

# **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.

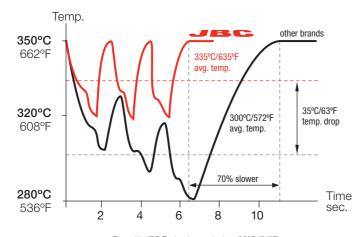


# **JBC** Technology

### 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).

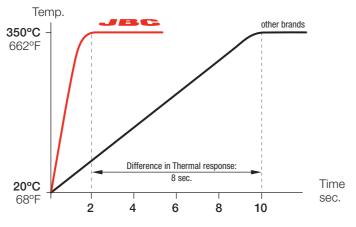


### **Productivity**

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

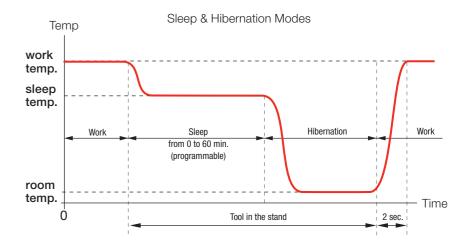
Sleep Mode automatically lowers tip temperature below the solder melting point when the tool rests in the stand. It prevents the dissolution of the iron tip coating into molten solder.

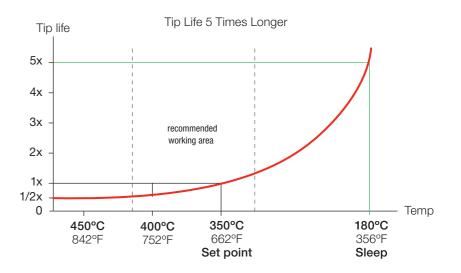
#### **Hibernation Mode**

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.

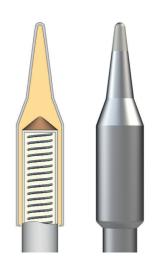




# Cartridges with long life & extended tip life

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:







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



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.



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
Battery-Powered Nano
Soldering Station
High-Precision Soldering

in hard-to-reach areas.



B-IRON TWEEZERS
Battery-Powered
Rework Station
Highest precision when
reworking SMDs.



B-IRON 100 Light Battery-Powered Soldering Station Designed for R&D and individual jobs.



B-IRON 500
Battery-Powered
Soldering Station
For electronic production
and intensive jobs.



B-IRON DUAL NANO
Battery-Powered Nano
Soldering Station
Unparalleled precision on two

workbenches simultaneously.



B-IRON REWORK
Battery-Powered
Rework Station
Rework SMDs without stopping.



B-IRON DUAL 500
Dual Battery-Powered
Soldering Station
Allows continuous work in mass
production.

# **Compact Stations**

A complete Soldering System

Everything you need in a **minimum footprint** 

Each unit meant for a **specific purpose** 



### Soldering

#### CDN

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

#### 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.

#### СΔ

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

The Soldering Co.







#### Rework

#### CP

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

#### CS

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

#### Soldering Assistant

#### CDE

**Soldering-Assistant Station** 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

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.



Display different ports in use

# Modular System Map



#### Control Units



#### DI

requirements.

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

DDE
2-Tool Control Unit
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-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 150 W per tool.

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



#### DDSE

#### 2-Tool Rework Station

This station presents an answer for both SMDs and high-power applications. Perfect for desoldering jobs of through-hole components and removing excess solder after SMD rework. It has a peak power of 150 W 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 electronical production with the highest thermal efficiency.



#### 4-Tool DMF

#### DMSE

#### 2-Tool Rework Station

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

It has a peak power of 150 W 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 jobs with medium to high-power needs** and **desoldering through-hole components and removing excess solder after SMD rework**. It consists of two handles, a desoldering iron and precision tweezers to assist you in your work. It has a peak power of 150 W 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 electronical 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



#### NASE 2-Tool Re

**2-Tool Rework Station** 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 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 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 Hot Air Station** 

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



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.



# **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



#### HDEK

power of 250 W.

Heavy Duty Rework Station

Designed to reduce the soldering time in applications that require a large amount of heat transfer.

It has a peak



#### 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

# **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.

# **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.



Manual Tip Cleaner 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

#### Fume Extractor with FAE1100 for 1 Workbench

FAE1 only operates when soldering and features a unique vacuum system integrated into the stand.

Each arm offers 80 m<sup>3</sup>/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



#### 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.



#### 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

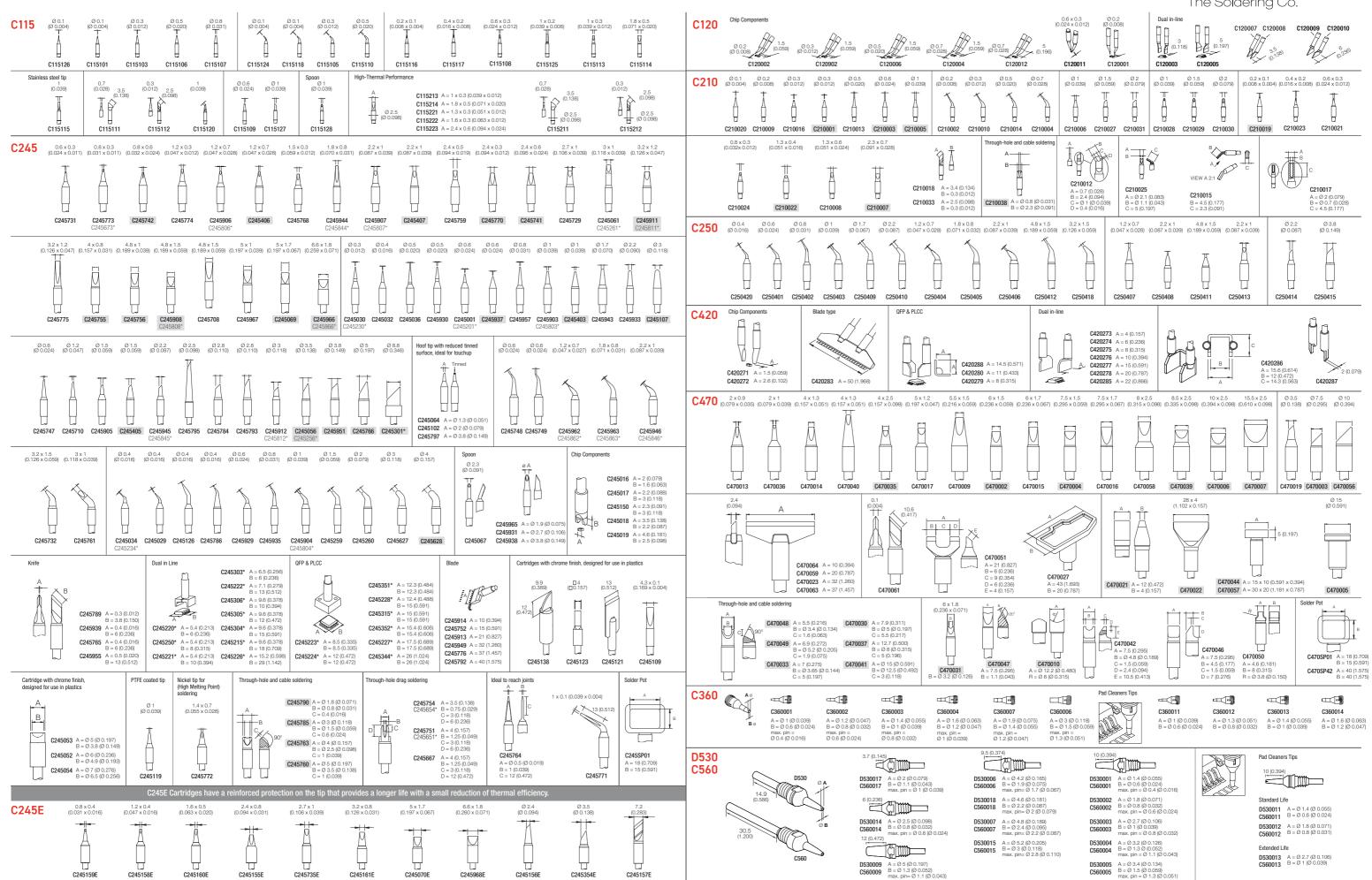
Suitable for a wide range of electronics applications. Full line designed according to ESD safety regulations.

# **Cartridge Map**

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

See the **full range** on our website





C245354E

C245968E

C245156E

C245157E

C245155E

C245735E

C245161E

C245070E

C245160E

C245159E

C245158E



