

Hot Air Rework Stations

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Electronics & Prototyping

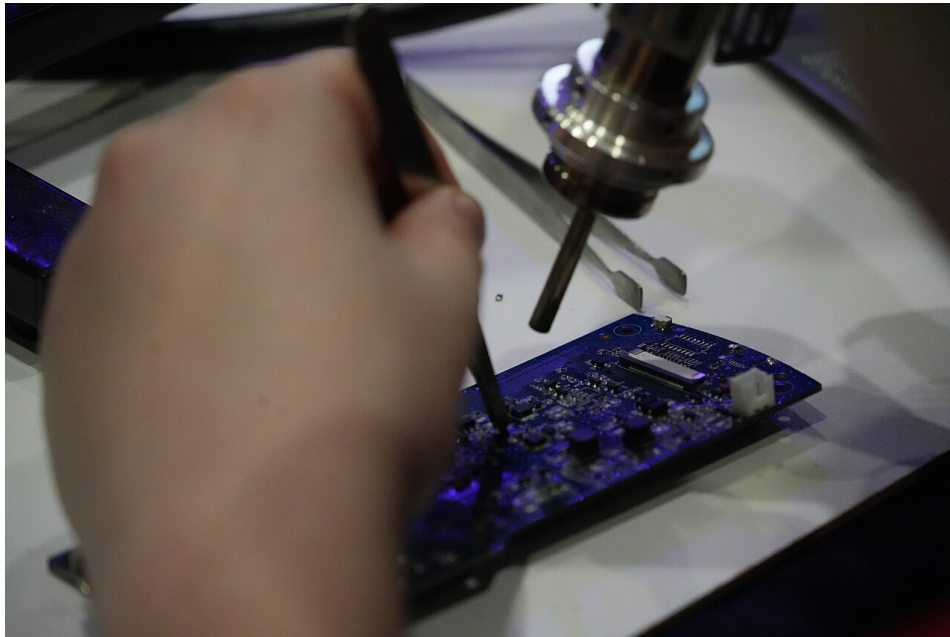


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A hot air rework station blows precisely controlled hot air to desolder surface-mount components, reflow solder paste and rework boards without touching the parts. Combined with a soldering iron, it is the tool for SMD assembly, repairs and prototyping.

Key Features

- Air temperature 100-480 degrees C control
- Adjustable air flow
- Interchangeable nozzles for chip sizes
- Digital displays for air and temperature
- Built-in air pump and standby modes

Typical Uses in the Workshop

- Remove SMD ICs and components safely
- Reflow solder paste for SMD assembly
- Repair lifted pads and damaged boards
- Shrink tubing and dry adhesives controlled

Safe Operation

1. Set nozzle, temperature and airflow for the job
2. Preheat the area slowly to avoid board stress
3. Direct hot air evenly around the component
4. Lift the part with tweezers once solder melts
5. Cool the board slowly after rework

SAFETY NOTES

- Hot air is a burn risk - keep hands and cords clear
- Use fume extraction - solder and flux fumes are harmful
- Do not exceed the board's safe temperature
- Keep the nozzle off plastic bodies and cables
- Switch off and let the station cool before storage

Maintenance & Consumables

- Clean nozzles of solder and flux
- Check the air filter and replace as needed
- Calibrate the temperature annually
- Check the element and airflow
- Store nozzles in a labelled tray

Specification & Buying Notes

Choose a station with digital control, a range of nozzles and a quiet pump. A combined iron-and-hot-air unit saves space. Check nozzle availability for common IC sizes.