

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.

CE ESD safe

All JBC products comply with CE standards and ESD recommendations.

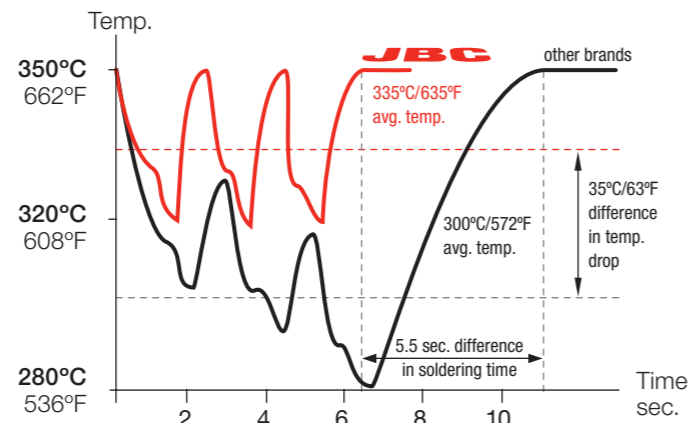


JBC Technology

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



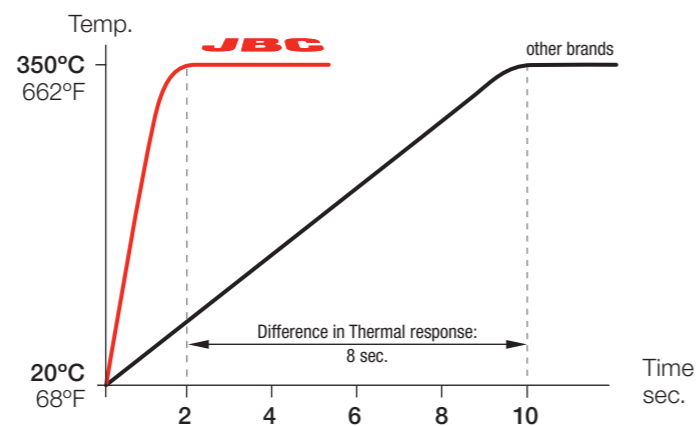
Tips with JBC Technology only drop 30°C (54°F) where others drop as much as 70°C (126°F).

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

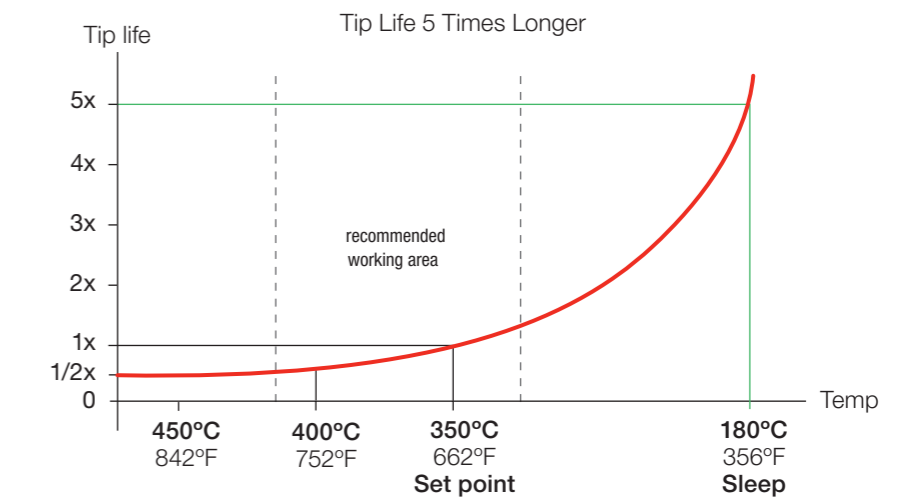
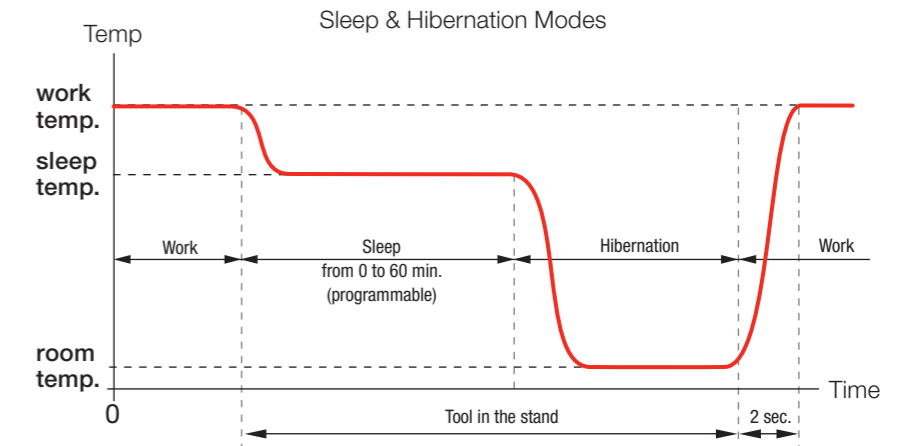
Sleep Mode **automatically lowers tip temperature** below the solder melting point when the tool rests in the stand. **It prevents the dissolution of the iron tip coating into molten solder.**

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**.

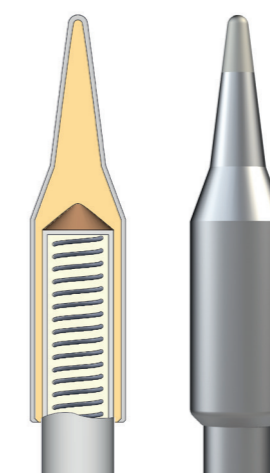
Longer Tip life

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**

Elevate your possibilities with our new solutions

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:



Cartridge Exchanger & Holder

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

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.

Safety Cap

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

Tools are designed to perfectly lie in the operator's hand, making the soldering process even **more comfortable**.

New ways to explore and expand your possibilities

Revolutionize your soldering experience with an ergonomic iron designed to provide unique **freedom in usage and versatile functionality** for an optimized performance.

B-100

100 SMD Soldering joints
Lightweight
35 gr

Application

LAB & individual jobs



B-500

500 SMD Soldering joints
Enhanced Performance
75 gr

Application

Production & intensive work

Battery-Powered Stations



B-IRON 100

Light Battery-Powered Soldering Station
Specially designed for R&D and individual jobs.

Tool weight: 35gr
Output peak power: 24W

B-IRON 500

Battery-Powered Soldering Station
Specially designed for electronics production and intensive jobs.

Tool weight: 75gr
Output peak power: 24W

B-IRON DUAL 500

Dual Battery-Powered Soldering Station
Allows continuous work in mass production.

Tool weight: 75gr
Output peak power: 24W

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

USB-A
Software updating & exporting graphics

Tool in use

Consult the comprehensive **help** for each parameter

Display different ports in use

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

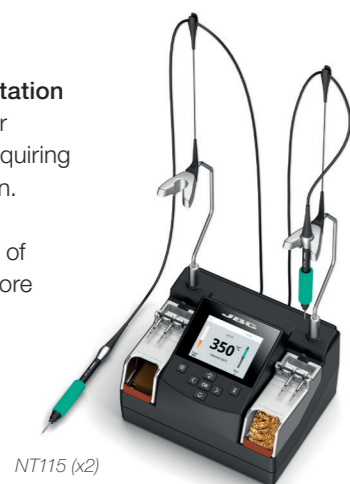
Designed for offering maximum control working under the magnifying glass

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.



ALE250

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

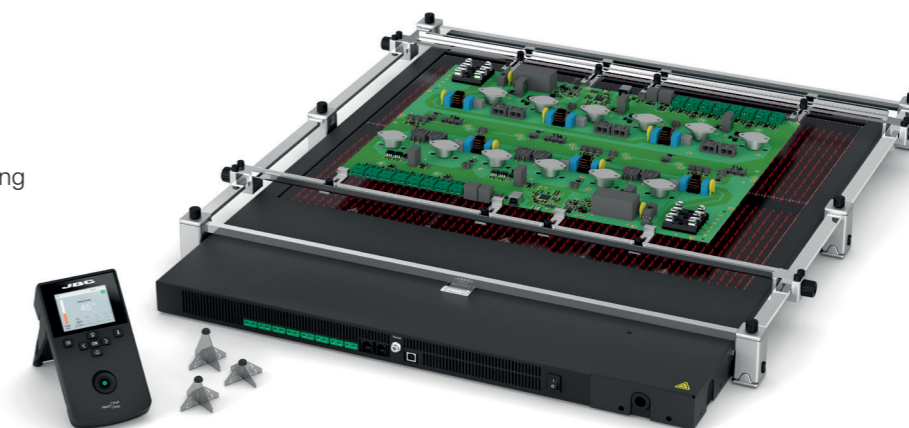
Forget about thermal shock

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 Multiaxis 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 antispash 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 4.5 m / 177.17 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: C115126, C115101, C115103, C115106, C115107, C115124, C115118, C115105, C115110, C115116, C115117, C115108, C115125, C115113, C115114

Stainless steel tip: C115115, C115111, C115112, C115120, C115109, C115127, C115128

Spoon: C115128

High-Thermal Performance: C115213, C115214, C115221, C115222, C115223, C115211, C115212

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, C245933, C245107

C245747, C245710, C245905, C245405, C245945, C245795, C245784, C245793, C245912, C245056, C245951, C245766, C245301, C245102, C245797, C245931, C245938, C245748, C245749, C245962, C245963, C245946

Hoof tip with reduced tinned surface, ideal for touchup

C245064, C245102, C245797

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

Chip Components: C245016, C245017, C245150, C245018, C245019

Knife: C245789, C245939, C245765, C245955

Dual In Line: C245220, C245304, C245250, C245215, C245221, C245226

QFP & PLCC: C245223, C245224

Blade: C245914, C245752, C245913, C245949, C245776, C245792

Cartridges with chrome finish, designed for use in plastics: C245138, C245123, C245121, C245109

Cartridge with chrome finish, designed for use in plastics: C245053, C245052, C245054

PTFE coated tip: C245119, C245772

Nickel tip for (High Melting Point) soldering: C245790, C245785, C245763, C245760

Through-hole and cable soldering: C245754, C245751, C245567

Through-hole drag soldering: C245754, C245751, C245567

Ideal to reach joints: C245764

Solder Pot: C2455P01

C245E

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

C120

Chip Components: C120002, C120902, C120006, C120004, C120012, C120011, C120001

Dual in-line: C120003, C120005, C120007, C120008, C120009, C120010

C210

C210020, C210009, C210016, C210001, C210013, C210003, C210005, C210002, C210010, C210014, C210004, C210006, C210027, C210031, C210028, C210029, C210030, C210019, C210023, C210021

C250

C250420, C250401, C250402, C250403, C250409, C250410, C250404, C250405, C250406, C250412, C250418, C250407, C250408, C250411, C250413, C250414, C250415

Through-hole and cable soldering: C210018, C210033, C210038, C210012, C210025, C210015, C210017

C420

Chip Components: C420271, C420272

Blade type: C420283

QFP & PLCC: C420288, C420280, C420279

Dual in-line: 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

Through-hole and cable soldering: C470064, C470059, C470023, C470063, C470061, C470051, C470027, C470021, C470022, C470044, C470057, C470046, C470050, C470055, C470056

Through-hole and cable soldering: C470048, C470049, C470033, C470030, C470037, C470041, C470031, C470047, C470010

Solder Pot: C470SP01, C470SP42

C360

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

Pad Cleaners Tips: C360011, C360012, C360013, C360014

C560

C560001, C560002, C560014, C560003, C560009, C560005, C560006, C560018, C560007, C560015, C560013, C560017, C560011, C560012, C560013, C560017

Pad Cleaners Tips: C560011, C560012, C560013, C560017

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.

