

## HOW TO SELECT A SOLDERING IRON

Tradeflame have a large range of soldering irons available, and choosing the appropriate soldering iron depends primarily on the way you'll use it as well as the type of projects you intend to do.

When you're searching for a soldering iron the three most important considerations are;

- **TEMPERATURE**
- **WATTAGE**
- **SOLDERING IRON TIP**

(Note: most soldering irons have interchangeable tips to suit an array of projects)



### WHEN DUCT TAPE JUST WONT CUT IT...

We love duct tape, but sometimes we need something stronger to join metal together, that's when we turn to welding or soldering, but what's the difference?

#### WELDING

Welding is the process by which you join two metals by melting them together.

#### SOLDERING

Soldering is the process by which you join two metals by melting another metal to flow and fill the gap between them. The melting metal is called solder. And the hand-operated tool you use to melt the solder is called a soldering iron.

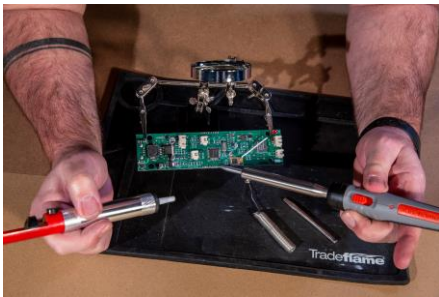
## SOLDERING IRON USES:

Know your soldering goals before you select and iron, do you need the iron for...

- A specific purpose?
- Versatility for multiple purposes?

Typical Soldering Iron uses;

- Arts & Crafts
- Solder mosaics and stained glass
- Jewellery making and repair
- Joining cable wires
- Soldering metal parts
- Soldering circuit boards / forming a permanent connection in a circuit board
- Plumbing e.g. closing small gaps between metal pipes
- Altering materials like plastic by making small holes with controlled heat
- Plastic welding applications



## SOLDERING IRON FEATURES:

When choosing a soldering iron, there are five features that will be the main determiner of what you eventually pick:

- Temperature control
- Wattage
- Tip size and tip shape
- Style/Type
- Mobility/Portability

## LET'S TALK ABOUT WATTAGE:

A soldering iron's wattage gives an indication of how fast it gets hot and how long it will stay hot, therefore, wattage is inarguably one of the most important factors to take into consideration when choosing a soldering iron. **THINK OF WATTAGE AS POWER** and **THINK ABOUT HOW MUCH POWER YOU'LL NEED** from your soldering iron. This is vital when it comes to using them on different materials and situations such as circuit boards.

Higher wattage soldering irons have more power, thus making them better suited for heavy-duty projects than their low-wattage counterparts. Higher wattage doesn't mean that the iron provides more heat; rather, high-wattage soldering irons have more power on reserve, enabling them to heat for longer periods.

The most common soldering irons used in electronics are 25 to 60 watts and these days, most popular soldering irons used are between 30 to 60 watts. While this does not mean that soldering irons that have higher wattage can apply more heat to the solder, it simply means that more power can be used by the soldering iron - so generally, soldering irons with higher wattage (30W and above) are better.

You do not want something that has too high of a wattage since you do not want to burn any important components to a crisp. At the same time, you should not get a soldering iron with too low a wattage since it might be inconsistent when it comes to the heat.

## WHAT KIND OF SOLDERING IRON – 30W OR 60W?

One of the most common questions is whether to use a 30W or 60W soldering iron. The two are not that different, but the 30W difference between them definitely makes for a substantial difference in terms of power and temperature control, among other things.

A 30W soldering iron is preferred for small appliances and most modest electronics while a 60W soldering iron is usually reserved for medium-sized appliances or applications requiring more power.

You have to make sure that you have the correct soldering iron before you start heating things up or you run the risk of damaging any fragile parts and components that you might encounter during the process.

## LET'S TALK ABOUT STYLE:

Selecting the right soldering iron style for the job is important and can prevent any potential mishaps that could occur when using the wrong one.

There are two main types of soldering irons:

- Soldering Irons (Electrical, 240V, 12V, Lithium-Ion, disposable battery)
- Soldering Torches (Powered by Butane gas)

## THE BASICS OF ELECTRICAL SOLDERING IRONS:

Regardless of which Trade**flame** model you use, soldering irons are typically used for smaller soldering jobs that require more precision than actual power. This is why it is a lot more common to see them being used on electrical applications like circuit boards. You get a lot more manoeuvrability with them, so you can solder the right components without damaging anything else around them.

Regular soldering irons work simply by plugging them to a power source. If you want something portable, you can always go for a battery operated, lithium-ion or refillable butane gas powered soldering iron.

## THE BASICS OF BUTANE POWERED SOLDERING IRONS:

Trade**flame** butane gas soldering irons have a usage time of at least 90-100 minutes which is enough time for continuous usage on precision-based applications such as small electronics.

The soldering iron is designed to run with easily accessible butane and some models come with a clear sight window to indicate gas levels.

The soldering iron also incorporates flame adjustment, gas on/off switch, a continuous on switch and a gas kill switch to quickly extinguish gas flow as well as a safety lock button. The torch can be use for soldering or as a small blow torch. The torches often come with additional accessories and have been designed to ensure the handyman or tradesman as everything needed to undertake jobs such as soldering, workshop repairs, electronics repairs, jewellery and even small automotive jobs. A great portable soldering torch option that can be used anywhere.