy-duty steel case, Available in 110 or 220V.
- Durable, User-friendly handpiece with four foot (1.22m) 10 AWG high-strand DLO cable.
- Two carbon block electrodes provide more intense heat than tweezer-style handpieces. Appropriate for application up to 9/16" (14.3mm) diameter.
- Rugged, Industrial Footswitch with 6 foot (1.83m), three-wire cord and NEMA 5-15 P/R piggyback plug.

**Weight:** 25 LBS (11.34 KGS)

**Standard Replacement Electrodes:** Model # 105159

## Industrial Capacity Plier-Style Resistance Soldering System - Model 10505

**Common Applications:** Thin Walled Copper Tubing up to 1/2". Heavy-duty Applications where More Critical Control of Intense Heat is Required. Large Scale Rebuilds. Operations Involving Significant Heatsink.

**Components:** Models 105C1TL, 10587 & 10518

**Specifications:**

- 1,800W (6.9VAC) Maximum Output Power Unit with 23 Unique Power Settings, Lighted Rocker, 15 Amp Circuit Protection & Heavy-duty steel case. Available in 110 or 220V.
- Heavy-Duty, User-friendly handpiece constructed from Heat-Resistant Plastic with ten foot (1.22m) 6 AWG Power cord.
- Concave Carbon Electrodes yield higher temperatures and allow for customization by grinding to fit application.
- Rugged, Industrial Footswitch with 10 foot (1.83m), two-wire Midget Twist Lock plug.

**Weight:** 34 LBS (15.50 KGS)

**Standard Replacement Electrodes:** Model # 10565



# RESISTANCE THERMAL WIRESTRIPPING SYSTEMS

## Standard Capacity Resistance Wirestripping System - Model 10503

**Common Applications:** Thermal Wirestripping from wires 14 AWG and finer.

**Components:** Models 105A3, 10517 & 10519

**Specifications:**

- 100W (2.65VAC) Power unit with Infinitely Variable Output control, Pilot light, 1 AMP Circuit Protection & Heavy-duty aluminum case, Available in 110 or 220V.
- Durable, User-friendly handpiece with four foot (1.22m) AWG 14-2 HPN cord set.
- Various types of elements available, including flat blades.
- Integrated stop mechanism provides for strip length ranging from 1/8" to 1 1/2" (3.18 to 38.10mm).
- Rugged, Industrial Footswitch with 6 foot (1.83m), three-wire cord and NEMA 5-15 P/R piggyback plug.

**Weight:** 5.50 LBS (2.50 KGS)

**Standard Replacement Elements:** Model # 10545

## Production Capacity Resistance Wirestripping System - Model 10503P

**Common Applications:** Thermal Wirestripping from wires 14 AWG and finer. Handpiece activates immediately upon removal from its cradle situated on top of the power unit.

**Components:** Models 105A3T & 10517

**Specifications:**

- 100W (2.65VAC) Power unit with Infinitely Variable Output control, Pilot light, 1 AMP Circuit Protection & Heavy-duty aluminum case, Available in 110 or 220V.
- Auto-switching, cradle-type On-Off switch increases productivity.
- Durable, User-friendly handpiece with four foot (1.22m) AWG 14-2 HPN cord set.
- Various types of elements available, including flat blade.
- Integrated stop mechanism provides for strip length ranging from 1/8" to 1 1/2" (3.18 to 38.10mm).

**Weight:** 5.25 LBS (2.38 KGS)

**Standard Replacement Electrodes:** Model # 10545

## Surface Mount Device Removal System - Model 105SMD (AKA Micro Resistance Wirestripping System)

**Common Applications:** Strips extruded plastics, including Teflon®, from wires 24 AWG and finer.

**Components:** Models 105A3, 105131, 105157, 105156, 105160, 10519.

**Specifications:**

- 100W (2.65VAC) Power unit with Infinitely Variable Output control, Pilot light, 1 AMP Circuit Protection & Heavy-duty aluminum case, Available in 110 or 220V.
- Durable, User-friendly handpiece with four foot (1.22m) AWG 18-2 HPN cord set.
- Elements constructed of .018" (.46mm) Ni-Chrome wire. Also available in short element style.
- Rugged, Industrial Footswitch with 6 foot (1.83m), three-wire cord and NEMA 5-15 P/R piggyback plug.

**Weight:** 5.5 LBS (2.50 KGS)

**Standard Replacement Electrodes:** Model # 105132

Certain wire types release Fluorine gasses into the air upon reaching a gel state. This gas can be harmful and cause negative health effects if ingested.

**ALWAYS ENSURE PROPER VENTILATION WHEN THERMALLY STRIPPING WIRE.**

# SINGLE PROBE RESISTANCE SOLDERING SYSTEMS



## Light Capacity Single Probe Resistance Soldering System - Model 10508

**Common Applications:** Micro miniature setups, terminations, small connections, micro-soldering in hard to reach areas.

**Components:** Models 105A3, 10515, 10512A & 10519

**Specifications:**

- 100W (2.65VAC) Power unit with Infinitely Variable Output control, Pilot light, 1 AMP Circuit Protection & Heavy-duty aluminum case, Available in 110 or 220V.
- Durable, User-friendly handpiece with four foot (1.22m) 10 AWG High strand DLO Cable. Standard Lead with Alligator clip.
- Copper clad, Carbon electrode, 3/32" (2.36mm) Dia., 3" Lgth.
- Rugged, Industrial Footswitch with 6 foot (1.83m), three-wire cord and NEMA 5-15 P/R piggyback plug.

**Weight:** 5.50 LBS (2.50 KGS)

**Replacement Electrodes:** Model # 10530



## High Capacity Single Probe Resistance Soldering System - Model 10509

**Common Applications:** For general service in electrical equipment manufacture, rework or repair.

**Components:** Models 105B2, 10511, 10512 & 10519

**Specifications:**

- 1,100W (5.8VAC) Power Unit with 23 Unique Output Settings, Lighted Rocker, 10 AMP Circuit Protection & Heavy-duty steel case, Available in 110 or 220V.
- Durable, User-friendly handpiece with four foot (1.22m) 10 AWG High strand DLO Cable. Standard lead with spring clip.
- Copper clad, carbon electrodes, 1/4" (6.35mm) Dia., 3" Lgth.
- Rugged, Industrial Footswitch with 6 foot (1.83m), three-wire cord and NEMA 5-15 P/R piggyback plug.

**Weight:** 24 LBS (10.9 KGS)

**Replacement Electrodes:** Model # 10526

# MICRO RESISTANCE SOLDERING SYSTEMS



## Micro Tweezer-Style Resistance Soldering System - Model 10599

**Common Applications:** For micro-soldering applications in limited space. Fine AWG wire processing, terminations, very small connections.

**Components:** Models 105A3, 105133 & 10519

**Specifications:**

- 100W (2.65VAC) Power unit with Infinitely Variable Output control, Pilot light, 1 AMP Circuit Protection & Heavy-duty aluminum case, Available in 110 or 220V.
- Durable, User-friendly handpiece with four foot (1.22m) AWG 18-2 HPN cord set.
- Stainless steel electrodes, .040" (1.02mm) Dia., 1/2" Lgth. Easily customizable by forming or notching.
- Rugged, Industrial Footswitch with 6 foot (1.83m), three-wire cord and NEMA 5-15 P/R piggyback plug.

**Weight:** 5.50 LBS (2.50 KGS)

**Replacement Electrodes:** Model # 105134

# LARGER CAPACITY RESISTANCE SOLDERING SYSTEMS

## Medium Electrical Work Resistance Soldering System - Model 10535

**Common Applications:** For soldering bus bars, lugs, starter and alternator leads, battery cables and similar electrical work.

**Components:** Models 105B2, 10513A & 10519

**Specifications:**

- 1,100W (5.8VAC) Power Unit with 23 Unique Output Settings, Lighted Rocker, 10 AMP Circuit Protection, Available in 110 or 220V.
- Panel Attachment fixes directly to power unit, bring work to unit.
- Includes 1/4" and 3/8" diameter copper clad carbon electrodes and two required Adapter Bushings.
- Rugged, Industrial Footswitch with 6 foot (1.83m), three-wire cord and NEMA 5-15 P/R piggyback plug.

**Weight:** 26 LBS (11.8 KGS)

**Standard Replacement Electrodes:** Model # 10550

## Medium-Duty Resistance Soldering Plumbing System - Model 10557

**Common Applications:** Strong enough for most plumbing, HVAC, large cable work, battery terminals, motor leads and stator applications. Sweat solder thin-wall copper tubing up to 1 1/2" diameter.

**Components:** Models 105C2, 10587 & 10518

**Specifications:**

- Three tap selectable power outputs of 500, 1300 and 1800W. (2.3 to 7.2VAC) Available in 110 or 220V.
- Durable, User-friendly handpiece with ten foot (3.1m) 6 AWG high-strand DLO cable.
- Handpiece connects to power unit with 3/8" ring terminal & stud/wing nut system to accommodate higher output range.
- Concave Carbon Electrodes yield higher temperatures and allow for customization by grinding to fit application.
- Rugged, industrial Footswitch with 6 foot (1.83m), three-wire cord and NEMA 5-15 P/R piggyback plug.

**Weight:** 34 LBS (15.50 KGS)

**Standard Replacement Electrodes:** Model # 10565

## Heavy-Duty Resistance Soldering Plumbing System - Model 10577

**Common Applications:** Our most powerful system for plumbing, HVAC, large cable work, battery terminals, motor leads and stator applications. Sweat solder thin-wall copper tubing up to 3" diameter.

**Components:** Models 105D1 & 10587

**Specifications:**

- Three tap selectable power outputs of 1000, 2000 and 3000W. (4.0 to 10.1VAC) Available in 110 or 220V.
- Durable, User-friendly handpiece with ten foot (3.1m) 6 AWG high-strand DLO cable.
- Handpiece connects to power unit with 3/8" ring terminal & stud/wing nut system to accommodate higher output range.
- Concave Carbon Electrodes yield higher temperatures and allow for customization by grinding to fit application.
- No Footswitch included in this system.

**Weight:** 69 LBS (31.3 KGS)

**Standard Replacement Electrodes:** Model # 10565



# RESISTANCE SOLDERING HOBBY SYSTEMS

## Light Capacity Resistance Soldering Hobby System - Model 105HCS

**Common Applications:** For brass models, track, kit bashing and scratch builds.

**Components:** Models 105A3, 10541, 10515, 10542, 10530, 10512A & 10519

### Specifications:

- 100W (2.65VAC) Power unit with Infinitely Variable Output control, Pilot light, 1 Amp Circuit Protection & Heavy-duty aluminum case, Available in 110 or 220V.
- Durable, User-friendly handpieces with four foot (1.22m) cord sets.
- Copper clad, stainless steel electrodes, 5/64" (1.98mm) Dia., 1½" Lgth. Easily customizable with approx. 3/8" opening upon shipping.
- Four foot return lead with alligator clip.
- Rugged, Industrial Footswitch with 6 foot (1.83m), three-wire cord and NEMA 5-15 P/R piggyback plug.

**Weight:** 6.0 LBS (2.7 KGS)

**Replacement Electrodes:** Model # 10542 & 10530

## Standard Capacity Resistance Soldering Hobby System - Model 105HCM

**Common Applications:** For brass models, track, kit bashing and scratch builds.

**Components:** Models 105A12, 10541, 10515, 10542, 10530, 10512 & 10519

### Specifications:

- 250W (2.8VAC) Power unit with Infinitely Variable Output control, Lighted Rocker, 3 Amp Circuit Breaker & Heavy-duty aluminum case, Available in 110 or 220V.
- Durable, User-friendly handpieces with four foot (1.22m) cord sets.
- Copper clad, stainless steel electrodes, 5/64" (1.98mm) Dia., 1½" Lgth. Easily customizable with approx. 3/8" opening upon shipping.
- Four foot return lead with standard clip.
- Rugged, Industrial Footswitch with 6 foot (1.83m), three-wire cord and NEMA 5-15 P/R piggyback plug.

**Weight:** 9.75 LBS (4.4 KGS)

**Replacement Electrodes:** Model # 10542 & 10530

## Deluxe Resistance Soldering Hobby System with Grounding Vise - Model 105HHH

**Common Applications:** For brass models, track, kit bashing and scratch builds.

**Components:** Models 105A12, 10541, 10515, 10542, 10530, 10512, 10519 & 105V12 Grounding Vise for holding small parts hands free.

### Specifications:

- 250W (2.8VAC) Power unit with Infinitely Variable Output control, Lighted Rocker, 3 Amp Circuit Breaker & Heavy-duty aluminum case, Available in 110 or 220V.
- Durable, User-friendly handpieces with four foot (1.22m) cord sets.
- Copper clad, stainless steel electrodes, 5/64" (1.98mm) Dia., 1½" Lgth. Easily customizable with approx. 3/8" opening upon shipping.
- Four foot return lead with standard clip.
- Rugged, Industrial Footswitch with 6 foot (1.83m), three-wire cord and NEMA 5-15 P/R piggyback plug.

**Weight:** 13.25 LBS (6.0 KGS)

**Replacement Electrodes:** Model # 10542 & 10530



# AMERICAN BEAUTY® RESISTANCE SOLDERING POWER UNITS

## Heat on Demand!

The backbone of any resistance soldering system is a high quality power unit. American Beauty's resistance power units are recognized industry-wide for their performance, reliability and safety.

All American Beauty Power Units share the following features:

- Fail-safe devices to ensure ultimate user safety.
- Available in 110/120V or 220/240V varieties.
- Can be operated with a variety of handpieces, allowing you to customize resistance soldering to your particular application.
- Come with a THREE-year warranty, guaranteeing the product to be free from manufacture defects and to work properly under normal operating conditions.

Reminder: User should adhere to 50% duty cycle rule to ensure handpiece and power unit longevity. (i.e. Use for 10 seconds, rest for 10 seconds.)



### Model 105A12

**Max Output:** 250 Watts  
**Power Settings:** Infinite  
**Connections:** Taper pins  
**Weight:** 3 LBS (1.4 KGS)  
**Dim. (in):** 3¾" x 4½" x 7½"  
**Dim. (cm):** 9.4 x 11.5 x 18.1  
**Color:** Black Crackle Finish



### Model 105B2

**Max Output:** 1,100 Watts  
**Power Settings:** 23  
**Connections:** Taper pins  
**Weight:** 6 LBS (2.7 KGS)  
**Dim. (in):** 6½" x 7½" x 8½"  
**Dim. (cm):** 16.5 x 19.1 x 21.6  
**Color:** Black Crackle Finish  
*Available with Twist Lock Receptacle*



### Model 105C1

**Max Output:** 1,800 Watts  
**Power Settings:** 23  
**Connections:** Ring Terminals  
**Weight:** 30 LBS (13.6 KGS)  
**Dim. (in):** 6½" x 7½" x 8½"  
**Dim. (cm):** 16.5 x 19.1 x 21.6  
**Color:** Black Crackle Finish  
*Available with Twist Lock Receptacle*



### MODEL 105A3

**Max Output:** 100 Watts  
**Power Settings:** Infinite  
**Connections:** Taper pins  
**Weight:** 2.5 LBS (1.1 KGS)  
**Dim. (in):** 3¾" x 3¾" x 5¼"  
**Dim. (cm):** 9.5 x 9.8 x 13.3  
**Color:** Black Crackle Finish



### Model 105C2

**Max Output:** 1,800 Watts  
**Power Settings:** 3  
**Connections:** Ring Terminals  
**Weight:** 30 LBS (13.6 KGS)  
**Dim. (in):** 8" x 11" x 12"  
**Dim. (cm):** 21 x 28 x 31  
**Color:** Black Crackle Finish  
*Requires Model 10518 Footswitch*



### MODEL 105A3T

Auto On/Off Switching  
**Max Output:** 100 Watts  
**Power Settings:** Infinite  
**Connections:** Taper pins  
**Weight:** 2.5 LBS (1.1 KGS)  
**Dim. (in):** 3¾" x 3¾" x 5¼"  
**Dim. (cm):** 9.5 x 9.8 x 13.3  
**Color:** Black Crackle Finish



### Model 105D1

**Max Output:** 3,000 Watts  
**Power Settings:** 3  
**Connections:** Ring Terminals  
**Weight:** 64 LBS (29 KGS)  
**Dim. (in):** 8" x 11" x 12"  
**Dim. (cm):** 21 x 28 x 31  
**Color:** Black Crackle Finish

# AMERICAN BEAUTY® RESISTANCE SOLDERING HANDPIECES

American Beauty Offers the **WIDEST SELECTION** of Resistance Soldering and Wirestripping Handpieces in the World!

Our handpieces are designed and built to provide absolute performance in the toughest environments. Resistance Soldering and Wirestripping handpieces provide instantaneous localized heat to handle all of your difficult soldering needs.

- Adhere to 50% duty cycle during all applications to ensure handpiece longevity.
- Ensure that handpiece shares the same connection style as the power unit with which it is to be used.
- Check out pages 5-10 to see our most popular power unit and handpiece combinations.
- Virtually every handpiece can be customized to your specific needs. Phone us directly with specific requests.



**Model 105133**

## Model 105133 – Micro-Tweezer Handpiece

Lightweight tool designed for micro-soldering applications in limited space; well suited for work on connections with wire 22 AWG and finer.

*\*Included in system 10599 located on pg.8*

- Suggested Power Unit: 105A3
- Lgth. 6½"(16.5cm), 4 ft. cord
- Std. Repl. Electrodes: 105134
- Easily customizable electrodes
- Shipping Weight: .5lbs (.23kg)
- Connection: Taper pins



**Model 10541**

## Model 10541 – Regular Tweezer Handpiece

Ideal tool for intricate soldering applications, combining intense heat with precise contact points.

*\*Included in systems 10501 & 10502 located on pg. 5 and in all Hobby systems on pg. 10*

- Suggested Power Unit: 105A12
- Lgth. 5"(12.7cm), 4 ft. cord
- Std. Repl. Electrodes: 10542
- Easily customizable electrodes
- Shipping Weight: 1lb (.45kg)
- Connection: Taper pins



**Model 105127**

## Model 105127 – Medium Tweezer Handpiece

Our most popular tool this rugged performer is excellent for antenna leads, semi-rigid co-ax, heavy-gauge wire, terminals, lugs, posts, etc.

*\*Included in system 10504 located on pg. 5*

- Suggested Power Unit: 105A12
- Lgth. 7 "(17.75cm), 4 ft. cord
- Std. Repl. Electrodes: 10594
- Easily customizable electrodes
- Shipping Weight: 2lbs (.91kg)
- Connection: Taper pins Std.



**Model 10578**

## Models 10578 & 10590 – Fixed Dual-Electrode Handpieces (10578-Ultra-Light Size & 10590-Regular Size Not Shown)

- Suggested Power Units: 105A3 & 105A12 respectively
- Lgths. 6"(15.3cm) & 7½"(19cm) respectively, 4 ft. cord
- Std. Repl. Electrodes: 10582 & 10594 respectively
- Easily customizable electrodes
- Shipping Weights: 1lb (.45kg) & 1.5 lbs (.68kg) respectively
- Connection: Taper pins
- Ideal when repeatability is desired



**Model 10515**

## Model 10515 – Single Probe Carbon Handpiece

Lightweight tool for soldering in areas inaccessible to tweezer-style handpieces.

*\*Included in system 10508 on pg. 8 and in all Hobby Systems on pg. 10.*

- Suggested Power Unit: 105A3
- Std. Repl. Electrodes: 10530
- Return Lead Required - We suggest Model 10512A
- Lgth. 6"(15.3cm), 4 ft. cord
- Shipping Weight: 1lb (.45kg)
- Connection: Taper Pins
- Other sizes available

# AMERICAN BEAUTY® RESISTANCE SOLDERING HANDPIECES



**Model 10511**

## Model 10511 – Std. Single Carbon Handpiece

Sturdy single carbon tool designed to handle a general assortment of soldering applications, rework and repair.

*\*Included in system 10509 located on pg.8*

*\*Return Lead Required*

- Suggested Power Unit: 105B2
- Suggested Lead: 10512
- Lgth. 8" (20.4cm), 4 ft. cord
- Shipping Weight: 1lb (.45kg)
- Std. Repl. Electrodes: 10549
- Connection: Taper pins Std.



**Model 10536**

## Model 10536 – Heavy-Duty Single Carbon Handpiece

Rugged tool designed to handle your extra heavy work.

*\*Return Lead Required*

- Suggested Power Unit: 105C1
- Suggested Lead: 10537
- Lgth. 7 1/2" (19.1cm), 4 ft. cord
- Shipping Weight: 2lbs (.91kg)
- Std. Repl. Electrodes: 10534
- Connection: Ring Terminals



**Model 105158**

## Model 105158 – Small High-Heat Carbon Pliers Handpiece

Carbon electrodes provide you more intense heat than our standard copper-clad stainless steel. Ideal for applications involving small sized parts (3/16") but large heat-sinks. *\*Included in system 10506 located on pg.6*

- Suggested Power Unit: 105A12
- Shipping Weight: 2lbs (.91kg)
- Lgth. 5" (12.7cm), 4 ft. cord
- Connection: Taper pins Std.
- Std. Repl. Electrodes: 105159



**Model 105258**

## Model 105258 – Medium High-Heat Carbon Pliers Handpiece

This is a heavy-duty version of the Model 105158 to better handle the higher current loads required for some larger industrial applications.

*\*Included in system 10507 located on pg. 6*

- Suggested Power Unit: 105B2
- 105C1 compatible on request
- Lgth. 7" (17.75cm), 4 ft. cord
- Shipping Weight: 2.5lbs (1.1kgs)
- Std. Repl. Electrodes: 105159
- Connection: Taper pins Std



**Model 10587**

## Model 10587 & Model 10588 – Heavy-Duty High-Heat Carbon Pliers Handpiece & Heavy-Duty Carbon Fork-Type Handpiece

Based upon internal testing and customer response, these are the highest quality and best performing large resistance soldering handpieces available on the market today.

*\*Model 10587 is included in system 10505 located on pg. 6 and in both of the plumbing systems located on pg. 9*

- Suggested Power Units: 105C1, 105C2 or 105D1
- Lgth. 10" (25.4cm), 10 ft. cord
- Std. Repl. Electrodes: For Model 10587: 10565, For Model 10588:10534
- Please adhere to 50% Duty Cycle
- Shipping Weight: 5lbs (2.3kgs)
- Connection: Ring Terminals



**Model 10588**

# AMERICAN BEAUTY® RESISTANCE SOLDERING HANDPIECES



**Model 105131**

## Model 105131 – Micro Wirestripping Handpiece

Extremely lightweight handpiece strips plastics, including Teflon®, for wires 24 AWG and finer.

*\*Included in system 105SMD located on pg. 7*

- Suggested Power Unit: 105A3
- Lgth. 6 ½" (16.5cm), 4 ft. cord
- Std. Repl. Elements: 105132
- For Shorter Elements: 105156
- Shipping Weight: .5lb (.23kg)
- Connection: Taper pins



**Model 10517**

## Model 10517 – Regular Wirestripping Handpiece

Thermal Wirestripping for wires 14 AWG and finer. Some elements mount at 90° for efficient stripping of "tough" insulations such as Teflon® and other PTFE-based materials.

*\*Included in system 10503 & 10503P located on pg. 7*

- Suggested Power Unit: 105A3
- Lgth. 4 ½" (11.5cm), 4 ft. cord
- Std. Repl. Elements: 10545
- Varieties of elements avail.
- Shipping Weight: 1lb (.45kg)
- Connection: Taper pins



**Model 10591**

## Model 10591 – Small V-Notch Wirestripping Handpiece

Single-loop element strips thermoplastics, including Teflon®, from wires between 18 to 12 AWG.

- Suggested Power Unit: 105A3
- Lgth. 5" (12.7cm), 4 ft. cord
- Std. Repl. Elements: 10593
- Shipping Weight: 1lb (.45kg)
- Connection: Taper pins



**Model 10597**

## Model 10597 – Large V-Notch Wirestripping Handpiece

Strips wires between 12 to 4 AWG, including coaxial cable to RG-8/U.

- Suggested Power Unit: 105A12
- Lgth. 7 ½" (19.05cm), 4 ft. cord
- Std. Repl. Elements: 10596
- Shipping Weight: 1.5lbs (.68kg)
- Connection: Taper pins



**Model 105142**

## Model 105142 – Solder Reflow Tool

Reflow solder on PC boards; general rework, repair; replacement of flatpacs; scarfing or parting of epoxied materials, etc.

- Suggested Power Unit: 105A3
- Lgth. 5" (12.70cm), 4 ft. cord
- Std. Repl. Elements: 105143
- Shorter Elements Available
- Shipping Weight: 1lb (.45kg)
- Connection: Taper pins



**Model 105123**

## Model 105123 – Micro Soldering Probe

A tiny handpiece for soldering with 1/64" to 1/32" (.40 to .80mm) solder pads, or .001" to .010" (.025 to .25mm) dia. solder balls. Element loop is .012" (.30mm) dia. ni-chrome.

- Suggested Power Unit: 105A3
- Lgth. 3 ½" (8.25cm), 4 ft. cord
- Std. Repl. Electrodes: 10531
- Limit power to minimal setting
- Shipping Weight: 5oz. (.14kg)
- Connection: Taper pins

# AMERICAN BEAUTY® RESISTANCE SOLDERING ACCESSORIES



## Footswitch - Model 10519

For foot control of most power units up to and including model 105C1. Eliminates sparking on contact and removal of electrodes from work. Provides more accurate timing of soldering operations. Recommended in most applications. A rugged, industrial switch with six-foot (1.83m), three-wire cord and NEMA 5-15 P/R piggyback plug.



## Grounding Vise for Holding Small Parts Hands Free - Model 105V12

- This versatile accessory functions as a holding fixture while providing a return path to the power unit. For use with single electrode resistance soldering or tweezer handpieces with Model 105Y10 adapter.
- Work is held at a comfortable 3½" (88.9mm) height.
- Compatible with American Beauty resistance soldering power units up to and including Model 105B2 (Page 6) at 1100W and all single electrode handpieces. 6" (15.24cm) extension cable included.

## Leads for Return Current

Required for establishing current return when using single electrode handpieces or Model 105Y10 adapter. Three models are available:



### Model 10512A

- Alligator Clamp
- 14 AWG Cable
- Connection: Taper pins



### Model 10512

- Standard Clamp
- 10 AWG Cable
- Connection: Taper pins



### Model 10537

- Heavy-Duty "C" Clamp
- 6 AWG Cable
- Connection: Ring Terminals

## Accessories



Model 10595

### Panel Attachments

Takes the place of "standing soldering iron," providing more efficient and repeatable processes.

*Free up your hands!*

### Model 10595

- Attaches to 105A3 or 105A12
- Uses Electrodes: 10594

### Model 10513A

- Attaches to 105B2
- Uses Electrodes: 10550



Model 10513A

### Model 10513B (not shown)

- Attaches to 105C1
- Uses Electrodes: 10550



### Adapter Model 105Y10

Connects both jaws of soldering tweezers to one terminal of power unit resulting in slightly more even heating. Must use with return lead.

# AMERICAN BEAUTY® REPLACEMENT ELECTRODES & ELEMENTS

A Resistance Soldering System is only as good as your "Point of Contact." American Beauty incorporates only the highest quality electrodes and elements into our handpieces. All Carbon and Stainless Steel Electrodes are Copper-Clad, except 10565, 10566, 105134 & 105159.

Inferior quality electrodes and elements will affect system performance and void applicable warranties.

## No.105134

- 1/2" Nickel-Chrome, .04" Dia., (1x12.7mm)
- Six Per Package
- Shpg. Wt.: 2oz (.06kg)
- Handpiece: 105133



## No.10530

- 3" Carbon, 3/32" Dia. (2.38x76.2mm)
- Six Per Package
- Shpg. Wt.: 8oz (.23kg)
- Handpiece: 10515



## No.10520

- Flat-Blade Nickel-Chrome Element
- Two Per Package, both w/ Center Notch
- Shpg. Wt.: 2oz (.06kg)
- Handpiece: 10517

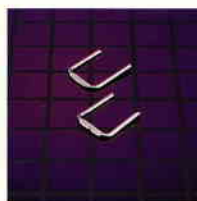
## No.10542

- 1 1/2" Stainless Steel, 5/64" Dia., (2x38.1mm)
- Six Per Package
- Shpg. Wt.: 4oz (.11kg)
- Handpiece: 10541



## No.10526

- 3" Carbon, 1/4" Dia. (6.35x76.2mm)
- Six Per Package
- Shpg. Wt.: 8oz (.23kg)
- Handpiece: 10511



## No.10529

- Flat-Blade Nickel-Chrome Element
- Two Per Package, one w/ Center Notch
- Shpg. Wt.: 2oz (.06kg)
- Handpiece: 10517

## No.10582

- 3" Stainless Steel, 5/64" Dia., (2x76.2mm)
- Six Per Package
- Shpg. Wt.: 8oz (.23kg)
- Handpiece: 10578



## No.10549

- 4" Carbon, 1/4" Dia. (6.35x101.6mm)
- Six Per Package
- Shpg. Wt.: 8oz (.23kg)
- Handpiece: 10511



## No.10545

- Round Blade Nickel-Chrome Element
- Two Per Package, one w/ Center Notch
- Shpg. Wt.: 2oz (.06kg)
- Handpiece: 10517

## No.10594

- 3" Stainless Steel, 1/8" Dia., (3.2x76.2mm)
- Six Per Package
- Shpg. Wt.: 8oz (.23kg)
- Handpiece: 105127



## No.10550

- 4" Carbon, 3/8" Dia. (9.52 x 101.6mm)
- Six Per Package
- Shpg. Wt.: 10oz (.28kg)
- Handpiece: 10513A,B



## No.10593

- Small, Single-Loop V-Notch Nickel-Chrome Element
- One Per Package
- Shpg. Wt.: 2oz (.06kg)
- Handpiece: 10591

## No.105159

- 2" x 1/4" x 1/4" Carbon Block Electrodes (50.8x6.4x6.4mm)
- Two Per Package
- Shpg. Wt.: 4oz (.11kg)
- Handpcs: 105158,105258



## No.10534

- 3" Carbon, 1/2" Dia. (12.7x76.2mm)
- Six Per Package
- Shpg. Wt.: 10oz (.28kg)
- Handpcs: 10536,10588



## No.10596

- Large, Single-Loop V-Notch Nickel-Chrome Element
- One Per Package
- Shpg. Wt.: 2oz (.06kg)
- Handpiece: 10597

## No.10565

- 1 1/2" x 1/2" x 5/8" Concave Carbon Block (38x13x16mm)
- Two Per Package
- Shpg. Wt.: 4oz (.11kg)
- Handpiece: 10587



## No.105156

- 5/8" Nickel-Chrome w/.018" cross-section (15.9mmx.46mm)
- Element at 90° angle
- Two Per Package
- Shpg. Wt.: 2oz (.06kg)
- Handpiece: 105131



## No.105143

- 1 1/2" Long Reflow Element (41.3mm)
- One Per Package
- Shpg. Wt.: 2oz (.06kg)
- Handpiece: 105142

## No.10566

- 1 1/2" x 1/2" x 5/8" Flat Carbon Block (38x13x16mm)
- Two Per Package
- Shpg. Wt.: 4oz (.11kg)
- Handpiece: 10587



## No.105132

- 1 1/8" Nickel-Chrome w/.018" cross-section (33.5mmx.46mm)
- Element at 45° angle
- Two Per Package
- Shpg. Wt.: 2oz (.06kg)
- Handpiece: 105131



## No.10531

- 10ft. Nickel-Chrome Wire, wound on one plastic bobbin
- .012" Dia. (.3mm)
- Shpg. Wt.: 2oz (.06kg)
- Handpiece: 105123

# AMERICAN BEAUTY® SOLDERING STATION

## T 3003 Soldering Station

Station offers easy access to tight work areas at a great price!

Included in the Model T 3003 Station:

- An infinitely variable power unit
- An ultra lightweight soldering iron
- And *FIVE* different high-quality soldering tips

Designed to tackle tight, limited access areas on printed circuit boards, micro-miniature SMD components and strain gauge leads. At low settings, can be used to detail wax castings.

### Features and Benefits:

- **Fast Warm-up**  
Ready to solder in 28 seconds
- **Lightweight**  
Iron weights only 1/2 ounce; minimizes fatigue
- **Infinitely Variable**  
Eliminates the need to change irons to change temperature. Operating temperatures range from 150°F to 625°F (65.5°C to 329.4°C)
- **All Micro-Tips are Nickel-Plated**  
Extend tip life and improve performance

## REPLACEMENT PARTS

Is it time to replace any of the key components of your station?

### Power Supply – Model T3

- 120V Input
- 6.3V Maximum Output
- Infinitely Variable Output Control
- Rugged Enclosure with Iron Holder

### Soldering Iron – Model T3 MS1 6.3

- Designed to be used exclusively with Model T3 Power Supply
- Weight: 1/2 oz. (.015kg.)

### Soldering Iron Tips (Nickel-Plated)

- Large Conical Tip - Model T3 01-LC
- Small Spade Tip - Model T3 02-SS
- Medium Spade Tip - Model T3 02-MS
- Large Spade Tip - Model T3 02-LS
- Precision Point Tip - Model T3 03-PP



**Model T3 01-LC**



**Model T3 02-LS**



**Model T3 02-SS**



**Model T3 03-PP**



**Model T3 02-MS**

# AMERICAN BEAUTY® LITTLE DANDY® SOLDERING IRONS

Model  
3112

Model  
3110

Model  
3108

## These Pencil-Style Soldering Irons Define Quality

Designed and built to give top performance under the most demanding production line conditions and to withstand rugged usage in all maintenance and repair operations. Plug-type tip is seated deep in element for quick heat transfer. Modular design provides for easy maintenance.

### Features and Benefits:

- **Ni-Chrome Wound Heating Element**  
Proven industry's most reliable heating element.
- **Paragon® Iron-Clad Tips**  
Outlasts ordinary tips many times over!
- **Iron Uses Plug-Type Tips**  
Superior heat transfer. Minimizes maintenance.
- **Intricate Thermal Management Design**  
Baffles deflect heat from handle.
- **Air-Cooled Finger Grip**  
Improves operator comfort; pencil-style gives precise control.
- **Modular Construction**  
Easy replacement of any part.

# AMERICAN BEAUTY® LITTLE DANDY® SOLDERING IRONS

## MODEL 3108

Available in 110/120V only. These irons meet or exceed UL/CSA certification requirements; special markings available upon request; additional terms may apply.

*Ideal for soldering miniature and small electronic connections, printed circuit board work and integrated circuits.*

MODEL NUMBER	WATTAGE (SPECIFY)	ELEMENT NUMBER	MAX. TIP TEMP.	OVERALL LENGTH	STD. TIP NO.	TIP SHANK DIA.	TIP LENGTH	PROD. WEIGHT	SHPG. WEIGHT
3108	20 Watts	9014	805°F (429°C)	6½" (16.51 cm)	501	1/8" (3.18 mm)	2¼" (5.72 cm)	2 oz. (56.7 g)	1/2 lb. (226.7 g)
3108	25 Watts	9014	900°F (482°C)	6½" (16.51 cm)	501	1/8" (3.18 mm)	2¼" (5.72 cm)	2 oz. (56.7 g)	1/2 lb. (226.7 g)
3108	30 Watts	9014	970°F (521°C)	6½" (16.51 cm)	501	1/8" (3.18 mm)	2¼" (5.72 cm)	2 oz. (56.7 g)	1/2 lb. (226.7 g)

## MODEL 3110

Available in 110/120V only. These irons meet or exceed UL/CSA certification requirements; special markings available upon request; additional terms may apply.

*Perfect for soldering small to medium electronic and electrical connections.*

MODEL NUMBER	WATTAGE (SPECIFY)	ELEMENT NUMBER	MAX. TIP TEMP.	OVERALL LENGTH	STD. TIP NO.	TIP SHANK DIA.	TIP LENGTH	PROD. WEIGHT	SHPG. WEIGHT
3110	25 Watts	9010	835°F (446°C)	6½" (16.51 cm)	618	3/16" (4.72 mm)	2¼" (5.72 cm)	3 oz. (85.05 g)	1/2 lb. (226.7 g)
3110	30 Watts	9010	890°F (477°C)	6½" (16.51 cm)	618	3/16" (4.72 mm)	2¼" (5.72 cm)	3 oz. (85.05 g)	1/2 lb. (226.7 g)
3110	35 Watts	9010	940°F (504°C)	6½" (16.51 cm)	618	3/16" (4.72 mm)	2¼" (5.72 cm)	3 oz. (85.05 g)	1/2 lb. (226.7 g)

## MODEL 3112

110/120V and 220/240V versions available. (Unless otherwise specified, customer will receive 110/120V version.) These irons meet or exceed UL/CSA certification requirements; special markings available upon request; additional terms may apply.

*The right soldering iron for soldering electrical and electronic connections such as lugs and posts. Enough heat for light to intermediate sheet metal and leaded glasswork.*

MODEL NUMBER	WATTAGE (SPECIFY)	ELEMENT NUMBER	MAX. TIP TEMP.	OVERALL LENGTH	STD. TIP NO.	TIP SHANK DIA.	TIP LENGTH	PROD. WEIGHT	SHPG. WEIGHT
3112	40 Watts	9012	950°F (510°C)	7¾" (19.69 cm)	720	1/4" (6.35 mm)	2¼" (5.72 cm)	4½ oz. (127.6 g)	1/2 lb. (226.7 g)
3112	50 Watts	9012	1050°F (566°C)	7¾" (19.69 cm)	720	1/4" (6.35 mm)	2¼" (5.72 cm)	4½ oz. (127.6 g)	1/2 lb. (226.7 g)
3112	60 Watts	9012	1130°F (610°C)	7¾" (19.69 cm)	720	1/4" (6.35 mm)	2¼" (5.72 cm)	4½ oz. (127.6 g)	1/2 lb. (226.7 g)

# AMERICAN BEAUTY® MID-RANGE AND HEAVY-DUTY IRONS



## Designed and Built for Ultimate Reliability

Where there is "heavy" soldering to do, these American Beauty® irons are on the job the world over. Each element is compression wound Ni-Chrome on a steel spool and is Hi-Pot tested (dielectric withstand testing) at 1200V. Uses include general production, telephone, electrical, military, marine, aviation, railroad, sheet metal and maintenance work. Also, ideal for stained glass professionals and hobbyists.

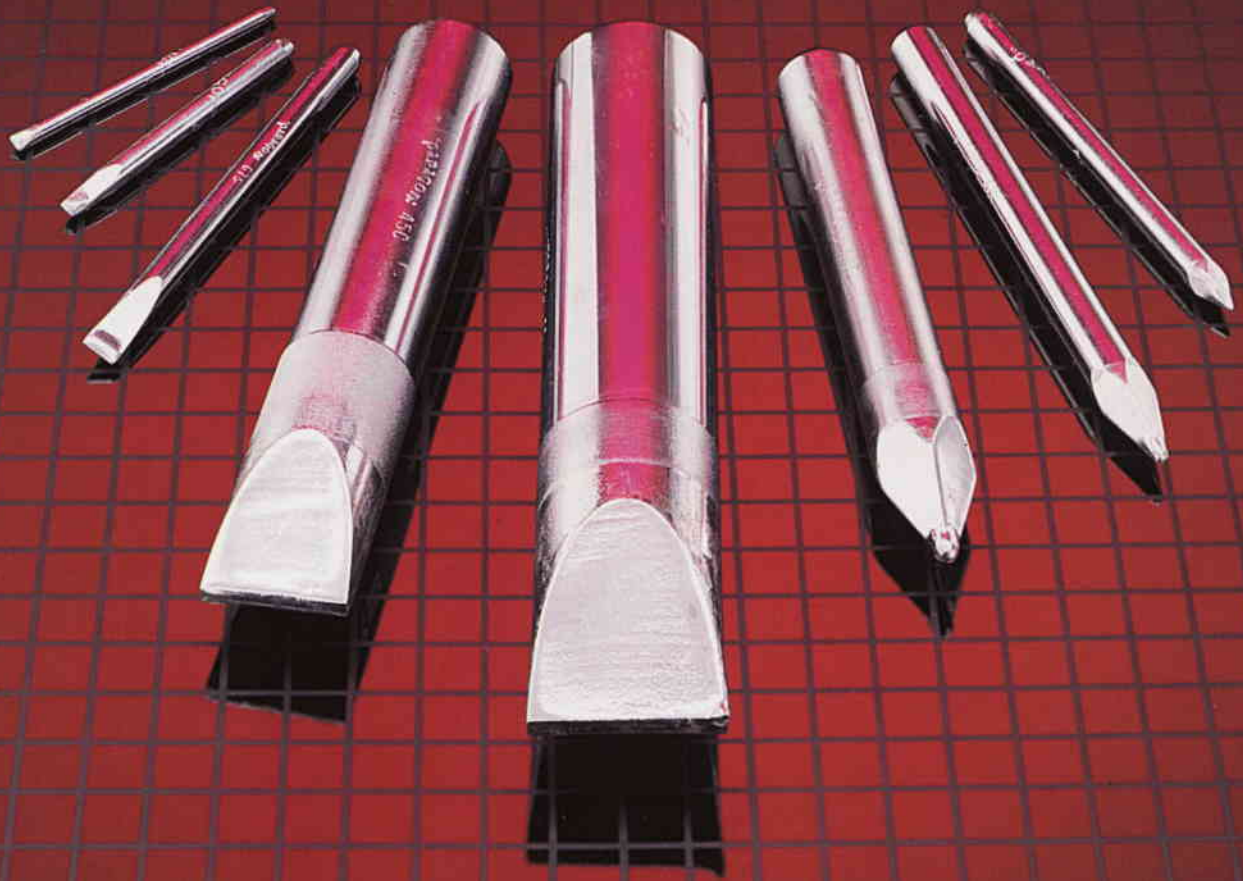
## Features and Benefits:

- **Ni-Chrome Compression Wound Heating Element**  
Proven industry's most reliable heating element.
- **Paragon® Iron-Clad Tips**  
Outlasts ordinary tips many times over!
- **Iron Uses Plug-Type Tips**  
Superior heat transfer. Minimizes maintenance.
- **Hardwood Handles**  
Selected for their thermal insulating properties and durability. Rubberoid finish.
- **Modular Construction**  
Easy replacement of any part.

# AMERICAN BEAUTY® MID-RANGE AND HEAVY-DUTY IRONS

Model Number	Wattage (specify)	Element Number	Maximum Tip Temperature	Overall Length	Standard Tip Number	Tip Shank Diameter	Product Weight	Shipping Weight
<b>3114</b>	60 Watts 75 Watts	9270	945°F (507°C) 1000°F (538°C)	9" (22.9 cm)	67D	1/4" (6.4 mm)	5 oz (.14 kg)	1 lb (.45 kg)
<p>The <b>Model 3114</b> is one of our two Mid-Range Soldering Irons, offering the power of the Model 3125 in a body that is three and a quarter inches shorter. Perfect for light electrical and sheet metal work, heavy electronic work. These irons meet or exceed UL/CSA certification requirements; special markings available upon request, additional terms may apply.</p>								
<b>3125</b>	60 Watts 75 Watts	9271	850°F (454°C) 930°F (499°C)	12 ¼" (31.1 cm)	67D	1/4" (6.4 mm)	6 oz (.17 kg)	1 lb (.45 kg)
<p>The <b>Model 3125</b> is our standard Mid-Range Soldering Iron. Performs the same applications as Model 3114 but allows operator to work at a more comfortable distance from the application. These irons meet or exceed UL/CSA certification requirements; special markings available upon request; additional terms may apply.</p>								
<b>3138</b>	100 Watts 130 Watts 150 Watts	9273	855°F (457°C) 955°F (513°C) 1010°F (543°C)	12 ¾" (32.7 cm)	43D	3/8" (9.5 mm)	13 oz (.37 kg)	2 lbs (.91 kg)
<p>The <b>Model 3138</b> is our most versatile soldering iron answering the needs of a wide variety of applications. Higher wattage irons should be reserved for production style usage. These irons meet or exceed UL/CSA certification requirements; special markings available upon request; additional terms may apply.</p>								
<b>3138X</b>	175 Watts	9273X	1025°F (552°C)	12 ¾" (32.7 cm)	43D	3/8" (9.5 mm)	13 oz (.37 kg)	2 lbs (.91 kg)
<p>The <b>Model 3138X</b> is specifically engineered to operate at the higher range of the heating element's parameters. Should be reserved for production style usage or high heat sink operations.</p>								
<b>3158</b>	200 Watts	9275	1000°F (538°C)	13" (33.0 cm)	44D	5/8" (15.9 mm)	24 oz (.68 kg)	3 lbs (1.36 kgs)
<p>The <b>Model 3158</b> is appropriate for heavy electrical work and intermediate sheet metal work. While the temperature is similar to lower model numbers, this larger iron offers the user greater ability to perform applications due to its larger capacity to store heat. These irons meet or exceed UL/CSA certification requirements; special markings available upon request; additional terms may apply.</p>								
<b>3158X</b>	250 Watts	9275X	1000°F (538°C)	13 ⅝" (33.0 cm)	44D	5/8" (15.9 mm)	24 oz (.68 kg)	3 lbs (1.36 kgs)
<p>The <b>Model 3158X</b> is similar to the 3138X in the aspect of being specifically designed to operate at the higher range of the heating element's parameters. Should be reserved for production style usage or high heat sink operations.</p>								
<b>3178</b>	300 Watts	9277	1000°F (538°C)	14 ⅜" (36.5 cm)	45C	7/8" (22.2 mm)	37 oz (1.05 kgs)	4 lbs (1.81 kgs)
<p>The <b>Model 3178</b> is a true workhorse soldering iron and will handle heavy electrical and sheet metal work.</p>								
<b>3198</b>	550 Watts	9279	1010°F (543°C)	15" (38.1 cm)	46C	1 ½" (28.6 mm)	60 oz (2.27 kgs)	5 ¾ lbs (2.61 kgs)
<p>The <b>Model 3198</b> is the largest and most powerful soldering iron in the American Beauty family. Designed to tackle the heaviest electrical, sheet metal and industrial applications.</p>								

# PARAGON® SOLDERING IRON TIPS



## Paragon® Soldering Iron Tips for Pencil-Type Soldering Irons

Outlasts ordinary tips many times over!

Available in a variety of sizes and shapes (chisel, conical, diamond and screwdriver) that fit American Beauty® Soldering Irons, as well as soldering irons from other manufacturers that accept plug-type tips.

Paragon® Tips define quality because of their:

- Solid Copper Core
- Iron Cladding
- Nickel Plating
- Chrome Coating
- Pre-Tinned Tip
- Plug-Type

## Tips and Tricks:

While American Beauty Paragon Soldering Tips incorporate every possible feature to ensure long tip life and “anti-seize” performance, there is simply no substitute for old-fashioned cleanliness.

- **Frequently Clean** the tips with simple sponge style cleaner (Model 481).
- Regularly remove tip (iron must be cold) from iron and **lightly abrade** shank of tip with light steel wool, emery cloth, or another mild abrasive.
- Keep work surface of tip **tinned** with high-quality solder.
- Return to iron after cleaning and ensure tip is **fully seated** inside of the element.

# PARAGON® SOLDERING IRON TIPS

## Standard Paragon Soldering Iron Tips

(Unless otherwise requested these are the tips that will be included in your iron purchase)



### Model 501

- Used in 3108 Model Irons
- Chisel Style
- 1/8" x 2 1/4"
- 3.18 x 57.15 mm



### Model 618

- Used in 3110 Model Irons
- Screwdriver Style
- 3/16" x 2 1/4"
- 4.72 x 57.15 mm



### Model 720

- Used in 3112 Model Irons
- Screwdriver Style
- 1/4" x 2 1/4"
- 6.35 x 57.15 mm



### Model 67D

- Used in 3114, 3125 Model Irons
- Diamond Style, Long
- 1/4" x 3 3/8"
- 6.35 x 57.15 mm



### Model 43D

- Used in 3138 Model Irons
- Diamond Style
- 3/8" x 4 3/8"
- 9.53 x 111.13 mm



### Model 44D

- Used in 3158 Model Irons
- Diamond Style
- 5/8" x 4 1/16"
- 15.88 x 118.87 mm



### Model 45C

- Used in 3178 Model Irons
- Chisel Style
- 7/8" x 5 1/2"
- 22.23 x 130.97 mm



### Model 46C

- Used in 3198 Model Irons
- Chisel Style
- 1 1/8" x 5 1/8"
- 28.58 x 149.23 mm

## Additional Paragon Soldering Iron Tips

ATI understands that one tip is not going to meet every customer's soldering needs. The following is a group of the most frequently substituted tips for each iron. However, ATI offers many additional tips; therefore if you do not see a tip that meets your specific requirements, please contact us directly (800-550-2510 or at [www.assemblytech.com](http://www.assemblytech.com)) for a complete detailed list.



### Model 505

- Used in 3108 Model Irons
- Diamond Style
- 1/8" x 2 1/4"
- 3.18 x 57.15 mm



### Model 610

- Used in 3110 Model Irons
- Diamond Style
- 3/16" x 2 1/4"
- 4.72 x 57.15 mm



### Model 701

- Used in 3112 Model Irons
- Turned-down Long Taper Chisel Style
- 1/4" x 2 1/4"
- 6.35 x 57.15 mm



### Model 67S

- Used in 3114, 3125 Model Irons
- Chisel Style, Long
- 1/4" x 3 3/8"
- 6.35 x 57.15 mm



### Model 43C

- Used in 3138 Model Irons
- Chisel Style
- 3/8" x 4 3/8"
- 9.53 x 111.13 mm



### Model 44c

- Used in 3158 Model Irons
- Chisel Style
- 5/8" x 4 1/16"
- 15.88 x 118.87 mm



### Model 45D

- Used in 3178 Model Irons
- Diamond Style
- 7/8" x 5 1/2"
- 22.23 x 130.97 mm



### Model 46D

- Used in 3198 Model Irons
- Chisel Style
- 1 1/8" x 5 1/8"
- 28.58 x 149.23 mm

# AMERICAN BEAUTY® SOLDER POTS



## ATI's American Beauty® Solder Pots are Built to Last!

American Beauty solder pots have industry recognition for superior performance. Uses include tinning the ends of stranded wire leads, pre-tinning small electrical parts, re-tinning soldering iron tips and dip soldering small circuit boards. Especially useful where reliable control of solder temperatures is essential. Includes dross skimmer that heats to solder temperature, thereby clearing solder without degrading temperature. Internal dross is moved to lip where it cinders away. Dross skimmers are safer and more efficient than paddles, spoons and sticks that contaminate solder and lower temperature.

### Features and Benefits:

- **Cast Iron Crucible**  
Chemically stable to keep solder pure.
- **Wide Lipped**  
Easy fixture mounting.
- **Superior Heat Control**  
Uniform solder temperature in crucible.
- **Internal Removable Dross Skimmer**  
Increases operator safety; maintains solder temperature.
- **For Model 675 only:**  
Meets or exceeds J-STD-001.

### Operational Warnings:

- Operate only in well-ventilated workstations.
- Run Solder Pots on heat resistant surfaces.
- Solder Pots generate a great amount of heat and should never be left to operate unattended.

# AMERICAN BEAUTY® SOLDER POTS

## General Purpose Model 300 and 600 Specifications

## Mil Spec. Compliant Model 675 Specifications

**Capacity:** Two basic models. See chart below for capacities.

**Crucible:** Cast iron, chemically stable.

**Dross Skimmer:** Removable dross skimmer included.

**Voltage:** 110-120V AC, 50/60 hz.

**Wattage:** See chart below.

**Temperature Range:** 350°F to 850°F (176°C-454°C).

**Heating Time:** Full pot to 400°F (204°C) in 15 min. Full pot to 850°F (454°C) in 25 min.

**Duty:** Continuous Operation.

**Heating Elements:** Two-cartridge type. Separately replaceable. See chart below.

**Fuse:** Model 300-5 Amp., Model 600-7 Amp.

**Thermostat:** Adjustable 350°F to 850°F (176°C-454°C). Dial shows approximate temperature set point.

**Fixturing:** Wide-lipped to accommodate fixtures. Crucible is center-tapped for dross skimmer or additional fixtures.

**Case:** Wrap-around satin finish stainless steel. Fiberglass insulated.

**Base:** Cast iron, flared for stability. Ventilated. Red finish.

**Cordset:** 6ft., 3-wire HPN, w/ NEMA 5-15P plug. Grounded.

**Options:** 220-240V AC (call for pricing and availability).

**Capacity:** 2 ¾ lbs. (1.24 kg).

**Crucible:** Cast iron, chemically stable.

**Dross Skimmer:** Removable dross skimmer included.

**Voltage:** 110-120V AC, 50/60 hz.

**Wattage:** 650 Watts

**Temperature Range:** 400°F to 800°F (204°C-427°C).

**Range:** Variance from set point, less than ± 15°F, after one hour setting time.

**Duty:** Continuous operation.

**Heating Element:** High quality band style, heavily insulated with fiberglass.

**Fuse:** 7 Amp. Type AG-3.

**Control Module:** Solid state zero cross switching, opto coupled triac.

**Fixturing:** Wide-lipped to accommodate fixtures. Crucible is center-tapped for dross skimmer or additional fixtures.

**Case:** Wrap-around satin finish stainless steel. Fiberglass insulated.

**Base:** Cast iron, flared for stability. Ventilated. Red finish.

**Cordset:** 6ft., 3-wire HPN, w/ NEMA 5-15P plug. Grounded.

**Features:** Permanently-attached control module can be placed up to 18" from solder pot.

### Do Not Operate Solder Pots Unattended!

MODEL NUMBER	WATTAGE	HEATING ELEMENT NO.	CAPACITY	CRUCIBLE	OVERALL SIZE	SHIPPING WEIGHT
300	320 Watts	9301	1 lb (.45 kgs)	I.D.: 2¼" (5.72 cm) Depth: 1½" (3.81 cm) Center Tap: 1/4" - 20	Top O.D.: 4¾" (12.07 cm) Base Dia.: 5¾" (14.61 cm) Height: 5½" (13.02 cm)	6½ lbs (2.95 kgs)
600	600 Watts	9300	2½ lbs (1.13 kgs)	I.D.: 3½" (8.89 cm) Depth: 1½" (3.81 cm) Center Tap: 5/16" - 18	Top O.D.: 6" (15.24 cm) Base Dia.: 7" (17.78 cm) Height: 5½" (13.97 cm)	9 lbs (4.08 kgs)
675	650 Watts	9302	2¾ lbs (1.24 kgs)	I.D.: 2¼" (5.72 cm) Depth: 1¾" (4.45 cm) Center Tap: 5/16" - 18	Top O.D.: 6" (15.24 cm) Base Dia.: 7" (17.78 cm) Height: 5½" (13.97 cm)	16½ lbs (7.43 kgs)

### Replacement Parts for American Beauty Solder Pots

MODEL NO.	DESCRIPTION	MODEL NO.	DESCRIPTION
8053	Thermostat/Nameplate Kit for Model 300 Solder Pots built before August 1998.	9301	Cartridge Heating Element for Model 300 Solder Pot (Two elements required)
8056	Thermostat/Nameplate Kit for Model 600 Solder Pots built before August 1998.	9300	Cartridge Heating Element for Model 600 Solder Pot (Two elements required)
8055	Thermostat Assembly for Model 300 and 600 Solder Pots built on or after August 1998	9302	Heater Band for Model 675 Solder Pot (One element required)
8057	Replacement Knob for Model 300 and 600	302	Dross Skimmer for Model 300 Solder Pot
874S3	Cord Set for Model 300 and 600	602	Dross Skimmer for Model 600 Solder Pot

# DRI-WICK® DESOLDERING BRAID

## Desoldering is quick and clean with Dri-Wick® Desoldering Braid!

Simplifies the desoldering of printed circuit board components, posts, pots, flags, through hole connections, pads and traces, as well as many non-PC board applications.

### Features and Benefits:

- **Pure Annealed Copper Braid**  
Cleanest, most efficient wick material.  
Attracts solder faster.
- **Water-White Rosin Flux Formula**  
Protects copper from oxidation and speeds wicking action, but leaves no contamination.
- **Multiple Sizes**  
A wick size for every job from microcircuits to posts and lugs.



SIZE	APPLICATION	WIDTH SIZE	PAD SIZE
1	Micro & integrated circuits	.025" (.63 mm)	.060" & smaller (1.52 mm & smaller)
2	Miniature P.C. boards	.050" (1.27 mm)	.060" to .125" (1.52 to 3.18 mm)
3	Standard P.C. boards	.075" (1.91 mm)	.125" to .190" (3.18 to 4.83 mm)
4	Commercial P.C. boards and connectors; phone connectors	.095" (2.41 mm)	.190" & larger (4.83 mm & larger)
5	Miniature circuit boards, turret terminals, etc.	.130" (3.30 mm)	

### Available in the following lengths:

- Five-foot spools sold in a sleeve of 25; Model 484 - (Width Size).
- 50 foot spools; Model 484 - (Width Size) L.



# DRI-WICK® DESOLDERING BRAID DISPENSERS

## Want a Solution to Wick Contamination? Try One of these Dispensers!

### Dri-Wick® Economy Dispenser Model 485-8C

#### Features:

- ESD Safe
- Disposable, Economical
- .093" x 8 foot No-Clean Dri-Wick desoldering braid
- Attractive peg-board display packaging

### Xuron® Wickgun from ATI

#### Features and Benefits:

- **Fully-integrated** - Desoldering tool for dispensing, positioning and cutting off wick.
- **ESD Safe** - Static dissipative body to protect your static sensitive components.
- **Contaminant Free** - Solderability is enhanced because the wick is not contaminated with finger oil or other foreign matter.
- **Saves Time** - Desoldering becomes a one handed operation. No more putting down your soldering iron to pick up a cutter to cut off used wick.
- **No More Burned Fingers** - No need to touch the braid, and the Wickgun shields you from heat conducted up the wick.
- **Saves Money** - No more wasted wick. Wickgun allows you to retract the braid to cut off just the used portion.



Model 485-8C



Model 482-WG

- |                      |   |
|----------------------|---|
| <b>Model 482-WG1</b> | Wickgun Pre-Loaded with Dri-Wick® Size No. 1 (.025") 15' Length |
| <b>Model 482-WG2</b> | Wickgun Pre-Loaded with Dri-Wick® Size No. 2 (.050") 15' Length |
| <b>Model 482-WG3</b> | Wickgun Pre-Loaded with Dri-Wick® Size No. 3 (.075") 15' Length |
| <b>Model 482-WG4</b> | Wickgun Pre-loaded with Dri-Wick® Size No. 4 (.095") 15' Length |

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| <b>Model 483-1XC</b> | Wickgun Cassette, Dri-Wick® Size No. 1 (.025") 15' Length |
| <b>Model 483-2XC</b> | Wickgun Cassette, Dri-Wick® Size No. 2 (.050") 15' Length |
| <b>Model 483-3XC</b> | Wickgun Cassette, Dri-Wick® Size No. 3 (.075") 15' Length |
| <b>Model 483-4XC</b> | Wickgun Cassette, Dri-Wick® Size No. 4 (.095") 15' Length |



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