

# JBC

The Soldering Co.



## Station Guide

Believe in innovation, enjoy the power

**A global organization at your service**

JBC is a global company with a distributor network spanning 5 continents that guarantees a solid commercial organization with quick and efficient service.

**The power of experience**

More than 90 years of experience have placed JBC at the technological forefront of tools for soldering and rework operations in electronics. Innovation, efficiency and reliability are the key features of a wide range of products which have been designed to satisfy the most demanding requirements of professionals.

**High technology, superior quality**

Product perfection is one of the main objectives of JBC's improvement and development program. The R&D department has created the most innovative soldering technologies, which JBC is proud to present in this catalogue.



All JBC products comply with CE standards and ESD recommendations.

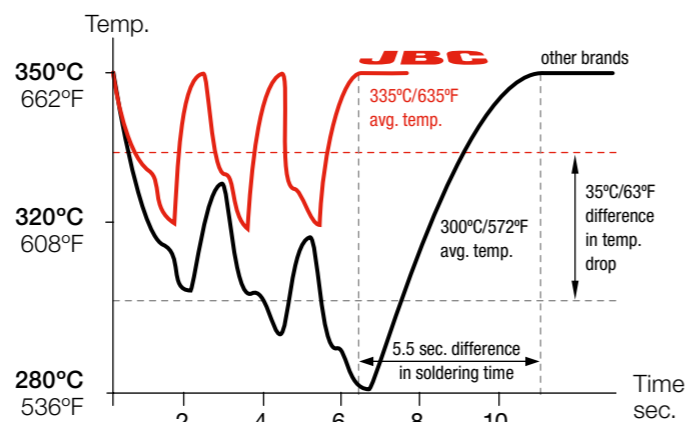


# JBC Technology

## Most Efficient Soldering System

JBC Stations work with JBC Most Efficient Soldering System, which **recovers tip temperature extremely quickly**. This increases work efficiency and allows the user to work with lower temperatures.

**Efficient Temperature Control**  
Comparative process of 3 solder joints



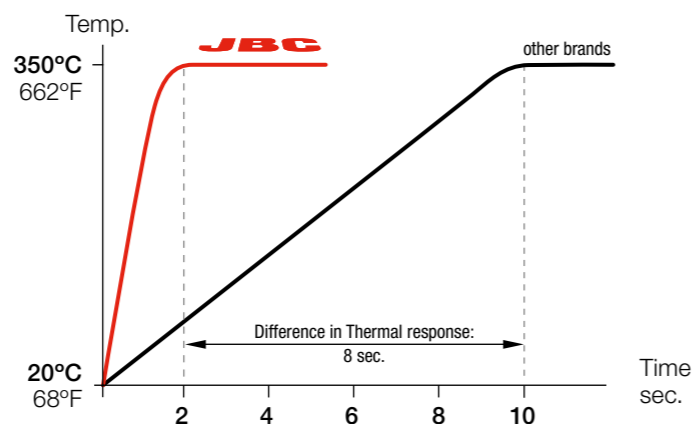
Tips with JBC Technology only drop 30°C (54°F) where others drop as much as 70°C (126°F).

Enhanced Temperature Efficiency ➔ Increased Productivity + Better Quality

## Productivity

Short tip-to-sensor distance ensures extremely quick temperature recovery and an **accurate control**.

**Heating System Principles**  
350°C/662°F in 2 seconds



This graph compares JBC C210 Cartridge Range to the equivalent cartridges of the best competitor.

## Intelligent Heat Management

Thanks to automatic detection of the tool in the stand, JBC Soldering & Rework Stations allow the tools to enter **Sleep & Hibernation Modes** when not being used. As a result, tip life lasts up to 5 times longer.

### Sleep Mode

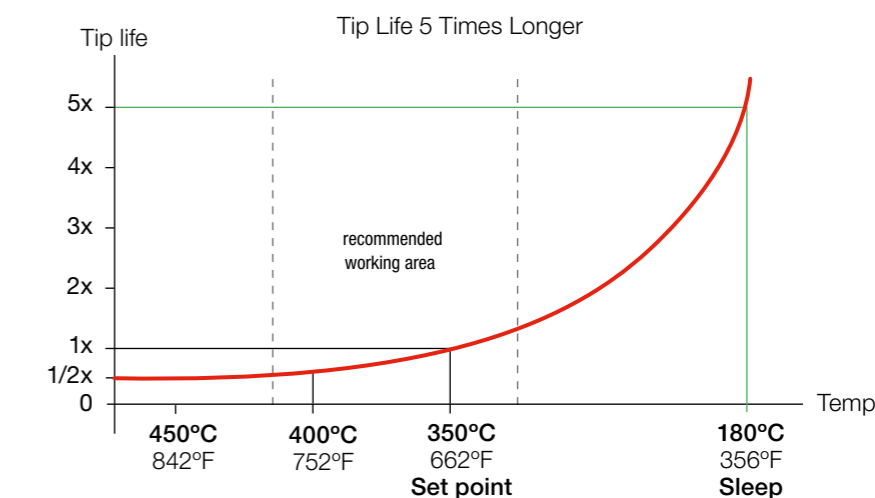
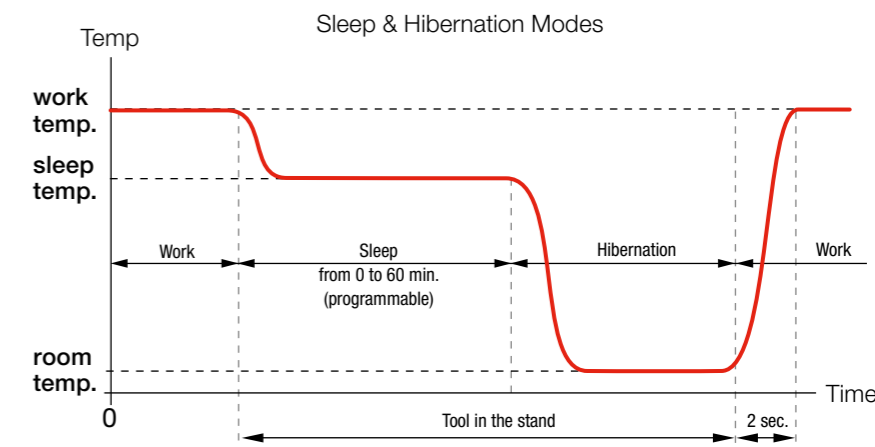
Sleep Mode **automatically lowers tip temperature** below the solder melting point when the tool rests in the stand. **It prevents the dissolution of the iron tip coating into molten solder.**

### Hibernation Mode

After a configurable period of tool inactivity in the stand, the tool enters Hibernation Mode. **It cuts off the power supply**, making the tip reach room temperature, thus **preventing oxidation and saving energy.**

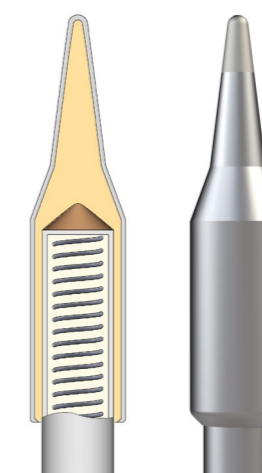
### Longer Tip life

Tip life increases exponentially by **using lower temperatures** as shown. Using Sleep Mode, the temperature is further reduced, which **multiplies tip life by 5.**



## Cartridges with long life & extended tip life

The essential part of the soldering iron is the tip. Therefore, JBC has **over 500 cartridge models of different shapes and sizes** to choose from, depending on each application. JBC has developed the most advanced technology based on the following principles:



- **Excellent Heat Transfer**  
The compact element reduces thermal barriers.
- **Instantaneous Heating**  
A fully-integrated thermal sensor in the heater ensures quick temperature recovery.
- **Great Durability**  
The intelligent algorithm control program extends tip life.

# B-IRON Stations

All the power and control in a Revolutionary Battery-Powered System

Control and configure the tool parameters **from any device**

**500 SMD soldering joints** with each full charge

## Improve & optimize your soldering quality

By using B-IRON App, you can configure and control the system. Alternatively, **use your own device**. You can download the APP from:



## Quick Cartridge Exchanger and Holder

The Quick Cartridge Exchanger System avoids damaging the tips and allows you to have the **tips ready for exchange**.

## Tip Cleaning System

A complete Tip Cleaning System with splashguard and antispash membrane to **keep the work area clean and free of solder particles**.



## Work position

JBC Stations are designed to suit the user's work position.

## Battery-Powered System

Charging your B-IRON is effortless thanks to its **charger integrated in the stand** which fully charges the tool while resting in Hibernation Mode, preventing tip oxidation.



20-80% charged in 35 minutes



B210 is designed to perfectly lie in the operator's hand with **minimum weight**, making the soldering process even **more comfortable**.

Expand your options and gain productivity

The new JBC Battery-Powered System allows you to work without stopping. Customize your station with one or two tools and combine them to suit your needs. You can control both tools from the App in real time.

## B210K

### Expansion kit for B210 Handle

This kit allows you to extend your B-IRON station adding an extra tool.

## Left Side Tool Holder for B210 Handle

**Its assembly is fast and easy** and, additionally, it disposes of an adjustable angle to suit the work position.

## B210

### Precision Handle for B-IRON

It has a **compact and lightweight design**, which brings the operator the highest precision thanks to the tip-to-grip short distance.



## Cap for B210 Handle

The tool has a **power safe mode that can be activated by putting on the cap**. If B-IRON remains idle for more than an hour, it will shut off automatically and can only be turned on again by placing it on its charging tool holder.

## B-IRON 210

### Battery-Powered Soldering Station

Specially designed for soldering SMDs.

It performs up to 500 SMD soldering joints per charge thanks to JBC Intelligent Heat Management.

It has a peak power of 40W.



## B-IRON 210 DUAL

Specially designed for soldering SMDs.

Add an extra tool as a backup or convert into a dual-tool system using Expansion Tool Kit.

It has a peak power of 40W.





# Compact Stations

A complete Soldering System

Everything you need in a minimum footprint

Each unit meant for a specific purpose



## Work position

JBC Stations are designed to suit the user's work position. **Tool Holder** and **Cable Collector** are easily adjustable.

## Intelligent Heat Management

The stations incorporate **Sleep & Hibernation Modes**, which lower tip temperature when the tool is placed in the tool holder. As a result, **JBC tips last up to 5 times longer than tips of other brands.**

## Communication Station-PC

The incorporation of a USB Connector on all stations and control units allows you to **manage your job remotely from a PC.** The most innovative technology to take your work beyond the station.

**Quick Cartridge Exchanger and Holder** Save time and increase productivity by using **Quick Cartridge Exchanger**, which facilitates fast and safe use of different cartridge geometries. **Cartridge Holder** allows storing up to four cartridges.

**Intuitive menu and interface** Fast and easy station configuration. **User-Friendly Menu** allows you to personalize over **20 parameters** to help manage the soldering process. Set temperature limits, check usage counters, lock the station with a PIN or program Sleep & Hibernation Modes.

## Tip Cleaning System

Compact Stations feature a tip cleaner with **antisplash membrane** to prevent splashing of solder particles and maintain the work area clean. The most complete **Tip Cleaning System** allows you to choose from three safe methods according to your needs: **metallic wool, sponge or metal brush.**

## Soldering

### CDN

**High-precision Soldering Station**  
Designed for **highest-precision jobs** in any micro-soldering application, offering **maximum control working under the microscope.**



NT115

### CDS/CDB

**Precision/Soldering Station**  
CDS is ideal when working on **populated PCBs** or under a magnifying glass. CDB is suitable for **general electronics applications.**



T210

T245

### CA

**Manual-Feed Soldering Station**  
Designed for those applications **requiring a free hand.** Ideal for soldering cables, connectors, etc.



AP250

## Rework

### CP

**Precision Rework Station**  
Ideal for soldering and **reworking SMT chip components**, small/medium SOP and dual in-line components.



AM120

### CS

**Desoldering Station**  
Ideal for **desoldering small THT components and SMD pad cleaning.**



DS360

## Soldering Assistant

### CDEB

**Soldering-Assistant Station**  
Improve your soldering quality while improving your skills.



T245

# Modular System

Build your solution

Stackable modules  
save work space

Fully-compatible tools  
with all control units

Easy-to-use menu helps  
work more efficiently



**Station Customization**  
Personalize the station parameters according to your application/needs.



**Partial Counters**  
Register total and partial time for each port, such as work and Sleep & Hibernation Modes in hours.



**Peripherals**  
Connect station ports to pedals and modules, such as desoldering pump, nitrogen flow regulator, etc.



**Tool Presets**  
Set parameters for each tool to automatically apply them.



**Graphics**  
In real time, visualize tip temperature and power delivered to the solder joint during the soldering process.



**Communication Station-PC**  
Manage your stations remotely via PC, export graphics and update the software.



**Robot**  
Automate the soldering process and manage the station via robot.



TFT screen

See % power for each port

Display different ports in use

**USB-A**  
Software updating & exporting graphics

**Tool in use**

Consult the comprehensive **help** for each parameter

## Modular System Map



## Control Units



**DI**  
**1-Tool Control Unit**  
DI Control Unit is designed for production and rework applications with low to medium thermal requirements.



**DDE**  
**2-Tool Control Unit**  
DDE Control Unit has 2 ports with an output peak power of 150W per port, successfully carrying out the most demanding jobs.



**DME**  
**4-Tool Control Unit**  
DME Control Unit operates with 4 JBC Tools simultaneously. DME provides you with extra applications: USB microscope, file storage, unit converter, etc.



# Multi-tool Stations

All-purpose solutions based on JBC Modular System

## 2-Tool DDE

### DDPE

#### 2-Tool Precision Rework Station

This station provides a quick and secure method for **reworking chip components and small outline ICs** in SMD applications. It has a peak power of 150W per tool.

More than 40 long-life cartridges suitable for precision electrical production with the highest thermal efficiency.



### DDSE

#### 2-Tool Rework Station

This station presents an answer for fast and safe **SMD rework of chip components and small outline ICs**.

It has a peak power of 150W per tool.

MSE Electric Desoldering Module creates a vacuum peak at the startup in order to collect the solder before it cools down.

More than 150 cartridges & tips suitable for general-purpose electrical production with the highest thermal efficiency.



## 4-Tool DME

### DMSE

#### 2-Tool Rework Station

This station offers a solution for **both SMDs and jobs with high-power requirements. Perfect for desoldering jobs of through-hole components and removing excess solder after SMD rework.**

It has a peak power of 150W per tool.

Its control unit provides you with extra applications: USB microscope, file storage, unit converter, etc.



### DMPSE

#### 4-Tool Rework Station

DMPSE provides a solution for **reworking any SMD and task requiring high power**. It consists of two handles, a desoldering iron and precision tweezers to assist you in your work. It has a peak power of 150W per tool.

MSE Electric Desoldering Module creates a vacuum peak at the startup in order to collect the solder before it cools down. More than 190 cartridges & tips suitable for general-purpose electrical production with the highest thermal efficiency.



## 2-Tool DDE + Hot Air

### RMSE

#### Complete Rework System

RMSE Complete Rework System is not only **the fastest but also the safest option for soldering and rework**, including the use of hot air. It is designed with stackable modules and comes with all essential accessories to streamline your tasks. Additionally, it features JTSE, a high-powered Hot Air Station capable of reworking various types of SMDs.



## NANO Stations

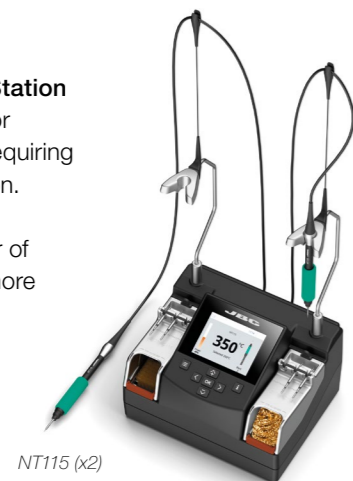
Designed for offering maximum control working under the magnifying glass

The best solution for soldering and desoldering components such as chips **01005, 0201, 0402**, etc.

Nano Stations work with **JBC Most Efficient Soldering System**, which improves the soldering quality

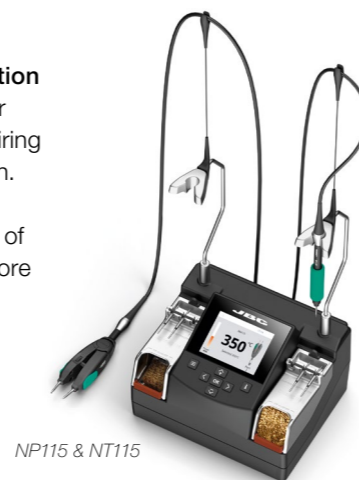
**NANE**  
**2-Tool Soldering Station**  
The best solution for **soldering SMDs** requiring the highest precision.

It has a peak power of 14W per tool and more than 30 different cartridge shapes.



**NASE**  
**2-Tool Rework Station**  
The best solution for **rework SMDs** requiring the highest precision.

It has a peak power of 14W per tool and more than 30 different cartridge shapes.



## High-Precision Hot Air Station

Experience the versatility of JNA thanks to its capacity to rework a wide range of components

Rework SMDs on areas with minimal separation **without affecting nearby components**

Rework a wide range of components using the new bent hot air cartridges

**JNA**  
**High-Precision Hot Air Station**  
The perfect combination of the **NH Handle** and **Hot Air Cartridges** allows you to direct the heat onto the selected component. Thanks to its design and ergonomics, it enables you to work comfortably under a magnifying glass.



## Hot Air Stations

The highest-quality contactless desoldering

Our range of tools allows you to **repair all types of SMDs** quickly and safely

JBC Hot Air Stations have the capability of **controlling precise temperature and airflow**

**TESE**  
**Precision Hot Air Station**  
Precision hot air station capable of **reworking small and medium SMDs**. It has a peak power of 300W and with 2 to 17 SLPM air flow.

An external thermocouple connection for high-precise close-loop control of the component/PCB during the rework process.



**JTSE**  
**Power Hot Air Station**  
A high-powered hot air station capable of **reworking all types of SMDs**. It has a peak power of 700W and with 5 to 50 SLPM air flow.

An external thermocouple connection for high-precise close-loop control of the component/PCB during the rework process.



**SRS**  
**SMD Rework System**  
SRS SMD Rework System **provides full control over SMD rework processes**.

RWS Rework Arm supports JTT Heater Hose Set, allowing **handsfree operation**.

PHSEK Preheater Set includes PHSE Preheater and PHSS PCB Support.





## Automatic-Feed Stations

Consistently dispense programmed amounts, ensuring uniform soldering joints

Makes soldering components easy, giving the operator **one free hand for more stability** in the soldering process

**Work without interruptions** makes the process more efficient

**ALE**  
**Automatic-Feed Soldering Station**  
The ideal solution for the soldering process requiring high productivity.

It has a peak power of 150W.  
It features solder wire perforation, allowing better flux flow and outgassing.



AL250

**SF**  
**Automatic Solder-Wire Feeder Station**  
Allows feeding solder wire automatically from any position.

It features solder wire perforation, allowing better flux flow and outgassing.



SF280

## Heavy Duty Stations

Industrial equipment ready to work intensively

250 Watts peak power for **high-thermal demands** and prolonged soldering applications

Used in production of solar panels, multi-layered circuits and **components of large dissipation surfaces**

**HDE**  
**Heavy Duty Soldering Station**  
The most powerful soldering unit of the JBC Range.  
It has a peak power of 250W.



T470

**HDEK**  
**Heavy Duty Rework Station**  
Designed to reduce the soldering time in applications that require a large amount of heat transfer.  
It has a peak power of 250W.



HT470

## Preheaters

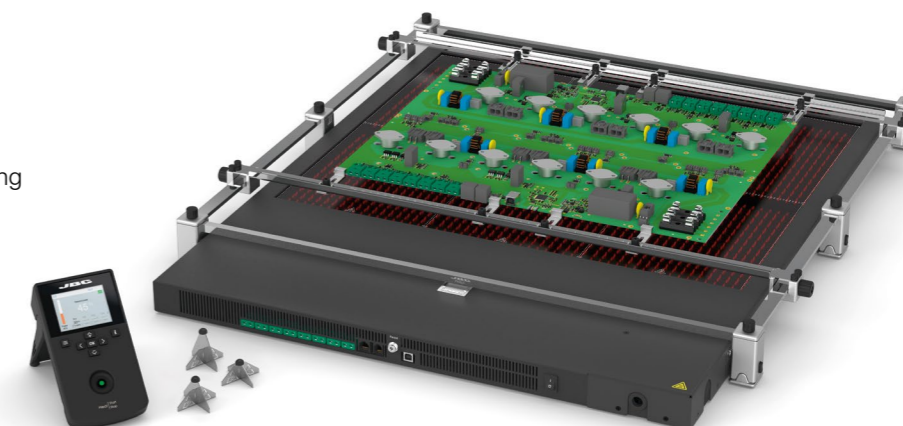
Forget about thermal shock

Matchless reliability in **temperature accuracy and control** of the PCBA

**3 Work Modes** safer and easier with up to 8 thermocouples

**Independent work zones** to be turned on/off

**PHXLEK**  
**Preheater Set for PCBs up to 51 x 61 cm / 20 x 24"**  
This is a complete system for preheating big-sized PCBAs such as communications boards, airplanes, etc. and ideal for repetitive soldering jobs.



**PHBEK**  
**Preheater Set for PCBs up to 36 x 28 cm / 14 x 11"**  
The best solution to rework medium / large PCBAs, such as the ones commonly used in laptops or PCB panels.



**PHSEK**  
**Preheater Set for PCBs up to 13 x 13 cm / 5 x 5"**  
Complete solution to rework small / medium PCBAs, such as the ones commonly used in electronics industries.



**PHNEK**  
**Preheater Set for PCBs up to 11 x 7 cm / 4 x 3"**  
The best solution to rework small PCBAs, such as the ones commonly used in smartphones.





## Wire Stripper Stations

High-temperature wire stripping

Wire insulations made of **thermostable materials such as Teflon\*, Kapton\*, silicone rubber, etc.** from 40 to 14 AWG (0.08 to 1.63 mm / 0.003 to 0.064 in) with temperatures of up to 800°C / 1470°F

### WSS High-Temperature Precision Wire Stripper Station

Its improved tweezer design makes it a small, ergonomic, handy and very safe tool, preventing burns even when reaching very high temperatures.



WS140

## Accessories

Work faster, easier and safer with our variety of complements for soldering & desoldering



**DPM Manual Paste Dispenser**  
Precise dosage for solder paste, adhesive, solder flux, etc. – ideal for SMT rework.



**PSS Multi-axis Rotative PCB Support**  
Ensures fast and precise PCB handling in any position. Turn your PCB upside-down (180°) in one movement. Designed to simplify your work, with or without preheater.

## Tip Cleaning Systems

Invest your time in soldering, not cleaning

Clean the tip in less than a second. With automatic cleaners you **save time and optimize production**

A clean tip is always easier to tin, resulting in higher **quality solder joints**



**CLMUP Automatic Tip Cleaner with Fiber Brushes (non-metal)**  
Perform a thorough and **gentle tip cleaning**. Regular usage recommended to improve tip life.



**CLMS Automatic Junior Tip Cleaner**  
Improve thermal transfer of the tip in only 1 second. It fits in any work area thanks to its **reduced size and is very easy to maintain**.



**CL Manual Tip Cleaner**  
A **complete cleaning system** with splashguard and antisplash membrane to keep the work area clean and free of solder particles.



**TMS / TMB ESD Table Mats**  
Protect the operator and equipment from static electricity discharges by draining the static electricity from objects placed on its surface.



**TM50 ESD Earthing Wristband**  
ESD Earthing Wristband offers simple adjustability and comfortably fits on the wrist. It is antiallergic. Tested according to BGI 818: 2001.



**TM20 ESD Spiral Earthing Cable**  
The spiral earthing cable has a length of 2.4 m / 94.49 in. The electrical resistance is 106 Ω at each connector.



**TM21 ESD Earthing Cable**  
The ESD earthing cable has a length of 4 m / 157.48 in and is suitable for ESD table mats and floor coverings.



**TWEEZERS for precision in electronics**  
Thanks to the tip design, these are well suited, especially for SMT.



**CUTTERS for electronics**  
Full line designed according to ESD safety regulations.



**PLIERS for electronics**  
Suitable for a wide range of electronics applications. With an ergonomic design, soft grips and light weight.

# Cartridge Map

Over 500 Cartridges & Customized models

See the full range on our website



**C115**

Chip Components

Stainless steel tip

Spoon

High-Thermal Performance

C115126, C115101, C115103, C115106, C115107, C115124, C115118, C115105, C115110, C115116, C115117, C115108, C115125, C115113, C115114

C115115, C115111, C115112, C115120, C115109, C115127, C115128, C115211, C115212

C115213 A = 1 x 0.3 (0.039 x 0.012)  
 C115214 A = 1.8 x 0.5 (0.071 x 0.020)  
 C115221 A = 1.3 x 0.3 (0.051 x 0.012)  
 C115222 A = 1.6 x 0.3 (0.063 x 0.012)  
 C115223 A = 2.4 x 0.6 (0.094 x 0.024)

**C245**

C245731, C245773, C245742, C245774, C245906, C245406, C245768, C245944, C245907, C245407, C245759, C245770, C245741, C245729, C245061, C245911

C245775, C245755, C245756, C245908, C245708, C245967, C245069, C245966, C245030, C245032, C245036, C245930, C245001, C245937, C245957, C245903, C245403, C245943, C245107

C245775, C245755, C245756, C245908, C245708, C245967, C245069, C245966, C245030, C245032, C245036, C245930, C245001, C245937, C245957, C245903, C245403, C245943, C245107

Hoof tip with reduced tinned surface, ideal for touchup

C245064 A = 0.13 (0.051)  
 C245102 A = 0.2 (0.079)  
 C245797 A = 0.3 (0.149)

C245747, C245710, C245905, C245405, C245945, C245795, C245784, C245793, C245912, C245056, C245951, C245766, C245301, C245965, C245931, C245938, C245748, C245749, C245962, C245963, C245946

C245732, C245761, C245034, C245029, C245126, C245786, C245929, C245935, C245904, C245259, C245260, C245627, C245628, C245067, C245965, C245931, C245938, C245016, C245017, C245150, C245018, C245019

Knife

Dual In Line

QFP & PLCC

Blade

Cartridges with chrome finish, designed for use in plastics

C245789, C245939, C245765, C245955, C245303, C245222, C245306, C245305, C245220, C245250, C245215, C245221, C245226, C245351, C245228, C245315, C245352, C245227, C245344, C245914, C245752, C245913, C245949, C245776, C245792, C245138, C245123, C245121, C245109, C245764, C2455P01

Cartridge with chrome finish, designed for use in plastics

PTFE coated tip

Nickel tip for (High Melting Point) soldering

Through-hole and cable soldering

Through-hole drag soldering

Ideal to reach joints

Solder Pot

C245053, C245052, C245054, C245119, C245772, C245790, C245785, C245763, C245760, C245754, C245751, C245667, C245764, C2455P01

**C245E**

C245159E, C245158E, C245160E, C245155E, C245735E, C245161E, C245070E, C245968E, C245156E, C245354E, C245157E

**C120**

Chip Components

C120002, C120902, C120006, C120004, C120012, C120011, C120001, C120003, C120005, C120002, C120010, C120014, C120004, C120006, C120027, C120031, C120028, C120029, C120030, C120019, C120023, C120021

**C210**

Through-hole and cable soldering

C210018, C210033, C210038, C210025, C210015, C210017

C210024, C210022, C210008, C210007

**C420**

Chip Components

Blade type

QFP & PLCC

Dual in-line

C420271, C420272, C420283, C420288, C420289, C420279, C420273, C420274, C420275, C420276, C420277, C420278, C420285, C420286, C420287

**C470**

C470013, C470036, C470014, C470040, C470035, C470017, C470009, C470002, C470015, C470004, C470016, C470058, C470039, C470006, C470007, C470019, C470003, C470056

C470064, C470059, C470023, C470063, C470061, C470051, C470027, C470021, C470022, C470044, C470057, C470005

Through-hole and cable soldering

C470048, C470049, C470033, C470030, C470037, C470041, C470031, C470047, C470010, C470042, C470046, C470050, C470051, C470052

**C360**

C360001, C360002, C360003, C360004, C360007, C360006, C360011, C360012, C360013, C360014

**C560**

C560001, C560002, C560014, C560003, C560009, C560005, C560006, C560018, C560007, C560015, C560011, C560013, C560015, C560013

CO00000 High Thermal Efficiency Cartridges: These are characterised by their optimised tip geometries which achieve improved thermal efficiencies of up to 40%.

CO00000\* These cartridges are 20mm longer than normal cartridges for easier access to difficult-to-reach joints.



