



KHOSLA ENGG.
PVT. LTD., PUNE.

PRODUCT SPECIFICATION

TITLE: SOLDER STICKS /
SOLID WIRE / SLAB / INGOTS /
ANODES SUPER DELUXE
QUALITY.

Ref No. : PDS/909
ISSUE NO. : 1
REV. NO. : 0
DATE : 19.07.2016
PAGE : 01 of 04

1. SCOPE: This specification covers the requirement 'Khosla' super deluxe quality solder sticks, solid wire, slab, ingots, anodes of all the composition of soft solder.

2. GENERAL: Solder sticks, solid wire, slab, ingots, anodes will be manufactured from virgin quality non-ferrous metal alloys. The application of this solder is vast in industries like electrical, electronics, mechanical, engineering and automobiles.

3. CHEMICAL COMPOSITION:

The chemical composition of solder alloy will be as below: As per IS 1921:2005, SI 193, BS EN 29453 & J-std 006A

Sr. No.	Alloy/Composition	% of Tin	% of Lead	Melting Range (°c)
1	0.5/99.5 (Sn/Pb)	0.5 ± 0.2%	Remainder	300-310
2	1/99 (Sn/Pb)	1 ± 0.2%	Remainder	300-315
3	4/96 (Sn/Pb)	4 ± 0.5%	Remainder	300-315
4	5/95 (Sn/Pb)	5 ± 0.5%	Remainder	305-315
5	7/93 (Sn/Pb)	7 ± 0.5%	Remainder	290-310
6	10/90 (Sn/Pb)	10 ± 0.5%	Remainder	268-290
7	15/85 (Sn/pb)	15 ± 0.5%	Remainder	227-288
8	20/80 (Sn/pb)	20 ± 0.5%	Remainder	183-275
9	25/75 (Sn/Pb)	25 ± 0.5%	Remainder	183-268
10	30/70 (Sn/pb)	30 ± 0.5%	Remainder	183-255
11	40/60 (Sn/pb)	40 ± 0.5%	Remainder	183-234
12	50/50 (Sn/pb)	50 ± 0.5%	Remainder	183-212
13	60/40 (Sn/pb)	60 ± 0.5%	Remainder	183-188
14	63/37 (Sn/pb)	63 ± 0.5%	Remainder	183
15	70/30 (Sn/Pb)	70 ± 0.5%	Remainder	183 - 192
16	80/20 (Sn/Pb)	80 ± 0.5%	Remainder	183-199



**KHOSLA ENGG.
PVT. LTD., PUNE.**

PRODUCT SPECIFICATION

**TITLE: SOLDER STICKS /
SOLID WIRE / SLAB / INGOTS
/ ANODES SUPER DELUXE
QUALITY.**

Ref No. : PDS/909
ISSUE NO. : 1
REV. NO. : 0
DATE : 19.07.2016
PAGE : 02 of 04

4. IMPURITIES: The maximum impurity levels will be as below: As per IS 1921:2005, SI 193,
BS EN 29453 & J-std 006A

Element	% of Element
Antimony	0.2%
Copper	0.1%
Arsenic	0.05%
Bismuth	0.10%
Iron	0.02%
Aluminum	0.001%
Zinc	0.005%
Cadmium	0.005%
Others	0.08%

4. DIMENSIONS:

1. **Solid solder wire-** For solid wire dia 0.45mm to 6.5mm \pm 0.05mm
2. **Machine extruded round solder sticks :**
 - a) Diameter:- 8 to 12mm \pm 0.5mm
 - b) Length: - As per customer requirements.
3. **Casted and m/c extruded Solder Sticks in Trapezoidal shape**

Parameter	Casted solder stick	M/c. Extruded solder stick
Bottom width (BW)	5mm-8mm \pm 1mm	5mm-8mm \pm 1mm
Top width (TW)	8mm-15mm \pm 1mm	8mm-15mm \pm 1mm
Height (H)	7 to 15mm \pm 2mm	7 to 15mm \pm 2mm
Length (L)	320-325mm	As per customer requirement \pm 5mm

4. Solder Ingots / Slab : As per customer specification.
5. Solder Anodes : As per customer specification.

6. SAMPLING: Sample every 300 kgs or everyday production batch.

7. ACCEPTANCE CRITERIA :

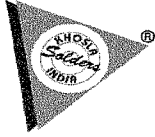
- > Tin: Specified \pm 0.5%.
- > Surface Finish (Shine): As per approved sample.

8. HANDLING AND STORAGE:

Solder wire is wound on spools of 500gms, 3 kg, 4 kg or as per customer requirement and further labeled prior to be storage. Sticks will be packed in 5kg polythene bag, labeled and further packed in corrugated boxes of 30-40 kg. Other products will be packed to customer requirements or as suitable to avoid damage in transit or direct exposure to atmosphere. These solders will be stored in finish good stores.

7. SHELF- LIFE:

This Solder sticks solid wire slab ingots anodes has infinite shelf life



**KHOSLA ENGG.
PVT. LTD., PUNE**

**PRODUCT
SPECIFICATION**

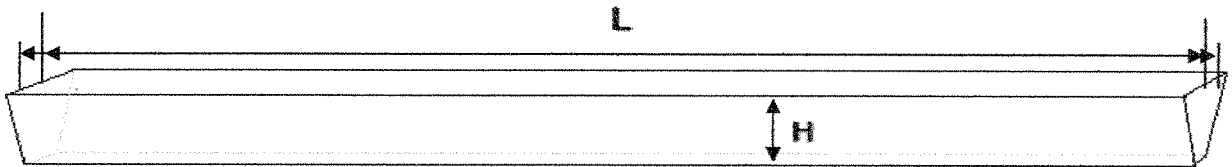
**TITLE: SOLDER STICKS / SOLID
WIRE / SLAB / INGOTS /
ANODES SUPER DELUXE
QUALITY.**

Ref No. : PDS/909
ISSUE NO. : 01
REV. NO. : 00
DATE : 19.07.2016
PAGE : 04 of 04

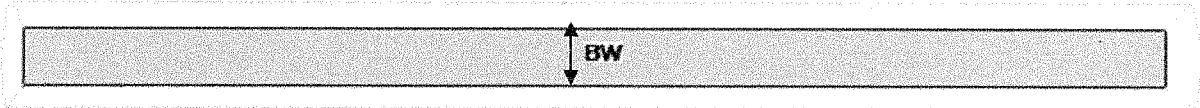
DIAGRAM:- EXTRUDED SOLDER STICKS



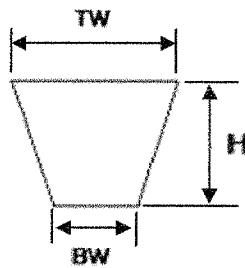
TOP SIDE



3D VIEW



BOTTOM SIDE



FRONT SIDE

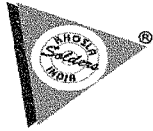
BW - Bottom width
TW - Top width
H - Height
L - Length

Reviewed By :
HOD Q.A. *[Signature]*

Approved By :
Vice President (Ops.) *[Signature]*

First Time Issued:19.07.2016

Control Copy No.:



**KHOSLA ENGG.
PVT. LTD., PUNE.**

PRODUCT SPECIFICATION

**TITLE: SOLDER STICKS /
SOLID WIRE / SLAB / INGOTS /
ANODES STANDARD QUALITY.**

Ref No. : PDS/910
ISSUE NO. : 1
REV. NO. : 0
DATE : 19.07.2016
PAGE : 01 of 04

1. **SCOPE:** This specification covers the requirement 'khosla' standard quality solders sticks, solid wire, slab, ingots, anodes of all the composition of soft solder.
2. **GENERAL:** Solder sticks, solid wire, slab, ingots, anodes will be manufactured from virgin quality non-ferrous metal alloys. The application of this solder is vast in industries like electrical, electronics, mechanical, engineering and automobiles.

3. CHEMICAL COMPOSITION:

Tin : As specified $\pm 10\%$
Lead: Remainder.

4. **IMPURITIES:** The maximum impurity levels will be as below:

Element	% of Element(max)
Antimony	0.2%
Copper	0.1%
Arsenic	0.05%
Iron	0.02%
Aluminum	0.001%
Zinc	0.005%
Cadmium	0.005%
Others	0.08%

5. DIMENSIONS:

4. **Solid solder wire-** For solid wire dia 0.45mm to 6.5mm ± 0.05 mm
5. **Machine extruded round solder sticks :**
 - c) Diameter:- 8 to 12mm ± 0.5 mm
 - d) Length: - As per customer requirements.

6. Casted and m/c extruded Solder Sticks in Trapezoidal shape

Parameter	Casted solder stick	M/c extruded solder stick
Bottom width (BW)	5mm-8mm ± 1 mm	5mm-8mm ± 1 mm
Top width (TW)	8mm-15mm ± 1 mm	8mm-15mm ± 1 mm
Height (H)	7 to 15mm ± 2 mm	7 to 15mm ± 2 mm
Length (L)	320-325mm	As per customer requirement ± 5 mm

4. Solder Ingots / Slab : As per customer specification.
5. Solder Anodes : As per customer specification.

6 SAMPLING: Sample every 300kgs or everyday production batch.