



BRAZING

Filler Metals and Fluxes





SolPro Brazing is a family business proudly manufacturing brazing products in Sheffield

SolPro Brazing Offers

- Only supplier of brazing alloys who manufactures as well as distributes in the UK
- Made in Sheffield
- Manufactures and supplies a full range of alloys to complement metal joining industry - Silver Brazing Alloys, Fluxes & Rings
- Capability to manufacture be-spoke items for customers from wire, rod, preforms and rings
- Trade accounts welcome
- Value for Money
- Quick fast order response times
- Professional, knowledgeable skilled team with over 100 years of experience
- Proven track record in problem solving for clients
- Working to ISO Standards

SolPro supplies to various markets, including industrial cooling, medical, automotive, tooling, aerospace, and military industries.

Our warehouse is fully stocked, ensuring quick delivery.



Our Product Range

Brazing Alloys

Silver Brazing Alloys
Copper Phosphorus Brazing Alloys
High Temperature Copper Alloys
Soft Solders
Aluminium Brazing Alloys

Forms

Rods, Wire, Strip, Rings and Preforms

Full range of Fluxes and Flux coated rods



Quality At Our Core

At the core of our operation is a steadfast commitment to quality. Every product undergoes thorough inspections and stringent quality control measures, ensuring accuracy, durability, and performance.



Brazing Alloys



The SolPro Brazing product range offers a variety of brazing alloys available in wires, rods, strips, and preforms, all complemented by a selection of suitable fluxes.

Our **General Purpose Silver Brazing Alloys** are designed for a wide array of industrial metal joining applications. They are particularly effective for joining dissimilar metals, such as stainless steel, mild steel, brass, bronze, and copper. These alloys can be used in various environments, ranging from industrial cooling to aerospace and military applications.

SOLPRO GRADE	ISO 17672:2016	COMPOSITION %					MELTING RANGE °C		SUITABLE FLUX
		Silver	Copper	Zinc	Tin	Si			
M25T	Ag155	55.0	21.0	22.0	2.0		630	660	F or Y
M15T	Ag145	45.0	27.0	25.5	2.5		640	680	F or Y
M10T	Ag140	40.0	30.0	28.0	2.0		640	680	F or Y
M8T	Ag138	38.0	32.0	28.0	2.0		650	720	U or F
CS77	Ag138Si	38.0	32.0	28.0	2.0	0.1	650	720	U or F
MOT	Ag130	30.0	36.0	32.0	2.0		665	755	U or F
L13S	Ag220Si	20.0	44.0	36.0		0.1	690	810	F or E

It is essential to use a suitable flux with all of these alloys. Many of our most popular silver brazing alloy rods can be supplied with a specially formulated flux coating, providing consistency, safety, and convenience compared to using a separate flux paste.

Safety Data Sheets are available on request

Special Application Silver Brazing Alloys

Where the application requires an alloy with specific properties we can offer:

SOLPRO GRADE	ISO 17672:2016	COMPOSITION %				Si	MELTING RANGE °C		FORMS AVAILABLE	SUITABLE FLUX
		Silver	Copper	Zinc	Tin					
HO		60.0	26.0	14.0			695	730	RODS	F
H7TN		67.5	27.0	4.5	1.0		730	760	RODS	G
M20N	Ag450	50.0	20.0	28.0	2.0		660	705	RODS	F
M10N	Ag440	40.0	30.0	28.0	2.0		675	790	RODS	F
M19MN	Ag449	49.0	16.0	23.0	4.5	7.5	680	705	RODS/ PREFORMS	U or F

Our HO alloy has excellent resistance characteristics with good mechanical strength and electrical conductivity.

H7TN is suitable when a high level of corrosion resistance is required, particularly on stainless steels in wet, oxygenated conditions and is also suitable for furnace brazing.

Our M20N, M10N and M19MN alloys are designed for the brazing of difficult parent metals such as cast iron and cemented carbides. M19MN has the additional benefit of being able to wet graphite containing materials and can be used for the brazing of tungsten carbide tip tools as well as difficult parent metals such as grey cast iron.

Copper Phosphorus Brazing Alloys

This range of alloys is suitable for the flux free brazing of copper and high content copper alloys (ie brasses and bronzes) particularly in the refrigeration, air conditioning and medical gas industries.

SOLPRO GRADE	ISO 17672: 2016	COMPOSITION %			MELTING RANGE °C		FORMS AVAILABLE
		Silver	Copper	Phos			
PHOS 15	CuP 284	15.0	80.0	5.0	645	800	RODS / WIRE / STRIP / RINGS
PHOS 5	CuP 281	5.0	89.0	6.0	645	815	RODS / WIRE / RINGS
PHOS 2	CuP 279	2.0	91.7	6.3	710	825	RODS / WIRE / RINGS
PHOS 0.2		0.2	93.7	6.1	645	850	SQUARE RODS
PHOS 0R	CuP 179	0.0	93.8	6.2	710	890	RODS / WIRE / STRIP / RINGS
PHOS 0	CuP 182	0.0	92.2	7.8	710	770	RODS / WIRE / RINGS

Alloys with high phosphorus contents are less ductile than those with lower phosphorus and higher silver contents. For applications where optimum mechanical strength or resistance to vibration is required the lower phosphorus alloys are preferred, i.e. Phos 5, Phos 2 and Phos OR. Phos 0.2 is suitable for copper to copper joints in sanitary, heating and gas installations.

These alloys should not be used with ferrous or nickel containing parent metals as this will result in brittle joints.

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Flux Products



The flux layer plays a crucial role in cleaning and protecting the surface of the parent metal during the brazing process.

It is essential to select the appropriate flux and to apply a sufficient amount to the joint area so that it provides protection throughout the brazing cycle. As a guideline, the chosen flux should be effective at least 50°C below the solidus temperature and 50°C above the liquidus temperature of the selected brazing alloy.

Our fluxes are available in both powder and paste forms, offered in a variety of sizes. Specialist fluxes are also available for specific customer requirements.

SOLPRO GRADE	OPERATING RANGE				FORMS AVAILABLE
		Fluidity	Activity	Life	
F	650-850	Moderate	Moderate	Long	Powder & Paste
Y	550-750	Good	High	Medium	Powder & Paste
U	600-800	Good	High	Med / Long	Powder & Paste
G	650-900	Good	Good	Very Long	Powder
E	650-850	Good	High	Very Long	Powder
B	750-1000	Moderate	Moderate	Very Long	Powder
AB1	550-800	Good	High	Medium	Paste

Safety Data Sheets are available on request

Rings, Wire and Preforms



Brazing rings and preforms are effective tools for achieving reliable and consistent brazing, especially in automated or semi-automated processes.

SolPro Brazing can manufacture brazing rings and preforms tailored to meet various needs across several applications, including HVAC, automotive, tooling, and electrical contacts.

RINGS

- Materials offered include Silver and Copper Phosphorus brazing alloys with an extensive range of Copper and Aluminium alloys.
- We offer a range of sizes and wire diameters with single or multi-turn options.

WIRES

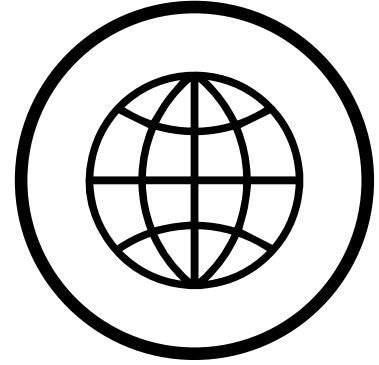
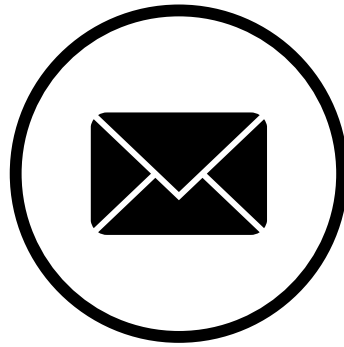
- We are able to draw down wires to 0.5mm diameter and can supply in coil form or on spools depending on the requirement.

PREFORMS

- We can produce a range of cut or stamped brazing preforms for a range of applications in various alloys.

Please note minimum quantity runs will apply depending on the size required.





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