SOLDERING JUST GOT
A WHOLE LOT SMARTER!

We delve into the world of the WXsmart station to see how it's changed the future of soldering.

As one of the market's most connected, controlled and secured hand soldering solutions, it's been a runaway success since its launch by Weller® a year ago.

What is it about this smart soldering platform that has made it so successful?

For a start, it's been developed through listening to customers, to understand and identify their needs – so, let's take a look and explore the benefits:

- Connection – to begin with, there is maximum connectivity, which supports IoT standards to give full traceability. Easy to set up and integrate into your own IT environment it offers a choice of connection from WiFi, LAN, USB or RS 232. It's also mobile-enabled to give easy remote access.

- Security – with the collection of data it's imperative that the network is protected, an important consideration especially in industries such as aerospace or military. The WXsmart is the first system to have built-in cyber security with the highest standards (TLS encryption) and two-factor authentication, to help prevent costly downtimes,.

- Smart – this is more than a station, it really is the hub of the workbench, consolidating all soldering applications into one platform. Tackling soldering from the smallest component to heavy duty applications, the control unit can also control multiple devices at the same time, for example rework module WXair, fume extraction, preheating plate, soldering bath and calibration unit.

- Control – it gives you Total Process Control (TPC), right from the tip to the station itself. WXsmart gives the administrator total process control of an individual operator's account with password protection, so you're secured against unauthorised access. This enables you to restrict access and control various parameters, such as temperature lock, tool lock and tip lock.

Compatibility and flexibility are key to the station, so there's no need to upgrade your existing WX tools and accessories. It offers backwards compatibility of tips, tools for soldering and desoldering, as well as hot-air applications - just upgrade or choose to add to, as and when you need – all helping to future-proof investment.

Smart Tools

Digital Irons

Parameters such as standby temperatures and automatic switch-off times can be easily stored in the soldering iron. They only need to be stored once and the iron can use them with any WX station. These have been designed to incorporate intelligent tool detection– with all parameters able to be customised.

Smart Tips

The WX smart tips are unique to the market, each containing an integrated chip which stores specific information such as unique serial number, ordering code, production date, soldering joint counter, total power consumption and more. The integrated data storage allows full traceability, including calibration history.

They have an extremely fast heat-up time of 3 seconds from 50°C to 350°C. Not only that, they have tip lock and tip off-set functionality, so that you can make sure you're using the correct dimension for the application. The tip-to-grip design means that you can change the tips really quickly, easy removal without any additional tools – even if it's 350°C – without burning your fingers.
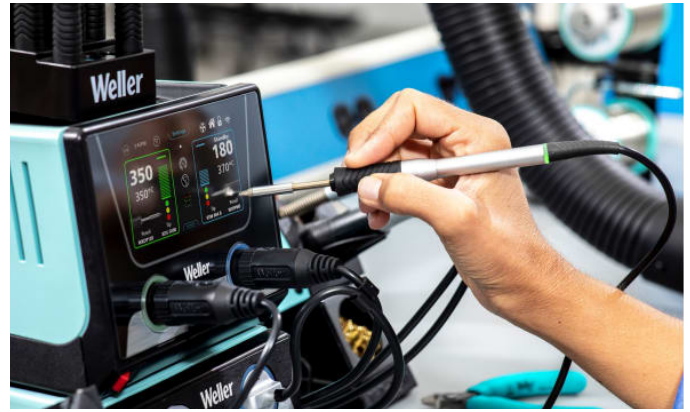
The data within the integrated chip contains the exact dimensions for the tip, making it very precise. Although this means it calibrates itself, you can still check using a temperature measurement device, with the calibration history and documentation being saved via the chip onto each tip itself.

Display

Let's not forget the impressive 4.3 inch screen. A large display that's as easy to navigate as a smart phone with 4 swipes to access information or change settings. This screen is also heat resistant and ESD safe, so if an operator accidently touches the screen with a soldering tip it will not burn through the display, as well as being optimised to also be used with ESD gloves.

Traceability

This is an important factor for a lot of industries where they need absolute traceability from beginning to end, from product design through to product sale. Traceability is required to ensure reliability of the process providing evidence when needed.

The WXsmart platform provides this complete transparency with full process documentation and high process control. This greatly reduces the risk of costly downtime.

Taking full advantage of the existing IoT standards, data is available in different formats to be easily integrated into your ERP system. The data can be transferred and stored either directly from the station with a direct connection to the MES system, collecting data via broker systems, or through the Weller Windows Application App with the possibility to store continuous data to a CSV file, or via a USB storage device.

All in all, the WXsmart soldering platform is one of the most powerful IoT soldering and rework stations in the market with 2-channels and performance up to 300W, including desoldering and hot air tool support. It really is the brain of the workbench, with the ability to connect more than 20 devices and tools to just one station – which saves time, space and money.

This is only the start, with development continuing to take place, Weller have really changed the face of soldering for the future.

Visit our website to see the full Weller range, including the WXsmart RS Stock No.: 252-8215