

# 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 catalog.



All JBC products comply with CE standards and ESD recommendations.

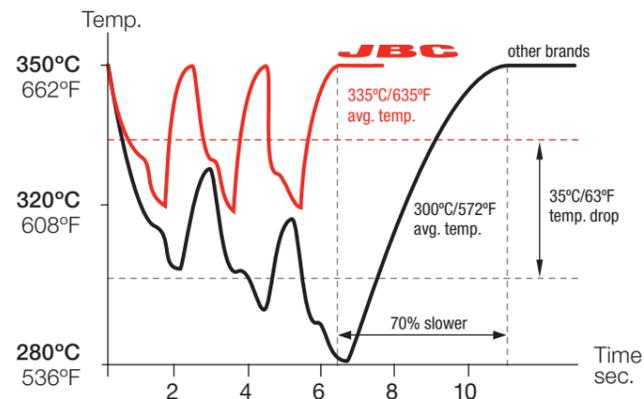


# JBC Technology

## 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



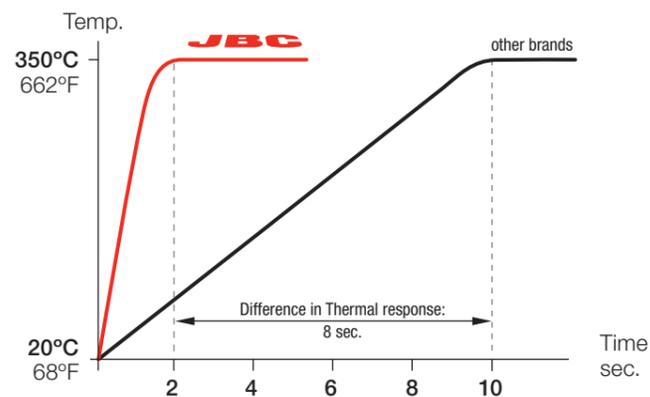
Tips with JBC Technology only drop 30°C (54°F) where others drop as much as 70°C (126°F).

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

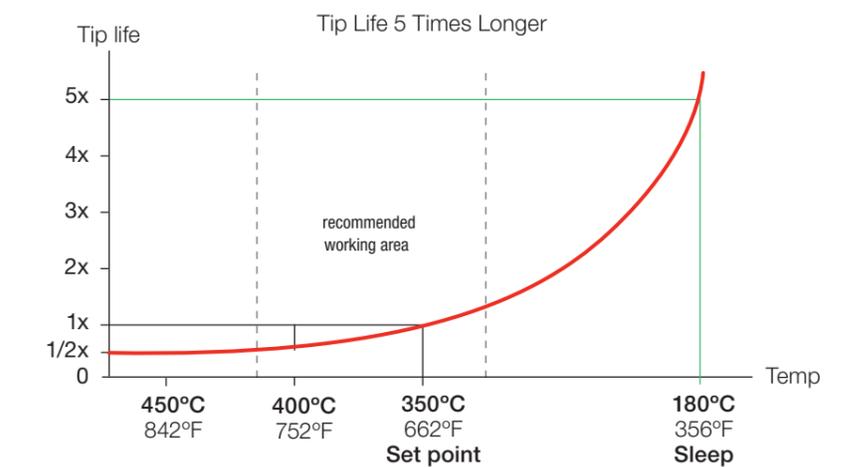
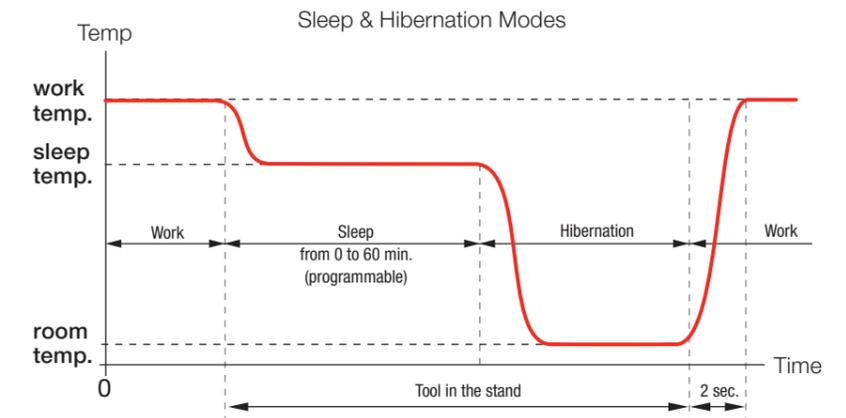
Sleep Mode **automatically lowers tip temperature** below the solder melting point when the tool rests in the stand. **It prevents the dissolution of the iron tip coating into molten solder.**

### 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.**

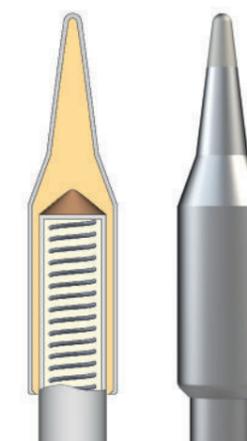
### Longer Tip life

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 Battery-Powered System

The easiest way of soldering

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

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.



## Battery-Powered Stations



**B-IRON NANO**  
**Nano Soldering**  
High-Precision Soldering in hard-to-reach areas.



**B-IRON TWEEZERS**  
**Rework**  
Highest precision when reworking SMDs.



**B-IRON 100**  
**Light Soldering**  
Designed for R&D and individual jobs.



**B-IRON 500**  
**Soldering**  
For electronic production and intensive jobs.



**B-IRON DUAL NANO**  
**Nano Soldering**  
Unparalleled precision on two workbenches simultaneously.



**B-IRON REWORK**  
**Rework**  
Rework SMDs without stopping.



**B-IRON DUAL 500**  
**Dual Soldering**  
Allows continuous work in mass production.

# Compact Stations

A complete Soldering System

Each station 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.

**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.**

**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.



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



**CDS**  
**Precision Soldering**  
Ideal when working on **populated PCBs** or under a magnifying glass.



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



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



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



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

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



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



**DME**  
**4 Tools**  
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

Ensure your **tools are always ready to work**

Bis zu 150 W pro Werkzeug

**Optimize work** with high performance

**Configure tool settings** for each port

Rework process with DDE 2-Tool Control Unit

Handle multiple tasks with DME 4-Tool Control Unit



**DDPE**  
Precision Rework Station  
Fast and precise rework for SMD components and small outline ICs.



**DDSD**  
Rework Station with DT530  
Ideal for SMDs, high-power tasks, desoldering through-hole components and removing excess solder.



**DDSE**  
Rework Station with DR560  
For both SMD and high-power applications and desoldering through-hole components.



**DMSS**  
Rework Station with DT530  
Versatile for SMDs and high-power tasks, ideal for desoldering through-hole components.



**DMSE**  
Rework Station with DR560  
A solution for both SMDs and high-power applications, as well as for desoldering.



**RMSD**  
Rework System with DT530  
The fastest but also the safest option for soldering and rework, including the use of hot air.



**RMSE**  
Rework System with DR560  
It provides the fastest and safest solution for soldering and rework, including hot air applications.



**DMPSD**  
Complete Rework Station with DT530  
Perfect for precise soldering, SMD rework and handling high-power tasks, ensuring efficient desoldering of through-hole components.



**DMPSE**  
Complete Rework Station with DR560  
Precise soldering, SMD rework and high-power tasks, ensuring efficient through-hole desoldering.

## 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

The best solution for **soldering SMDs** requiring the highest precision.

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



### NASE

#### 2-Tool Rework

The best solution for **rework SMDs** requiring the highest precision.

It has a peak power of 14 W 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

The perfect combination of **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

Precision hot air station capable of **reworking small and medium SMDs**. It has a peak power of 300 W 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

A high-powered hot air station capable of **reworking all types of SMDs**. It has a peak power of 700 W 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**  
The ideal solution for the soldering process requiring high productivity.

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



ALE250

**SF**  
**Automatic Solder-Wire Feeder**  
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**  
**Soldering**  
The most powerful soldering unit of the JBC Range.  
It has a peak power of 250 W.



T470

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



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



**PHNEK**  
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.



**PHSMK**  
For PCBs up to 13 x 13 cm / 5 x 5" with PSS  
A solution to rework small / medium PCBAs, such as the ones commonly used in electronics industries. It features PSS for fast, easy and precise PCB changes.



**PHSEK**  
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.



**PHBEK**  
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.

**PHXLEK**  
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.



# 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

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



WS140

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



**CLMS**  
**Automatic Junior**  
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**  
A **complete cleaning system** with splashguard and antispash membrane to keep the work area clean and free of solder particles.

# Fume Extractors

FAE1 is the most effective solution to avoid exposure to solder fumes

## FAE1

**With FAE1100 for 1 Workbench**  
FAE1 only operates when soldering and features a unique vacuum system integrated into the stand.

Each arm offers 80 m³/h aspiration, optimizing fume extraction for two workbenches. It surpasses industry standards, ensuring higher air quality and compliance.



# 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.



## ESD PRODUCT LINE

### ESD Table Mats

Protect the operator and equipment from static electricity discharges by draining the static electricity from objects placed on its surface.



## 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.



## TWEEZERS

### for precision in electronics

Thanks to the tip design, these are well suited, especially for SMT.



## CUTTERS & PLIERS

### for electronics

Suitable for a wide range of electronics applications. Full line designed according to ESD safety regulations.

# 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, C245933, C245107

C245775 A = 3.2 x 1.2 (0.126 x 0.047)  
 C245755 A = 4 x 0.8 (0.157 x 0.031)  
 C245756 A = 4.8 x 1 (0.189 x 0.039)  
 C245908 A = 4.8 x 1.5 (0.189 x 0.059)  
 C245708 A = 4.8 x 1.5 (0.189 x 0.059)  
 C245967 A = 5 x 1 (0.197 x 0.039)  
 C245069 A = 5 x 1.7 (0.197 x 0.067)  
 C245966 A = 6.6 x 1.8 (0.259 x 0.071)  
 C245030 A = 0.3 (0.012)  
 C245032 A = 0.4 (0.016)  
 C245036 A = 0.5 (0.020)  
 C245930 A = 0.5 (0.020)  
 C245001 A = 0.6 (0.024)  
 C245937 A = 0.6 (0.024)  
 C245957 A = 0.8 (0.031)  
 C245903 A = 0.8 (0.031)  
 C245403 A = 0.9 (0.039)  
 C245943 A = 0.9 (0.039)  
 C245933 A = 1.7 (0.070)  
 C245107 A = 2.2 (0.090)  
 C245107 A = 3 (0.118)

Hoof tip with reduced tinned surface, ideal for touchup

C245064 A = 0.13 (0.0051)  
 C245102 A = 0.2 (0.0079)  
 C245797 A = 0.3 (0.0149)

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

Knife

Dual In Line

QFP & PLCC

Blade

Cartridges with chrome finish, designed for use in plastics

C245732, C245761, C245034, C245029, C245126, C245786, C245929, C245935, C245904, C245259, C245260, C245627, C245628, C245067, C245916, C245917, C245150, C245018, C245019

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

C245E Cartridges have a reinforced protection on the tip that provides a longer life with a small reduction of thermal efficiency.

**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

C120018 A = 3.4 (0.134)  
 C120033 A = 2.5 (0.098)  
 C120038 A = 0.8 (0.031)  
 C120025 A = 0.7 (0.028)  
 C120015 A = 0.21 (0.083)  
 C120017 A = 0.2 (0.079)

**C210**

Through-hole and cable soldering

C210018, C210033, C210038, C210025, C210015, C210017

C210018 A = 3.4 (0.134)  
 C210033 A = 2.5 (0.098)  
 C210038 A = 0.8 (0.031)  
 C210025 A = 0.7 (0.028)  
 C210015 A = 0.21 (0.083)  
 C210017 A = 0.2 (0.079)

**C420**

Chip Components

Blade type

QFP & PLCC

Dual in-line

C420271, C420272, C420283, C420288, C420280, 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

Through-hole and cable soldering

C470048, C470049, C470033, C470030, C470037, C470041, C470031, C470047, C470010, C470042, C470044, C470046, C470050, C470051, C470027, C470021, C470022, C470044, C470057, C470005

**C360**

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

**D530**

**C560**

D530017, C560017, D530014, C560014, D530009, C560009, D530006, C560006, D530018, C560018, D530007, C560007, D530015, C560015, D530004, C560004, D530005, C560005

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.

