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.

CE
ESD safe

All JBC products comply with CE standards and ESD recommendations.

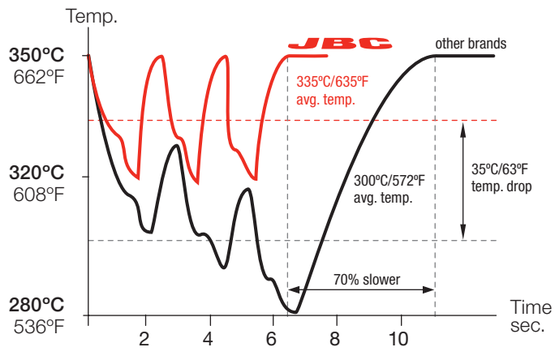
BORN FOR LEAD FREE

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



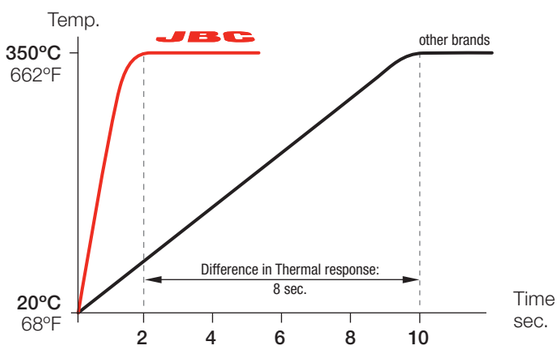
Tips with JBC Technology only drop 30°C (54°F) where others drop as much as 70°C (126°F).

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.**

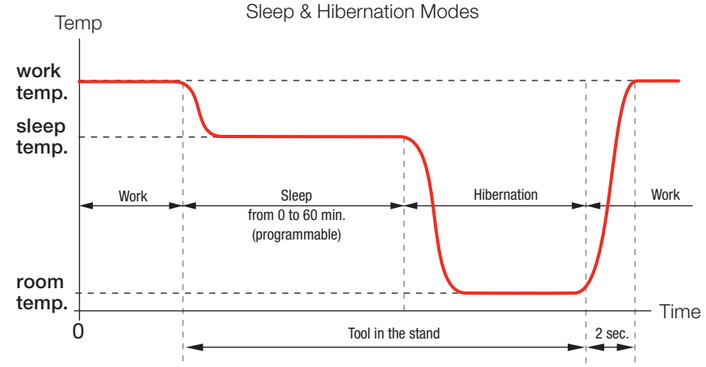
Hibernation Mode

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**.

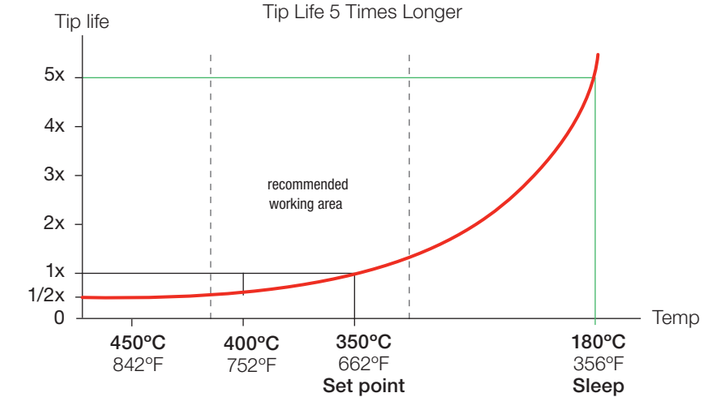
Longer Tip life

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

Sleep & Hibernation Modes

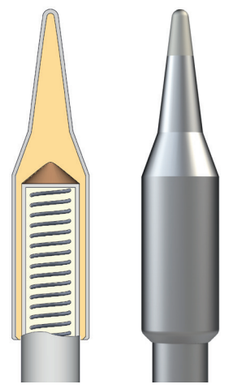


Tip Life 5 Times Longer



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:

GET IT ON Google Play

Download AppStore

Cartridge Exchanger & Holder

Quick Cartridge Exchanger System avoids damage of the tips and allows you to have the **cartidges 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**.

JBC
The Soldering Co.

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·NANO *B·TWEEZERS* *B·100* *B·500*

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

Work position

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

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.

Intelligent Heat Managament

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.

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**.

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Each station meant for a specific purpose

NT115

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

T245

T210

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

CDB
Soldering
Suitable for general electronics applications.

AP250

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

AM120

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

DS360

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

T245

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.

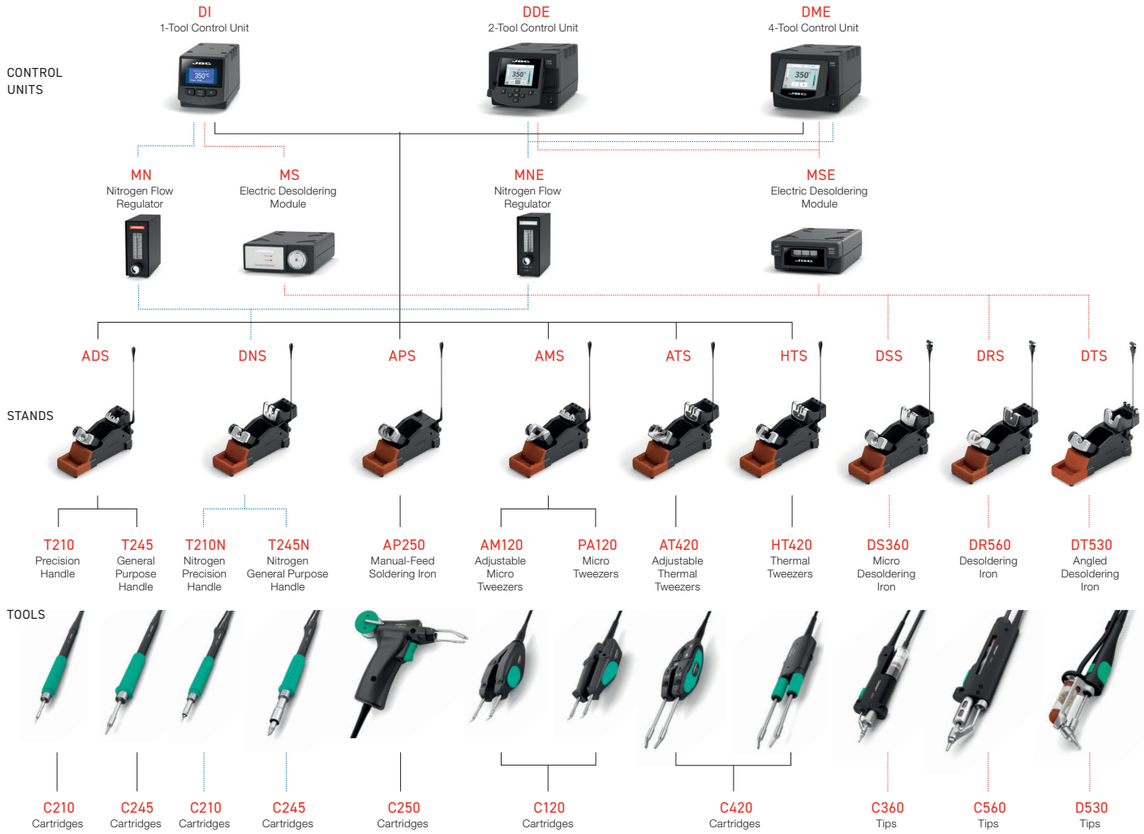
Tool Presets
Set parameters for each tool to automatically apply them.

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.

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

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**.

Handle multiple tasks with DME 4-Tool Control Unit

DMSD
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.

NT115 (x2)

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.

AN115 & NT115

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.

NH

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.

TET

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.

JTT

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.

JTT

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

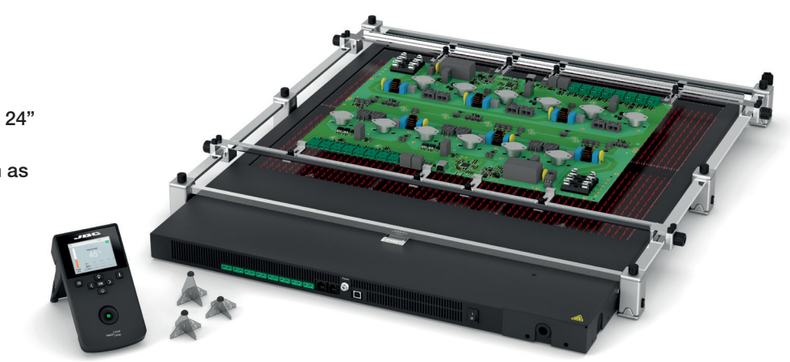
PHNEK
For PCBs up to 11 x 7 cm / 4 x 3”
The best solution to **rework small PCBAs, such as the ones commonly used in smartphones**.

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 800ºC / 1470ºF

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 antisplash 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.

PSS

Multiaxis Rotative PCB Support

Ensures fast and precise PCB handling in any position. Turn your PCB upside-down (180º) in one movement. Designed to simplify your work, with or without preheater.

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.

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.

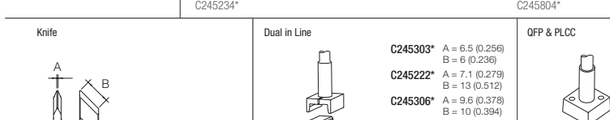
Cartridge Map

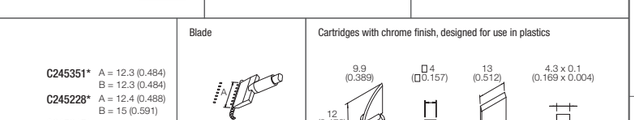
Over **500** Cartridges & **Customized** models

See the **full range** on our website

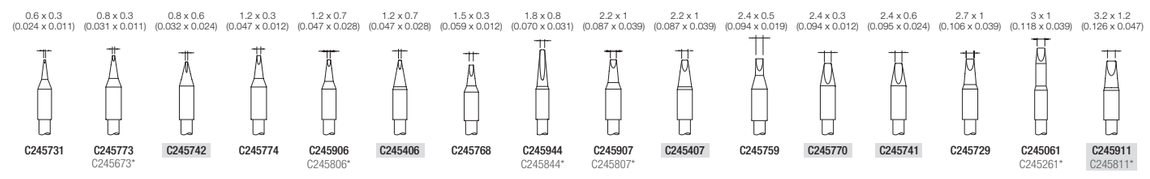
JBC The Soldering Co.

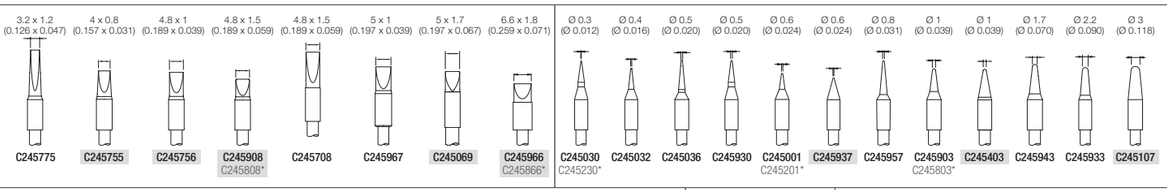
C115

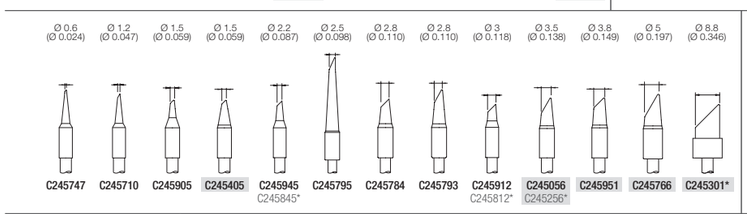




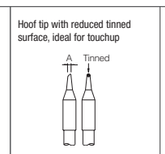
C245

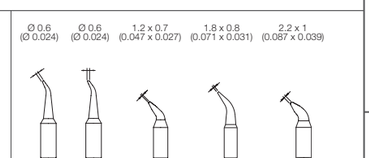


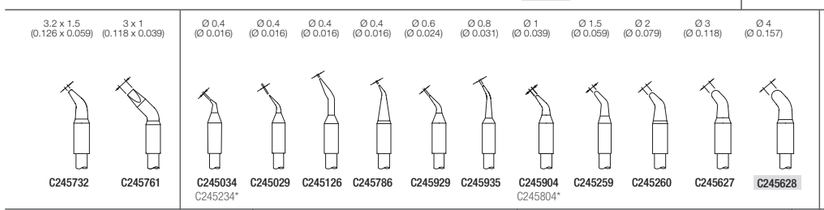


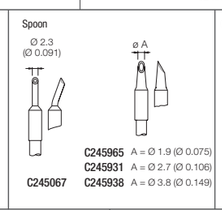


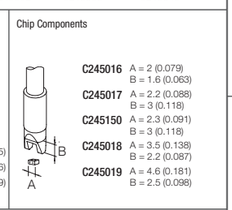
Hoof tip with reduced tinned surface, ideal for touchup

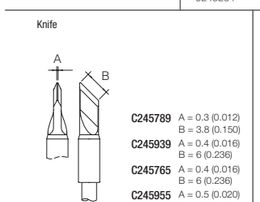


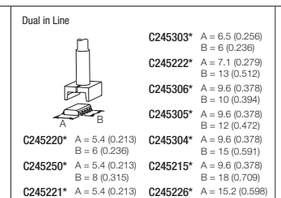


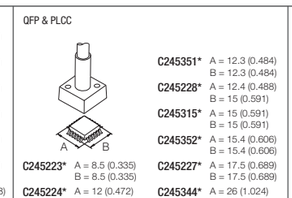


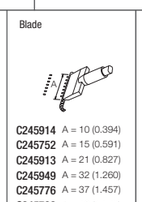


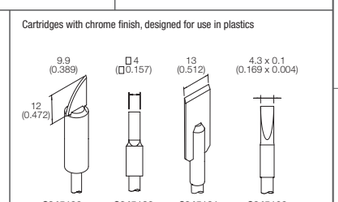


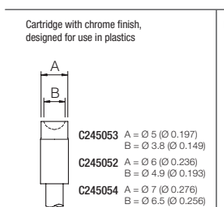


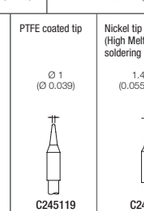


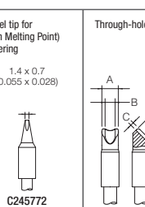


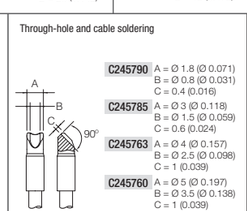


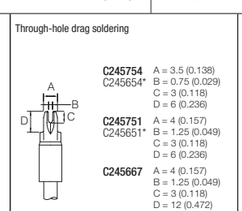


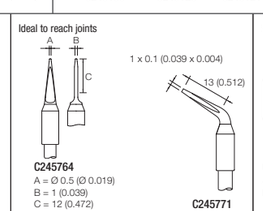


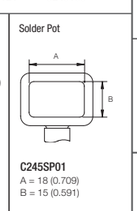








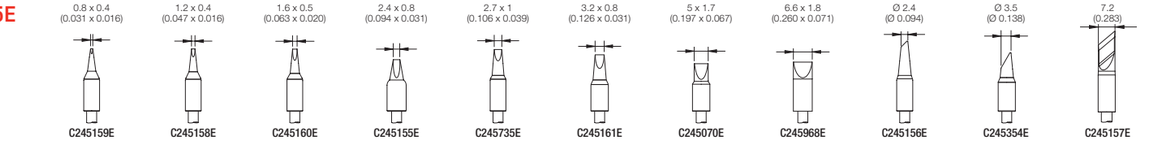




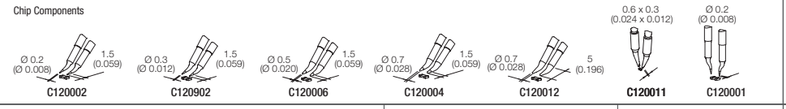
C000000 **High Thermal Efficiency Cartridges: These are characterised by their optimised tip geometries which achieve improved thermal efficiencies of up to 40%.**
C000000* These cartridges are 20mm longer than normal cartridges for easier access to difficult-to-reach joints.

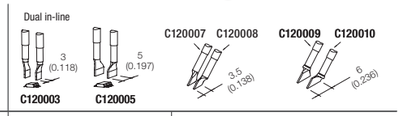
C245E

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



C120





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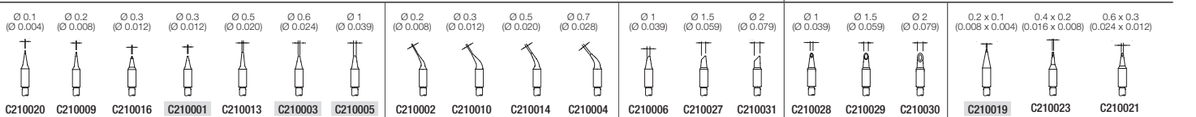
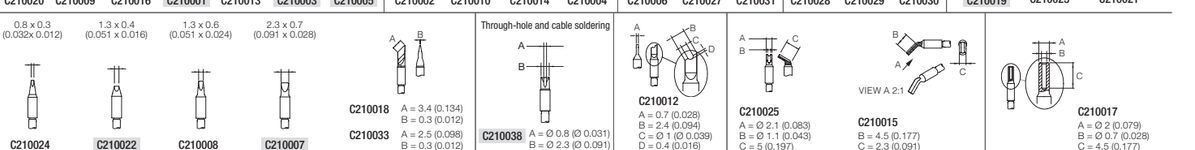
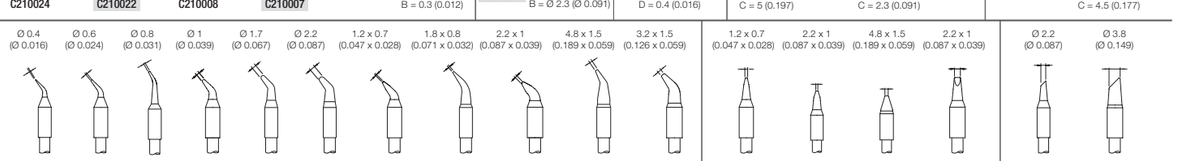




C250



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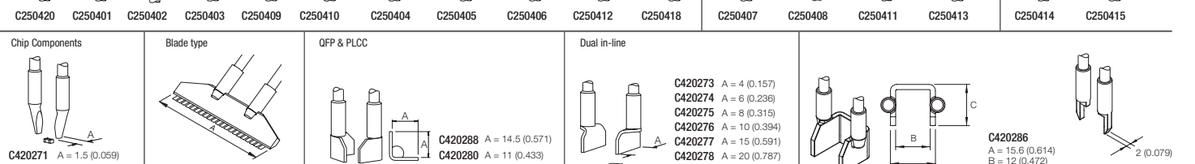
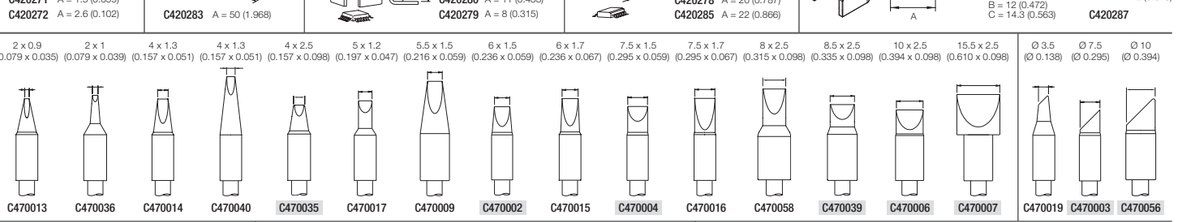
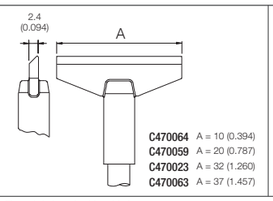
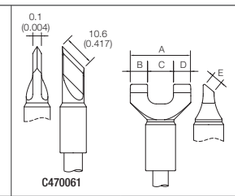
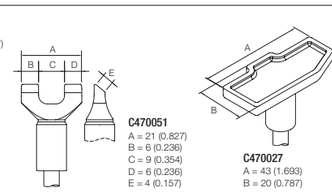


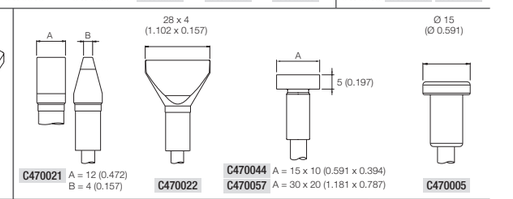
C470

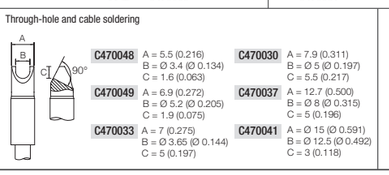


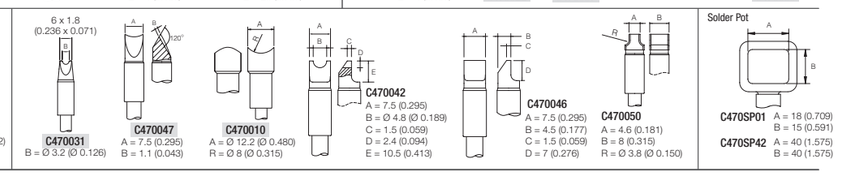




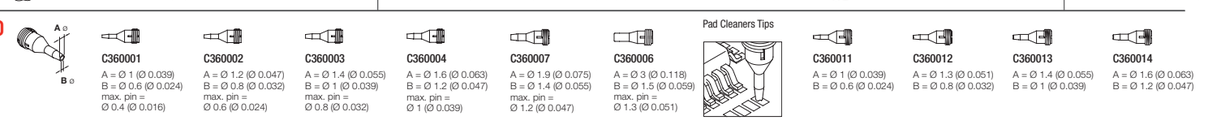




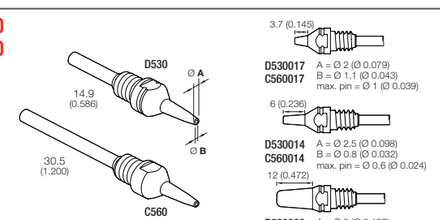


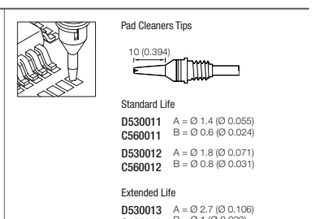


C360



D530 C560





millimeters / (inches)

ESD safe

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