

Hilderbrand Swiss Solder Pastes

The most labour-efficient, economical, modern method

of soldering is the system using solder pastes. The exact amount of solder is placed on the exact location by means of a solder paste syringe. The time consuming operations of cutting sheet and wire solder, of trying to get the piece of solder to stay in position, of applying flux- all of these are eliminated, by using solder paste. The savings in solder usage are significant. The increase in productivity over the use of solder preforms can range from 100 to 400%.

Solder pastes are stocked in a wide range of gold and silver solders with that include flux. Advantages include:

- No wasted solder • No wasted time handling solder bits • No fluxing necessary • No solder cutting
- Solder adheres to work • Productivity increases up to 400% • Long shelf life.

Solder paste is also available in 100g cartridges and tubes.



Hilderbrand Solder Pastes



Reference	Description	Weight
26-468-000	9ct Pink gold	700°C 5g
26-465-005	9ct Yellow, easy	680°C 5g
26-466-005	9ct Yellow, medium	720°C 5g
26-467-005	9ct Yellow, hard	742°C 5g
26-468-005	10ct White gold	735°C 5g
26-470-005	14ct Yellow, easy	720°C 5g
26-471-005	14ct Yellow, medium	760°C 5g
26-472-005	14ct Yellow, hard	785°C 5g
26-473-005	14ct White gold	735°C 5g
26-475-005	18ct Yellow, easy	630°C 5g
26-476-005	18ct Yellow, medium	763°C 5g
26-477-005	18ct Yellow, hard	840°C 5g
26-478-005	18ct White gold, easy	770°C 5g
26-478-008	18ct Rose gold, easy	710°C 5g
26-490-008	Silver, easy 65%	690°C 8g
26-490-030	Silver, easy 65%	690°C 30g
26-491-008	Silver, medium 70%	730°C 8g
26-491-030	Silver, medium 70%	730°C 30g
26-492-008	Silver, hard 75%	770°C 8g
26-492-030	Silver, hard 75%	770°C 30g
26-497-005	Platinum	920°C 5g

**Special flux-free alloys available for furnace brazing.

Silver paste can be used for copper or steel to steel brazing.

Wire Solder

Silver - 1.5 metre coils of 0.5mm Solder Wire.

26-400-000	Silver Wire, easy	706°C
26-401-000	Silver Wire, medium	732°C
26-402-000	Silver Wire, hard	778°C

Sheet Solder

Silver - 3cm x 1.5cm pieces approx. 2grams each

26-421-000	Silver Sheet, extra easy	643°C
26-426-000	Silver Sheet, easy	706°C
26-426-001	Silver Sheet, medium	732°C
26-426-002	Silver Sheet, hard	778°C

Gold - 3cm x 1.5cm pieces approx. 2grams each

26-428-004	9ct Yellow Sheet, extra easy	653°C
26-428-000	9ct Yellow Sheet, easy	715°C
26-428-001	9ct Yellow Sheet, medium	759°C
26-428-002	9ct Yellow Sheet, hard	799°C
26-428-003	9ct Pink Sheet, medium	770°C
26-429-000	14ct Yellow Sheet, easy	730°C
26-429-001	14ct Yellow Sheet, medium	770°C
26-429-002	14ct Yellow Sheet, hard	802°C
26-430-000	18ct Yellow Sheet, easy	710°C
26-430-001	18ct Yellow Sheet, medium	785°C
26-430-002	18ct Yellow Sheet, hard	841°C
26-431-000	9ct White Sheet easy	735°C
26-431-002	9ct White Sheet hard	802°C
26-431-003	18ct White Sheet, easy	835°C
26-431-005	18ct White Sheet, hard	892°C

Platinum - Minimum 1gram each type

26-432-000	Platinum Sheet, easy	1100°C
26-432-001	Platinum Sheet, medium	1250°C
26-432-002	Platinum Sheet, hard	1390°C

Solder Paste Dispenser MKIII

Ref: 26-447-000

This Swiss made dispenser is a simple, precision tool that extrudes the paste very easily and allows you to place the exact amount of solder required accurately. Lift the lever to release the plunger and stop paste flowing. Syringes of paste can be quickly loaded and unloaded from the dispenser.

Pneumatic dispensers are also available. Please ask for information.



Pink Needle 0.58mm for paste syringe Ref: 26-450-000 **Purple Needle** 0.51mm for paste syringe. Ref: 26-451-000

Stop Braz Ref: 26-455-000 A small plug for the needle to prevent paste from running when work is interrupted.

Portable Precision Soldering Torch

Ref: 24-399-000 A precision tool for soldering, desoldering, hard soldering, heating, etc. Especially designed for jewellers and hobbyists. The Torch has an instant piezo electronic ignition which means it is self-lighting. An important feature of this torch is the adjustable gas flow and separate adjustment of air supply, that allows precise adjustment of the flame shape allowing you to produce a fine pointed flame that does not promote oxidation. The refillable butane tank gives a working time up to 3 hours with temperatures up to 1300°C. Supplied complete with base stand for stability.

Height: 110mm
Weight: 200g

Economy Model Ref: 24-399-100

Soldering Handpiece



Ref: 24-260-000
LPG (propane)/Air Torch

Made in UK, these hand held bench torches are designed to have a plastic tube from your mouth to the air inlet to blow air in at low pressure to mix with the LP Gas.

Gas Fittings

LP Gas Regulator

Ref: 24-468-000

Adjustable to reduce the gas pressure from the Gas Cylinder to suit various soldering torches. Suitable for use on the 'Little Torch'.



Gas 'Y' Piece

Oxygen Ref: 24-246-001

LPG Ref: 24-468-003

'Y' piece allows you to run two torches from one regulator or gas bottle.



Fitting Adaptors

Regulator to Australian Hose. Ref: 24-468-002

Companion Gas Cylinder to Regulator. Ref: 24-468-001

Adapt Primus Gas Cylinder to Companion fitting Ref: 24-468-004

Adapt Companion Gas Cylinder to POL fitting (for Smith type regulator) Ref: 24-471-000

Adapt Primus Gas Cylinder to POL fitting (for Smith type regulator) Ref: 24-471-100



MicroTorch II Kit Ref: 24-340-000

The MicroTorch II Soldering Set is designed for use by Manufacturing Jewellers, Retail Jewellers, Dental Labs, Optometrists, Model Builders, etc. It produces a flame of 2750°C, which will handle a wide range of precision soldering. The kit is supplied in its own portable carrying case with Tips 0.6, 0.8, 1.0 & 1.2mm, plus 1 Gas Cylinder & 2 Oxygen Cylinders. Approximate continuous soldering times on tip 0.6mm 2 x Oxygen Cylinders- 7hours. One Gas Cylinder 20 hours.

Replacement parts: 16g Oxygen cylinder Ref: 24-360-000

40g Gas cylinder Ref: 24-365-000

Solder tips Ref: 24-380-000 (specify size)

Economy Soldering Torch



Hose Ref: 24-261-000

1.8m hose connects directly onto Gas cylinder and to the handpiece (below)



Handpiece

Ref: 24-262-000

Connecting Valve Ref: 24-263-000

Connecting valve with bent stem fits to handpiece (see above and a burner tip (see below)



Ultra Pin Point Burner

Ref: 24-280 Provides a very fine pointed flame 50mm long. Suitable for soldering gold and small silver pieces. Very good for chain links.



Pin Point Burner Ref: 24-264-000

Produces a pointed flame 120mm long. It is suitable for fine to medium size solder jobs on 925 Silver.



Medium Burner Ref: 24-281-000

Produces a wide blunt flame approximately 130mm long. Suitable for annealing.

Important Note: Unlike other LPG equipment, this equipment is designed to operate at Gas Cylinder Pressure. That means that you should not use a regulator between the Gas Cylinder and the hose. Please test for leaks (with soapy water) and check the pressure and safety requirements before using any gas equipment.

Spark Igniter

Ref: 24-314-000

Spark Igniters are the safer way to light your torch.



Do not use
Cigarette Lighters
for lighting gas torches.

'The Little Torch'

When you pick up 'The Little Torch', you know immediately that you are holding a magnificent instrument which will enable you to extend your skills far beyond previous limits. Whether you are in the first stages of learning your craft or have mastered it with more limited tools, The Little Torch will open a new world of possibilities for you.

The Little Torch provides a perfectly controlled, completely stable flame hot enough to melt commercially weldable metals, glass and even ceramics. It may also be used with special heating tips to melt up to 85 grams (3oz) of metal.

Supplied in the Kit are 5 tips to provide a wide range of flame lengths and heat output for various metals and thicknesses. Operators can vary the flame length to their exact requirements by adjusting the oxygen and fuel valves in the torch body. Simply choose from Oxygen + LP Gas or Oxygen + Acetylene.

- Reaches 3480°C • Extremely lightweight and flexible • 5 sizes of tips either #2 to #6 or #3 to #7 • Instructions with safety information included • Set of two, 1.8 metre hoses with brass connectors. Tips 1, 2, & 3 have sapphire jewels in the tip ends to ensure accurate gas flow and improve shape of flame.



Little Torch Kits

for use with Little Torch Regulators Ref: 24-317-000

for use with other brand Regulators Ref: 24-318-000

Little Torch Regulators Because the Little Torch operates in the 2-6 psi range, we recommend you connect your Little Torch to regulators that are made by the same company. The industrial regulators available locally are generally made for higher pressure equipment that operates at 15 to 30psi and readability of the gauge is designed accordingly. Therefore the gauge cannot be easily read to make sure the operating pressure for the little torch is correct.



Oxygen regulator Ref: 24-465-000 Outlet pressure: 0-20PSI

LP Gas regulator Ref: 24-470-000 Outlet pressure: 0-15PSI

Regulators Feature - Safety reverse flow check valves as standard - Heavy duty construction for extended service.

Melting Tips

This unique design creates a wider more powerful flame (3300°C) to enable the Little Torch to melt, in a crucible, up to 3oz of gold or silver

LPG Tip

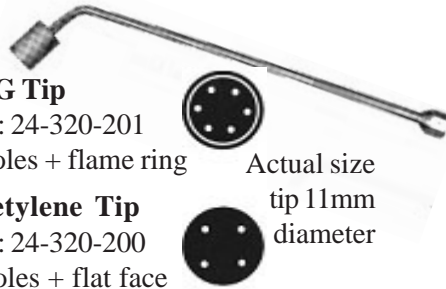
Ref: 24-320-201

6 holes + flame ring Actual size

Acetylene Tip

Ref: 24-320-200

4 holes + flat face tip 11mm diameter



Magnetic Torch

Stand Ref: 24-315-000

Heavy 645g base will hold torch firmly so it can be used as a third hand. Also provides storage for seven tips.



Manifolds

These manifolds allow connection of two hoses to a single regulator on each line.



Each torch can be turned on or off separately.

Acetylene Ref: 24-468-005

Oxygen Ref: 24-468-006

Little Torch Parts

24-320-010 Valve packing seal (Stop gas leaks around control knobs)

24-320-012 Control knob assembly, Green.

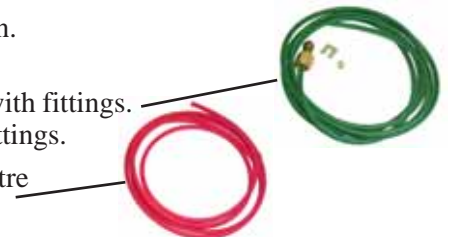
24-320-011 Control knob assembly, Red.

24-320-158 Oxygen Hose, Green 2.4m with fittings.

24-320-168 Fuel Hose, Red 2.4m with fittings.

24-320-152 Oxygen Hose, Green per metre

24-320-162 Fuel Hose, Red per metre

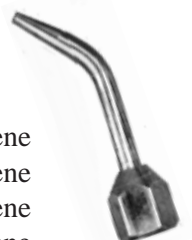


Little Torch Replacement Tips

These copper stem tips are built with precision including

sapphire jewel inserts in the 3 smallest sizes to ensure the correct flame size and shape is produced.

Reference	Tip #	Size	Oxygen Pressure	Fuel Pressure	Fuel Type
24-320-001	1	0.076 mm	2 p.s.i	2 p.s.i	Acetylene
24-320-002	2	0.152 mm	2 p.s.i	2 p.s.i	Acetylene
24-320-003	3	0.279 mm	4 p.s.i	4 p.s.i	LPG or Acetylene
24-320-004	4	0.508 mm	4 p.s.i	4 p.s.i	LPG or Acetylene
24-320-005	5	0.737 mm	6 p.s.i	6 p.s.i	LPG or Acetylene
24-320-006	6	0.787 mm	6 p.s.i	6 p.s.i	LPG or Acetylene
24-320-007	7	0.999 mm	8 p.s.i	8 p.s.i	LPG or Acetylene



Elma Hot Flame

Silver + Gold + Platinum

Elma's hallmark of exceptional quality and features are clearly evident in the Hot Flame range. Compare the features.



Special Order

All of the relevant settings, such as electrolyte level, are displayed on the electronic control panel. For safety the Hot Flame has a built-in warning light with aural tone.

Even at the filling point the features promote ease of use. For those occasional spills there is a recessed well to catch the overflow and make mopping up a simple operation.

The ergonomic hand piece has been designed to assist precise handling for those more intricate jewellery creations.

State of the art soldering technology for Jewellery

- Energy saving multi cell system
- Microprocessor control and monitoring with revolving control board.
- Optical and acoustic monitoring of fill level during use and when filling the electrolyte.
- Automatic regulation of gas level production to match nozzle size used.
- Automatic stand-by mode when handpiece valve is turned off with autostart when the valve is opened.
- Separate outlets for Gold/Silver (with in-flame flux) and Platinum (no flux)

Specifications:

Hot Flame 150 - Ref: 24-794-150

Gas production 170L/h

Overall size: 420 x 390 x 670 high

Torch Nozzle Capacity

G18 (1) G20 (1) G22 (2) G24 (3) G26 (4)

For Laser Welders and Spot Welders see Welding Pages 148-149

Micro Welder - Oxygen/Hydrogen Soldering

Precision soldering without the associated problems of Oxygen and Fuel stored under pressure and no rental on gas cylinders. In the Micro Welder, water is broken down electrically into its components, Hydrogen and Oxygen. These two gasses are fed to the torch where they re-combine to burn at temperatures of up to 3300°C. To control the temperature, the gasses are passed through a special solution. All this is done automatically. The flame produced is carbon free and can have flux automatically transferred into the flame. This means there is virtually no clean up required after soldering.



One Torch Micro Welder Ref: 24-795-000

Two Torch Micro Welder Ref: 24-796-000

Electric Pickle Pots

Electric Pickle Pots from Ferris safely heat pickle to a pre-set 60°C and provide a lift-out acid resistant plastic basket to make retrieval of your pieces quick and easy. Remove oxidation and firescale from Gold, Silver and other non-ferrous metals.



350mL
Ref: 26-176-000
125 x 145mm high

1.4L
Ref: 26-179-000
215 x 125mm high

470mL
Ref: 26-177-000
140 x 185mm high

Pickle Tongs

Ref: 28-630-000

210mm long. Made from copper with blunt smooth tips



For use in pickle and acid solutions

Pickle Compound

Used to remove oxides & fire-scale after soldering from gold, silver and other non-ferrous metals. It is a safer, odorless pickling compound that will do the work of sulphuric acid without the hazards. Will not burn holes in clothes.



500g jar
Ref: 26-170-000

1Kg jar
Ref: 26-175-000

Mix with water at the ratio of 250g per litre of water. Also suitable to use for light etching prior to electro-plating.

Flux

Auflux

For all hard soldering This liquid flux supercedes borax as a soldering medium. Try Auflux next time you have trouble with Rose Gold Solder!

Available in: 200mL Ref: 26-125-000
1 Litre Ref: 26-115-000



JM Tenacity 6 ** Ref: 26-130-000

For high temperature soldering - hard solder.

JM Tenacity 4A ** Ref: 26-138-000

For medium solder 600 - 850°C

JM Easyflow ** Ref: 26-140-000

For easy solder 550-800°C.

JM Argotect ** Ref: 26-142-000

Use to protect against firescale when soldering silver.

****Product Safety Warning****

Fumes given off during use may contain small quantities of hydrogen fluoride & boron trifluoride. When inhaled over-exposure to fume over many years may result in fluorosis. Use only in well ventilated areas or with an approved respirator. Always wear personal protection when soldering.

Borax Powder 250g Ref: 26-160-000

Very good as a flux for melting gold, silver and other alloys. Simply mix with water and brush on. Can also be used to line ceramic crucibles to protect against impurities transferring to the molten metal.



Boric Acid 250g Ref: 26-165-000

When mixed with methylated spirits is painted on items being soldered to prevent oxidation. It can also be used as a flux or in conjunction with borax.



Borax Cone 90g

Ref: 26-150-000

Prepared borax for making flux. Dissolves easily when rubbed in a small amount of water on a borax tray.



Borax Tray

Ref: 26-235-000



130mm diameter

Flux Brush

Ref: 05-575

Hog Bristle (supplied without nanate.)

**Anti-flux**

Yellow Ochre 230g Ref: 26-195-000

Mix with methylated spirits and brush onto areas where you do **not** want solder to flow.

**Annealing/Soldering Pan**

Ref: 26-060-000 A rotating pan 300mm diameter filled with pumice allows the ideal positioning of work for annealing or soldering. Rotates on ball bearings.



Replacement Lump Pumice 1kg Ref: 26-060-100

Soldering Blocks

Hi-Temp Solder Board Ref: 26-020-000

High temperature soldering platform for Platinum and other solders that require extreme heat.



Ceramic Soldering Board

Withstands extreme heat and has rubber feet to prevent movement.

150 x 150mm Ref: 26-042-000

300 x 150mm Ref: 26-043-000



Ceramic Soldering Board with Grooves

Flat on one side with grooves on the other side for holding Ring Shanks, Chain Loops, etc. Ref: 26-046-000
190mm x 184mm x 22mm



Ceramic Soldering Block Ref: 26-044

Honeycombed with hundreds of tiny (1.5mm) holes that trap the heat in the area being soldered reducing heat loss. Will withstand temperatures up to 3000°C. 130 x 90 x 12mm.



Refractory Brick Ref: 26-085-000

Refractory Bricks are soft which allows pins to be easily pressed into the surface. Size: 220 x 110 x 30mm



Non-Asbestos Soldering Boards

All of the advantages of heat resistant asbestos, without the health hazards.

150 x 150 x 12mm Ref: 26-005-000

200 x 200 x 12mm Ref: 26-010-000

300 x 300 x 12mm Ref: 26-015-000



Charcoal Soldering Block

Ref: 26-050-000

Under flame the charcoal glows and reflects heat back into the work, making the flame more efficient.

Size: 115 x 70 x 30mm.

**Soft Blocks**

Magnesia Soldering Block

Ref: 26-040-000

Soft fireproof material. Pins or work can be easily pressed into surface.

Size: 152 x 76 x 40mm.



Soft Jig Block Ref: 26-048-000

Soft fire-proof material. Pins or work can easily be pressed into surface.

120 x 25 x 95mm.

**Soldering Wig**

Ref: 26-035-000

Preheat the wig with your solder torch then place the article to be soldered on the wig. Soldering can be accomplished using The minimum amount of heat. Size: 100mm diameter.



Soldering Accessories

Ceramic Ring Soldering Rod Ref: 26-100-000

Improve your ring resizes and repairs. The Ceramic Ring Soldering Rod holds heat longer & more efficiently. It holds rings in position while soldering and prevents collapse or movement. Mounted on a pivoting base for easy adjustment & positioning. Accommodates rings from

size H up. Weight: 745g

Replacement Ceramic Rod only Ref: 26-101-000

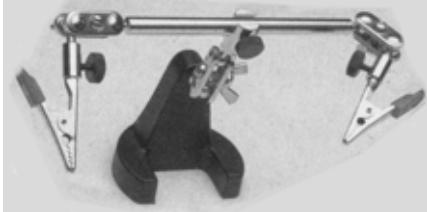
Replacement Carbon Rod only Ref: 26-103-100

Ceramic Soldering Mandrel Ref: 26-102-000

With groove for set rings. Will accommodate sizes from A to Z+5



Solder King Ref: 26-830-000

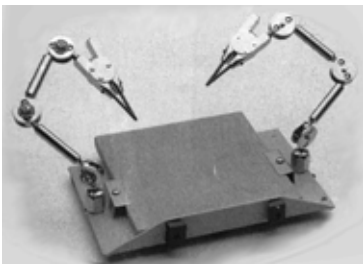


Ball joints enable work to be rotated to any position. 113mm cross bar. Heavy duty base. Weight: 620g.

Third Hand Ref: 26-810-000

Soldering tweezers on a stand. Reverse action tweezers. Leaves both hands free for soldering.

Replacement Tweezer only
Ref: 26-811-000

GRS Solder Station Ref: 29-495-000

Spring loaded clamps with fine round and toothed jaws securely hold items to be soldered. The multiple ball joints allow precise positioning of parts. Designed to fit to the

BenchMate's dove tail mounting plate.

GRS Precision Third Hand

Ref: 29-490-004 Part of the BenchMate range this is the same third hand as used in the solder station above.

**GRS Insulated Soldering Clamp**

Ref: 29-490-010 Will not act as a heat sink. Long life jaws do not erode with heat. One jaw swivels for clamping larger items.

Burner Mesh

Stainless Steel wire mesh is used to diffuse heat.

125 x 125mm Ref: 24-116-000

150 x 150mm Ref: 24-118-000



Cool Paste

**Thermo Gel 100g** Ref: 26-350-000

Thermo Gel significantly reduces the transfer of heat from the soldering torch to stones. Cover stones with Thermo Gel before soldering and wash off after use.

Diewersol 150gram Ref: 26-335-000

One of the most effective heat shields on the market. Simply apply a 6-7mm layer of cool paste to gems or areas you wish to protect

while soldering. Wash off in water when finished.

Binding Wire



For holding or forming pieces to be soldered. Also for tying items to be plated.

Ref: 26-515-000 0.28mm 22 SWG

Ref: 26-530-000 0.36mm 18 SWG

Ref: 26-535-000 0.40mm 16 SWG

Ref: 26-540-000 0.44mm 14 SWG

Ref: 26-555-000 0.55mm 08 SWG

Titanium Tweezers
& Solder Pick

Titanium is highly acid resistant, 100% non-magnetic, no solder, either hard or easy, will stick to it, very light weight, very little heat conduction, remains cool during soldering process, and tips remain hard, even after annealing. Use when working with platinum to reduce risk of contamination.



Ref: 28-123-000 Tweezer 135mm

Ref: 28-126 Solder Pick 180mm

Soldering Tweezers

AA Ref: 28-100 Stainless Steel 130mm the fine tips



are ideal for picking up small pieces of solder.

Curved Tip

Ref: 28-410-000



152mm long

Fibre Grip X-Lock

Stainless steel tweezers with heat resistant grips. Self closing action and blunt tips.



165mm long

Straight Tip

Ref: 28-405-000

Fibre Plastic Ref: 28-510-000

110mm tweezers



suitable for picking up small delicate items from the pickling bath.

Ring Holding Tweezers Ref: 28-420-000

Designed to comfortably grip rings while soldering with an easy locking feature

