



Resistance Soldering System

The SuperChief 250 is built around a 250 watt power unit that allows modelers to tackle a wide range of jobs, from wire to rail, scratch builds and engine repair and refurbs. The tweezer handpiece permits the user to solder in tight locations and hold items in place to ensure correct

alignment. And no system would be complete without a footswitch to free up an extra hand and ensure crisp clean solder joints.

Also available

- Flux pens and dispensers
- De-soldering braid
- Tweezers
- Soldering irons
- Resistance Soldering systems
- Manual soldering systems
- Conductive coating pens
- Track Cutters
- Air Dusters
- Cleaning wipes



Solder CONNECTION

Electronics & Industrial Soldering Solutions

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EVERYTHING YOU MIGHT NEED FROM A SINGLE SOURCE

Solder CONNECTION

SOLDERING MATERIALS FOR MODEL MAKING

The four-stage process for effective soldering



SOLDERING MATERIALS FOR MODEL MAKING

EFFECTIVE SOLDERING
The Knowledge
The Products

Effective soldering is a **four-stage** process

: Preparation

: Tinning

: Soldering

: Post Cleaning

stage one Preparation

Preparation is a combination of ensuring the parts to be soldered are a good dry fit, then pre-cleaning the areas to be soldered with an abrasive such as wire wool. (Emery and sand paper should not be used as they cause silica particles to become embedded in the surface which prevents solder wetting.)

For larger jobs, make a jig to hold the parts while soldering.

stage two Tinning

Tinning ensures optimum solderability of the surfaces to be soldered. It is possible to tin using solder bar/wire and flux but the easiest way is to use a solder paint. Paint the area to be soldered, heat until the solder powder in the paint becomes molten. Wipe away excess paint leaving a shiny solderable finish.

stage three Soldering

Apply a light coating of flux, then jig up the pieces to be soldered and apply a heat source (soldering iron or gas torch) to both surfaces simultaneously. If using an iron, clean the tip and load it with solder to assist heat transfer. When the surfaces are up to temperature, feed in sufficient solder (stick or wire) to make the joint. Remove the heat source and allow the solder to solidify and make the joint.

In many instances it is possible to make a good joint using only the solder paint. Apply the paint to both, pre-cleaned mating surfaces. Jig up the parts and apply the heat until the solder powder in the paint becomes molten. Remove the heat source to let the joint solidify. This technique has limited ability to fill voids.

stage four Post Cleaning

Active fluxes can stain and even corrode the metal. Remove all flux residues after soldering by cleaning thoroughly. Fluxes recommended by the Solder Connection can be cleaned effectively with warm soapy water. The addition of a little citric acid to the rinse water may be beneficial.

Solder Paint

Fryolux

Fryolux is a uniform mixture of finely powdered tin/lead solder and zinc chloride activated flux. It has a creamy consistency and is ideal for pre-tinning, solder coating and soft solder assembly. It is applied easily by brush swab or spray, to cold surfaces and then heated to melt the solder and make the joints. Only a thin coat is needed and as the solder and flux are both applied at once it saves time.

Available in 125gm and 500gm containers



Fryolux 500gm

Soldering Flux

Fluxite Paste

Fluxite is a traditional grease paste flux. It can be brushed onto the substrate surface and will adhere to the solder stick prior to applying the heat. Fluxite is Zinc Chloride activated and residues require removal when the soldering process is complete.

Available in 100gm tins



Fluxite 100gm

Solder alloys

60/40 tin/lead solder

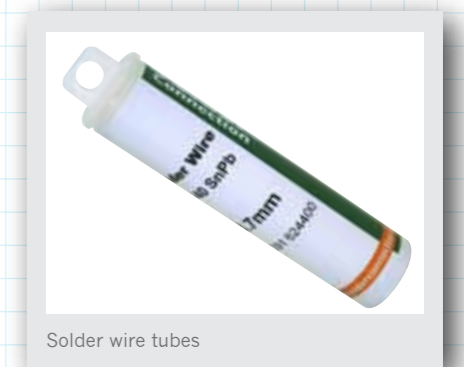
High purity solder that is made of 60% tin and 40% lead with a small plastic range of 5°C (183°C to 188°C).

Available in:

Solder wire tubes 0.5mm and 0.9mm as standard other sizes available on request

Blow pipe (8 Sticks. approx 1/2 Kilo)

Solder wire 100gm and 250gm (0.7mm, 1.2mm or 1.6mm diameter)



Solder wire tubes



Blow pipe



Solder wire 100gm

Bakers No. 3 Soldering Fluid

This water based liquid flux is highly effective and many consider it easier to apply than grease-like alternatives. It can be used successfully to solder all yellow metals and cleaned mild steel but should not be used on Stainless Steel, Zinc or Aluminium.

Post soldering flux residues require cleaning with water.

Available in 125ml and 250ml bottles.



Baker's Soldering Fluid No.3 125ml

