THE
MISSING
LINK

NEW: i-CON TRACE
IOT SOLDERING STATION

ersa

i-CON TRACE®

ONLINE   READY   SERVICE

GLOBAL. AHEAD. SUSTAINABLE.

i-CON TRACE

Complete traceability for manual soldering at last!

Manufacturers of electronic assemblies are currently facing numerous challenges – including the advancing miniaturization of the components to be processed, an ever increasing component density on the PCBs to be processed and the growing variance of different assemblies. In order to keep the overview here and to be able to continuously improve processes, traceability and precise process data documentation in assembly production are becoming more and more important.

Traceability has long been an integral and indispensable part of the machine soldering process. The situation is different with traceability in the manual reworking of assemblies with a hand soldering station. However, as soon as rework is carried out with a soldering iron, the complete documentation of the entire soldering process was previously no longer possible. For this reason, many electronics manufacturers have completely dispensed with a manual soldering process or only permitted this following elaborate special approval.

100 years after the patent application of the first electric soldering iron by company founder Ernst Sachs, Ersa has reinvented hand soldering - for the digital age. The i-CON TRACE is the world's first IoT-enabled soldering station. With its integrated WLAN, Bluetooth and network card, it can be fully integrated even into MES-controlled production processes and makes the entire hand soldering process traceable and verifiable. Discover the new IoT hand soldering on the next pages!

100 % Connectivity

With the i-CON TRACE, Ersa is offering the first soldering station specifically designed for use in a digitally networked environment and for complete traceability in hand soldering. With integrated WLAN, Bluetooth and an upgradeable network card it offers an all-new connectivity. The operating software ERSA TRACE COCKPIT is available free of charge as a download and is installed only once centrally on the customer's server. As soon as a soldering station is integrated into the company network, all mobile end devices (PC, tablet, smartphone) that are in the company network and have the appropriate authorization can access the soldering stations. Access is via web browser, e.g. Google, Chrome, Firefox, Windows Explorer. The server-based communication concept decisively facilitates the administration of the individual soldering stations by means of connectivity: Firmware updates, calibration intervals and much more can be carried out and monitored centrally from one computer.

Easy access to connected i-CON TRACE soldering stations via web browser and the principle of centralized control of firmware updates and calibration processes of individual soldering stations.
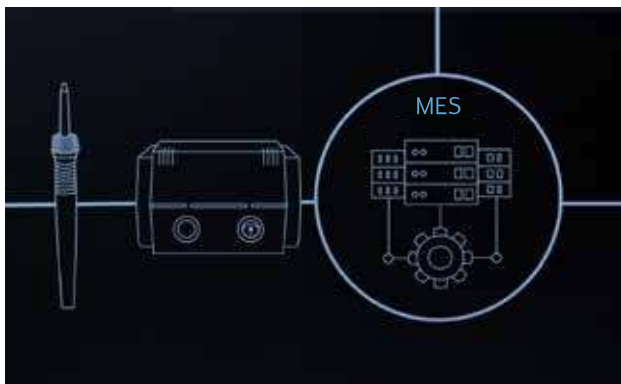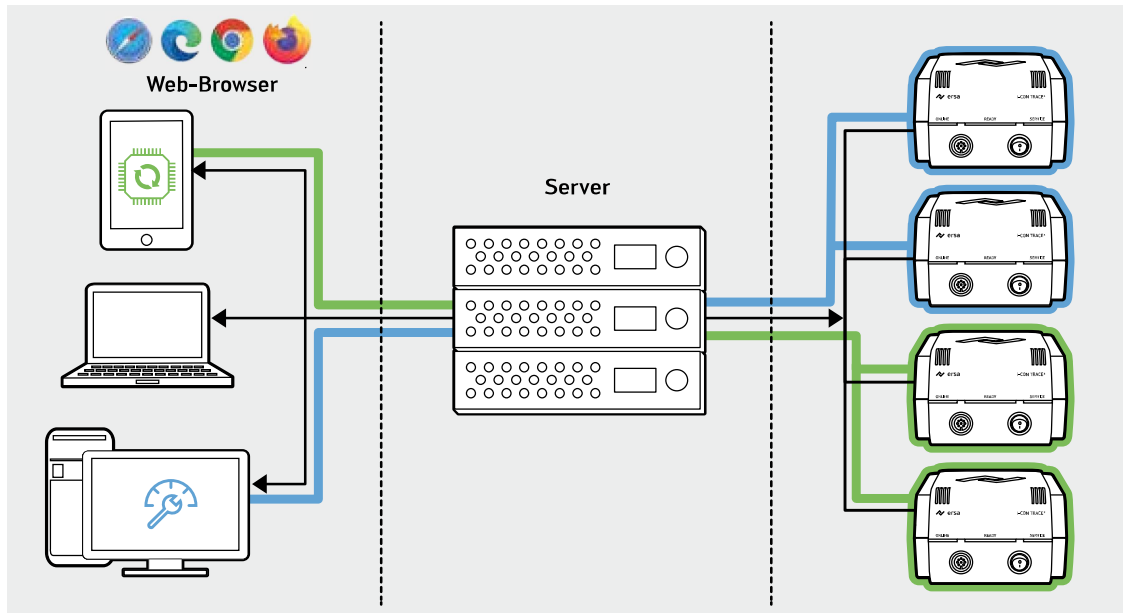
Fully comprehensive documentation/MES connection

Seamless process data documentation is a key-feature of future electrical production. The i-CON TRACE closes the last gap in the manual soldering process and can be completely integrated into MES-controlled production processes. Thus it is already possible to download a recording of the entire soldering task via a desired file format and save this in a higher-level control system. In the future, even real-time communication between the soldering station and the customer's MES will be possible.

Traceability

Specific soldering tasks can be centrally assigned to each soldering station – via MES, PC or mobile device. Thereby all essential parameters such as the soldering tip to be used, temperature, soldering wire and flux are set centrally by qualified personnel. This significantly increases process reliability: Each workpiece is soldered according to the predefined specifications. The operator can concentrate fully on soldering and the susceptibility to errors is reduced.

GREEN MEANS GO!

With only one on/off switch and three LEDs, the interface of the soldering station differs significantly from all other industrial soldering stations with their complex setting options and a display. The work for the personnel at the soldering station is significantly simplified. By means of a hand-held scanner the component, soldering tip, solder wire and flux used are recorded. In this way, the system „knows" that all the conditions for the assigned soldering task are met. The LED interface then literally gives the user the green light as soon as the predefined temperature is reached at the soldering tip. An effective measure to ensure that each solder joint is soldered with the exact temperature and the right material. Any malfunctions (e.g. defective heating element, wrong soldering tip in relation to the component) are detected by the system and reported to the operator. If all parameters are correct, the soldering process is authorized. During soldering, the i-CON TRACE records the process data. Every soldering process is precisely documented and traceable.

Unique operating concept: GREEN MEANS GO. Once all the requirements for the assigned soldering task have been fulfilled, the LED interface of the i-CON TRACE literally switches to green and the user can start the soldering process.

Process data documentation - the connectivity of the i-CON TRACE allows the documentation of every single soldering process: Assembly, tip used, temperature and soldering duration are recorded electronically and can be traced. Left picture: Scanning the QR code of the soldering tip with the hand-held scanner before soldering.

PREMIUM
PERFORMANCE.
MINIMUM
COST.

New features of the i-CON TRACE set standards not only in terms of connectivity and operating concept, but also in hardware.

Proven technologies have been refined: With 150 W heating power, the i-CON TRACE offers outstanding performance. It heats up very quickly, and reheats even faster, and thus ensures a stable temperature profile. Newly designed soldering tips bring the heat to the solder joint with pinpoint accuracy.

The heating element and soldering tip can still be replaced separately. This saves resources and money, because each wearing part only needs to be replaced when it is really necessary. The i-CON TRACE is therefore not only an economic but also an ecological benefit for every electronics production.

Features

1. i-TOOL TRACE: extremely lightweight, powerful fine soldering iron
2. New heating element: high power 150 W, SENSOTRONIC temperature control, quick tip exchange (tip'n'turn release) of the tip
3. New soldering tip series: thermally optimized new tip design, quick tip fastening with QR code on each soldering tip

Tip change in record time

In order to always have the right soldering tip at hand for the various soldering applications, Ersa offers a variety of different shapes and sizes of soldering tips. Even customized tip shapes for special applications are no problem. Tip'n'Turn is the patented concept for joining heating element and soldering tip, which enables tip change in record time.

Each tip has a bayonet lock which, in combination with the multi-functional holder, allows particularly fast and safe changing of the soldering tip. The soldering iron including tip only has to be placed in one of the openings provided and turned through approx. 10° – the old soldering tip can then be removed and a new, suitable tip can be fitted. This can be done by hand, even without the storage stand. Even while hot.

Economic-ecological benefit for every electronics manufacturing

Via a mobile app for smartphones and tablets, the i-CON TRACE can be used like a conventional stand-alone soldering station even without a connection to a company network. The program for controlling the soldering station runs on the mobile end device – relevant information such as set and actual temperature is displayed on a smart device via Bluetooth or WLAN and can also be changed there. This enables demand-oriented, smart operation for the user.
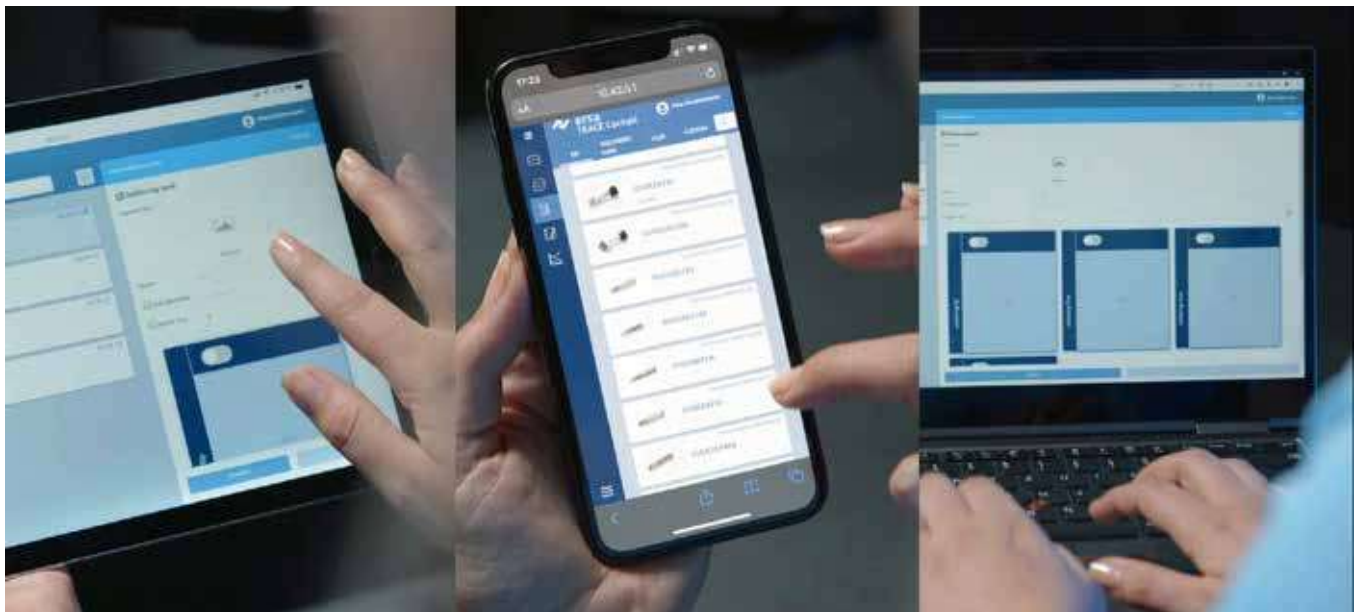
Order Information:

Order No.	Description
0ICT1000A	i-CON TRACE soldering station, complete with soldering iron i-TOOL TRACE (0140CDJ) and holder 0A58 with dry sponge 0008M
1ICT1000A00A67	i-CON TRACE soldering station, complete 115 V version
0ICT125	Network card i-CON TRACE

Technical Data

Name	Nominal power/Voltage	Temperature	Soldering Tool	Secondary Voltage	Heat up time	Weight
i-CON TRACE	Max. 150 W/230 V (115 V), 50/60 Hz	50 – 450 °C	i-TOOL TRACE	24 V	ca. 9 s	72 g