



Building **Relationships**
Manufacturing **Quality**

SREESOLDER MANUFACTURING COMPANY PRIVATE LIMITED

AN ISO 9001 : 2015 CERTIFIED COMPANY

OUR COMPANY

Sreesolder Manufacturing Company Private Limited is one of the quality manufacturer of solder wires, solder bars & solder related products having ISO 9001:2015 certification.

Our fully equipped manufacturing plant is located in Mumbai, having all the facilities and technical competence to manufacture the best quality of solder products and give related services to our Customers.

We are committed for **QUALITY** and implement quality control at every stage. We manufacture products as per ISS/BSS/ASTM/JIS standards and as per our customer's specific requirements.

Our management team and staff are committed to manufacturing products upto the highest level of excellence.

WE ARE DIFFERENT.....



SOLDER BAR

'SREE' extruded solder sticks / bars are manufactured from virgin metals (TIN ingots and LEAD ingots) thereby reducing oxides and removing contaminates to negligible levels.

FEATURES :

- Uniform alloy composition and minimum level of impurities resulting in lower dross formation.
- Increases yield in production and minimum re-work due to brighter solder joints.
- Excellent joint strengths.
- Compatible with all kinds of fluxes including no clean, water soluble and rosin liquid flux.

TECHNICAL SPECIFICATIONS with APPLICATIONS : (For solder bars & wires)

(As per International specifications)

(figures in percentage)

ELEMENT	SYMBOL	GRADE	ISS	ASTM	JIS	BSS	APPLICATIONS
TIN	Sn	60/40*	59.5-60.5	59.5-60.5	59.5-60.5	59-61	(a) PCB Industries
		63/37*	62.5-63.5	62.5-63.5	62.5-63.5	62-64	
LEAD	Pb	60/40*	39.5-40.5	39.5-40.5	39.5-40.5	39-41	(b) Wave Soldering Process
		63/37*	36.5-37.5	36.5-37.5	36.5-37.5	36-38	
ARSENIC	As	IMPURITIES LEVEL (for any grade)	0.03	0.03	0.03	0.03	(c) LED Industries
BISMUTH	Bi		0.05	0.10	0.05	0.10	(d) Automotive Industries
COPPER	Cu		0.05	0.08	0.05	0.01	
ALUMINIUM	Al		0.05	0.08	0.05	0.08	(e) Electronics Industries
ANTIMONY	Sb		0.05	0.05	0.08	0.05	(f) Dip-Soldering Process
ZINC	Zn		0.001	0.003	0.005	0.003	

* other solder alloys may also be available as per customer's specific requirement.

PACKAGING: 'Dust free' and 'oxide free' shrink packaging in 25/50/100 kgs.

SOLDER WIRES

'SREE' solder wires (made from virgin TIN ingots and LEAD ingots) are in the form of continuous wires in different grades and gauges as per specification with high quality flux and less chlorine burning throughout its length which avoids dry solder.

FEATURES :

- Excellent spreadability : (a) Increases production efficiency and (b) Minimize defect occurring ratio.
- No spattering of flux or solder particles.
- Free from any cracks, knots or flows.
- Efficiency of soldering with minimal residue of flux.
- Appropriate for both hand and automated soldering operation.

TECHNICAL SPECIFICATIONS with APPLICATIONS :

Alloy	Composition (%)		Solidius Temp. (°C)	Specific Temp. (°C)	Specific Gravity (g/cm ³)	Application
	Tin	Lead				
95/5	95 ± 1	Rem	183	224	7.4	Food Processeing Industries
65/35	65 ± 1	Rem	183	186	8.3	Printed - Circuit Board
63/37	63 ± 1	Rem	183	183	8.4	Dip-Soldering Process
60/40	60 ± 1	Rem	183	190	8.5	Wave Soldering Process
50/50	50 ± 1	Rem	183	215	8.9	Copper Tube Assemblies
40/60	40 ± 1	Rem	183	238	9.3	Radiator / Fan Industries
35/65	35 ± 1	Rem	183	248	9.5	Plumbing Industry
30/70	30 ± 1	Rem	183	258	9.7	Automobile Industry
20/80	20 ± 1	Rem	183	278	10.2	Lamp Industry

*All the above alloys conform to International Standards (ISS/ASTM/JIS/BSS)

PACKAGING : 'Dust free' and 'oxide free' shrink packaging in spools of 500 gms each available in 30 kgs cartons.
(can create specialized packaging to meet specific needs)

Diameter Available :

swg	mm	inch
16	1.63	0.064
18	1.22	0.048
20	0.914	0.036
22	0.711	0.028
24	0.599	0.022

Flux Percentage :

Flux %	Flux % range
1.2%	1.2 - 1.3%
1.6%	1.6 - 1.7%
2%	2 - 3%

Other swg and Flux percentage variation available as per customer requirements.

LEAD FREE SOLDER

Keeping with the requirements of a more environmently friendly world for lead-free and ROHS compliances products, the most recent addition to our product list is the lead-free solder wires and bars.

The major alloy variants in lead-free are Tin-Copper and Tin-Copper-Silver combination.

FEATURES :

- Low flux spattering and low fluxes at soldering.
- Good wettability and maximum wetting spread.
- Excellent solderability.
- Low residue and no voids in the wire.

PURE TIN ANODES



‘SREE’ anodes are manufactured in high pressure process which ensures compact structure of anodes with dense and uniform fine grains resulting in minimal impurities content, less anode sludge and excellent conductivity.

SPECIFICATIONS with APPLICATIONS are as follows :

(figures in percentage)

GRADE	Sn	Pb	Impurities							Application
			Sb	Cu	Bi	Zn	Fe	Al	As	
Tin Anode	99.95	0.02	Traces	0.002	Traces	0.002	0.0023	Traces	0.013	PCB Industries
Solder Anode	62.90	Rem.	0.03	0.018	0.014	Traces	Traces	Traces	Traces	

FLUXES

'SREE' soldering flux serves a three - fold purpose :

- It removes any oxidized metal from surfaces to be soldered.
- Seals out air, thus, preventing further oxidation.
- Improving wetting characteristic fo the liquid solder.

Categories of fluxes :

Flux Type	Appearance	Specific Gravity	Solid Content	Compliance	Halide Content	Applications
Water Soluble						
SF-100	Pale yellow	0.79-0.80	High	IPC-JSTD	Halide Free	Circuit boards, copper/ nickel based alloys & other common soldering applications.
Alcohol Based						
SF-500	Light yellow	0.92	High	IPC-JSTD	Halide Free	Metallized pad & OSP pad.
Other Fluxes						
SF-1000	Colourless	0.82	Low	IPC-JSTD	Halide Free	Circuit boards

SOLDER PASTE

Use of solder paste has been increasing at a rapid pace in the electronic industry, especially in LED light manufacturing and consumer electronics. With a view to better serve the electronic industry, we are currently developing the following variants :



Categories of solder paste :

PASTE TYPE	ALLOY TYPE	INT'L STANDARD	POWDER SIZE	HALIDE CONTENT	FLUX CONTENT	TEMP SOLIDUS	PROPERTIES / USAGE
SP-100 Solder Paste	<ul style="list-style-type: none"> • Sn63/Pb37 • Sn60/Pb40 • Sn62/Pb36/Ag2 	IPC J-STD 004 (ROL0)* OPTIONAL	1PC TYPE 3/4 3/4	0.12% - 0.14% 0.12% - 0.14% 0.12%	9.5% to 10.5%	181 - 183°C 181 - 183°C 179 - 184°C	1. Halide free 2. Excellent humidity Resistance 3. Complies with bellcore specs
SP-1000 Lead Free Solder Paste	<ul style="list-style-type: none"> • Sn96.5/Ag3/ Cu0.5 • Sn99/Cu0.7 Ag0.3 	IPC-J-STD 004 (ROL0)*	3/4 3/4	0.1% 0.1%	10.5-11% 10-12%	214 - 223°C 217 - 220°C	1. High reliability in consumer electronics 2. Mobile phones and digital camera

* Base RO (sin), Activity L(ow), Halide content 0 (yes) = ROL0

TROUBLE SHOOTING

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- | | |
|---------------------------------------|---|
| 1. Spattering | : Reason : Spattering occurs due to quick heating of solder wire.
Action : Slow down the feed rate of solder wire and avoid contacting solder wire to soldering iron tip by feeding solder wire to preheated components or soldering surface. |
| 2. Dull-Looking Solder Joint | : Reason : Contact time to soldering iron tip with molten solder is too long after removal of solder wire.
Action : Remove the soldering iron and solder wire as soon as the fillet is complete. |
| 3. Carbon-like Residue | : Reason : Soldering iron tip and tip cleaning sponge is not cleaned.
Action : To maintain consistent tip cleaning discipline i.e. keep the iron tip and tip cleaning sponge free from oxides and debris at all times. |
| 4. Solder Residue around Joint | : Reason : Excessive solder residue remains after soldering due to:
a) Use of large diameter of solder wire for application
b) Excessive or fast feeding of solder wire
c) Damaged soldering iron tip
d) Wrong selection of soldering iron or soldering iron tip
Action : a) Use solder wire of smaller diameter
b) Slow down the feeding speed of solder wire
c) Use new soldering iron tip
d) Use soldering iron with higher wattage adjust tip size |
| 5. Excessive Time in Soldering | : Reason : Selection of grade and gauge of solder wire is wrong; selection of soldering iron tip is wrong; soldering surface and component leads are not cleaned thoroughly; lack of efficiency and proper soldering skills of the operator.
Action : Select appropriate grade and gauge of solder wire depending upon the components to be soldered; select the appropriate soldering iron and its tip depending upon the heat sinking capacity of the components; clean the soldering surface and component lead properly. |

TIPS FOR PERFECT SOLDERING

1. Clean the surface thoroughly where soldering needs to be applied.
2. Soldering Iron tip should be clean, smooth and shining.
3. Select the appropriate grade and gauge of solder wire.
4. Feed the solder wire at a 45° angle, contacting both the soldering iron tip and the fillet surface for efficient heat transfer and optimum productivity.
5. Remove the soldering iron tip and solder wire as soon as fillet is complete.
6. Never leave the soldering iron tip with soldering joint without presence of solder wire to avoid degradation of physio-chemical nature of solder joint.

OUR VALUES

Integrity

Quality Assurance

Trust & Reliability

Market Leadership

Innovation & Growth

Operational Excellence

Solution Oriented

Environment friendly

Value Focussed

Committed

Empowered Team

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