1001. ACME-MAS-ACE-STR-0001

LODHA BUILDING A BETTER LIFE	Lodha Sales Gallery, ACME Manpada, Thane	ACE GLOBAL AIRCON SERVICES LTD.	Work Order No.:
			Material Approval Submittal
			MAS No:

Contractor:ACE GLOBAL AIRCON SRVICES LTD

To LODHA Group: Lodha Sales Gallery, Manpada, Thane | Date: 02-03-2022

Discipline ☐ Architectural ☐ Structural ■ HVAC ☐ Electrical ☐ Plumbing ☐ Facade ☐ Others (.....)

MATERIAL DETAILS (One Item Only Per Form)

Item description :COPPER PIPE

Name of material : Refrigerant Pipe & Fitting

Remarks ☐ As per specifications ☐ Alternate submission

- Attach all relevant technical literature marked to identify relevant descriptions, current test certificate, samples etc.
- Highlight any element of contractual non-compliance in this submittal

Drawing Ref: -	**Planned Date for applicable submittal for: -**	**Date:**
Specification Ref: -	1. O & M Manual	
BOQ Ref: -	2. Training Manual	
Indian/International Standards Ref: -	3. Specified /recommended spare parts	
	4. Warranties and Guarantees	

Manufacturer / Supplier

Company Name: - Parasmani Tubes Pvt Ltd	Locally Manufactured
Address: 2A, D.S. Kapol Niwas, Khatwadi,	Production Period
4th Lane , Mumbai-400 004	Delivery Ex-works
	Total Delivery Time
Local Agent:	Total Delivery Time

Programme: -

Date required on Site: -

Expected date of arrival on Site: -

Contractor's Authorized Signature

ACE GLOBAL AIRCON SERVICES LTD MUMBAI

LODHA Engineer's Comments ☐ Design ☐ Con. Mgmt (Civil) ☐ Con. Mgmt (MEP) ☐ Con. Mgmt (Facade) ☐ QA/QC

MAKE DEVIATION TO BE APPROVED WITH PROCUREMENT TEAM AND EMAIL FOR COMPLIANCE OF SAME FROM PROJECT TEAM REQUIRED.
TENDER DOCUMENTS ATTACHED ARE NOT VISIBLE.

Jangbahadur Sonkar

Digitally signed by Jangbahadur Sonkar
DN: C=IN, OU=Lodha Group, O=Lodha Group, CN=Jangbahadur Sonkar, E=jangbahadur.sonkar@lodhagroup.com
Reason: I am approving this document
Location: your signing location here
Date: 2022.03.05 10:57:26+05'30'
Foxit PDF Reader Version: 11.1.0

Signed (LODHA Engineer)

Consultant's Comments. ☐ Hafeez contractor ☐ Sterling ☐ ESKEYEM ☐ Others (.....)

Signed (Consultant's Engineer)

Status	Code 1	Code 2	Code 3	Code 4
	Work may proceed	Conditionally approved. Work may proceed and resubmit incorporating comments indicated	Revise & Resubmit. Work may not proceed	For information and records only. Work may proceed.

Project Director | **Date: -**

CC: VP (QA/QC), VP (Purchase)

Code 1 – Work may proceed
Code 2 – Conditionally approved. Work may proceed and resubmit incorporating comments.
Code 3 – Revise & Resubmit. Work may not proceed
Code 4 – For information and records only. Work may proceed
Important: Permission to proceed does not relieve contractor from full compliance with contractual obligations

LODHA BUILDING A BETTER LIFE	**Luxuria Marriage Hall** Consultant : Ambrosia Design Architect : KDND	ACE GLOBAL AIRCON SERVICES LTD	**Contract Ref:** **Material Approval Submittal** **MAS No: LX-MAS-AG-HVAC-0011-00**

Contract: Construction of Lodha – LUXURIA MARRIAGE HALL

To LODHA Group: **Ace Global Aircon Service Ltd.** | Date: 28.09.2020

Discipline ☐ Architectural ☐ Structural ■ HVAC ☐ Electrical ☐ Plumbing ☐ Facade Others ( )

MATERIAL DETAILS (One Item Only Per Form)

Item description : Refrigerant Copper Pipe

Name of material : Refrigerant Copper Pipe

Remarks ☐ As per specifications ☐ Alternate submission

- **Attach all relevant technical literature marked to identify relevant descriptions, current test certificate, samples etc.**
- Highlight any element of contractual non-compliance in this submittal

Drawing Ref: -	**Planned Date for applicable submittal for: -**	**Date:**
Specification Ref: - 2.1	1 O & M Manual	
BOQ Ref: - 1.2 & 2.9	2 Training Manual	
Indian/International Standards Ref -	3 Specified recommended spare parts	
	4 Warranties and Guarantees	

Manufacturer / Supplier

Company Name: **Parasmani Tubes Pvt. Ltd.**
Address: 2A, D.S.Kapol Niwas, Khetwadi, 4th Lane, Mumbai-400 004.

Locally Manufactured

Production Period
Delivery Ex-works
Total Delivery Time

Programme: -
Date required on Site: -
Expected date of arrival on Site: -

Contractor's Authorized Signature

LODHA Engineer's Comments | Design | Con. Mgmt (Civil) | Con. Mgmt (MEP) | Con. Mgmt (Facade) | QA/QC

Lodha comments:
1. Cu Pipes shall be 21G as per BOQ.
2. Provide relevant test certificates as specified in tender specs.
3. Comply all technical specs strictly.
4. Follow the procedure specified in tender specs for installation.

Signed (LODHA Engineer) Digitally signed

Consultant's Comments. ☐ AE OM ☐ Mott McDonald ☐ ☐ ☐ ☐

Signed (Consultant's Engineer)

	Status	**Code 1** Work may proceed	**Code 2** Conditionally approved. Work may proceed and resubmit incorporating comments indicated	**Code 3** Revise & Resubmit. Work may not proceed	**Code 4** For information and records only. Work may proceed
	Project Director			**Date: -**	
	CC: GM (QA/QC), GM (Purchase)				

Code 1 – Work may proceed
Code 2 – Conditionally approved. Work may proceed and resubmit incorporating comments
Code 3 – Revise & Resubmit. Work may not proceed
Code 4 – For information and records only. Work may proceed
Important: Permission to proceed does not relieve contractor from full compliance with contractual obligations

Form no. LP-EDF-01 Rev.01 dt.10/10/11

ACE GLOBAL AIRCON SERVICES LTD. MUMBAI

LODHA

LIST OF APPROVED MAKES - HVAC SYSTEM

Sr. No.	Details of Materials / Equipment	Manufacturer's Name
1	Constant Volume Air cooled Split AC Units	Carrier Daikin Hitachi Voltas Blue Star Toshiba Panasonic LG
2	AHU/TFA DX type	Blue Star Carrier Nutech Suvidha-Saiver Voltas
3	Variable Frequency Drive Automatic AFD Bypass Differential Pressure Sensor / Transmitter	Danfoss ABB Schneider Siemens
4	Anti corrosive coating on condenser / evaporator / Cooling Coils	Blygold
5	Centrifugal Fan	Greenheck, Kruger Nicotra Nuaire Dynair
6	Vane / Tube Axial Flow Fan	Greenheck Kruger Nicotra Nuaire Dynair
8	Inline/Propeller Fan/Roof extractor Fan/ Cabinet type fans	Greenheck Kruger Nicotra Nuaire Dynair INDO
9	Volume Control damper(VCD) & Pressure relief damper	Caryaire Ravistar Greenheck
10	Hangers & Supports	Hilti Fischer HITECK
11	Acoustic Insulation: a. Fiber glass	Owen Corning UP Twiga Sipla Solutions
11	Copper Pipes	Mandev Rajco Conex Banninger

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1.

Name of Manufacturers & Address

PARASMANI TUBES Pvt. Ltd.

ADDRESS :- 2A, D.S.Kopal Niwas, Khetwadi

4th Lane, Mumbai – 400 004.

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2. PIPE & FITTINGS.

The scope of this section comprises the supply and lying of pipes, pipe fittings and support, and refrigerant piping required for the complete installation as shown on the Drawings. All piping inclusive of fittings and valves shall follow the applicable Indian Standards. Pipe sizes shall be as required for the individual fluid flows. Various pipe sizes have been indicated on the Drawings, these are for Contractor's guidance only and shall not relieve contractor of responsibility for providing smooth noiseless balanced circulation of fluids.

References:

- ASTEM B68/1995 and ASTM-B75/1983- copper tubes used for Refrigerant purpose.
- ASTM-E243 - Standard Practice for Electromagnetic (Eddy-Current) Examination of Copper and Copper-Alloy Tubes
- BS 864-Part II - Specification for Capillary and Compression Fittings for Copper Tubes
- BS EN 29453 - Soft solder alloys. Chemical compositions and forms
- 1723 - Brazing. Methods for non-destructive and destructive testing

2.1 Refrigerant Pipes & Fittings: - Products:

A. All refrigerant piping shall be of copper tubes conforming to ASTM B68 / 1995 and ASTM – B75/1983
B. Copper tubes shall be seamless, bright annealed with clean inside surface, free from all impurities.
C. Material of the tube shall be Phosphorous Deoxidized High Residual Copper with minimum 99.9% copper and 0.015% to 0.040% phosphorous.
D. Copper tubes shall have the following properties:

Comply.

Sr. No.	Properties	Soft Annealed (ASTM-B68)	Hard Drawn (ASTM-B75)
a)	Tensile strength	30 ksi (min)	45 ksi (min)
b)	Elongation	40% (min)	Not required
c)	Hardness	60 HV5 (max.)	55 HV5 (min)
d)	Grain size	0.040 (min.)	Not required
e)	Expansion	40% (min)	Not required

E. All tubes shall be 100% eddy current tested as per ASTM – E243 and test certificate submitted.
F. All tubes shall be carbon film tested and test certificate submitted. Maximum residual carbon shall be 0.1 mg/dm2.
G. All tubes shall be deburred at both ends.
H. All tubes shall be free from carbon oxide or any other contaminant. Tubes for Non-CFC gas such as R134a, R410a, R600 etc. shall not be subjected to paraffin, wax, acids, chromium etc. in the factory and shall be cleaned & supplied without residues / oxides or carbon in the ID.
I. All tubes shall be pre-filled with nitrogen and capped on both sides before supply.
J. Tubes shall be ROHS complied as per EC directives for hazardous substances including mercury, lead, cadmium &hexavelent chromium.
K. Contractor shall submit all test certificates including Hazardous Substance Compliance Certificate.
L. **All hard tubes shall be printed with manufacturer's name,** specifications, size, hardness at regular intervals.
M. Tubes shall be duly capped and packed in polythene bags. Capillary and compression fittings of copper and copper alloys shall conform to BS 864-Part II. Solder wire and brazing alloys shall conform to BS EN 29453 and BS 1723 respectively.

N. Selected piping material shall have sufficient corrosion resistance and shall work for at least 15 years without any change in property for sea climate.
O. Line velocities for pipe sizing shall be as follows:

a) Suction - 6 to 20 MPS
b) Discharge - 10 to 17.5 MPS
c) Liquid - 0.5 to 1.25 MPS

Contractor shall submit a schematic piping diagram for each type of refrigeration Machine.

Comply.

2.2 Refrigerant Pipes & Fittings: - Execution.

A. Design Drawings indicate schematically the size and location of pipes. The Contractor, on award of the work, shall prepare detailed shop drawings, showing the cross-section, longitudinal sections, details of fittings, locations of isolating and control valves, drain and air valves, and all pipe supports. The pipe size shall be as per the machine manufacturers recommendation. He must keep in view the specific openings in the building through which pipes are designed to pass.

B. The selection of pipe size as per the shop drawing and the actual length of the pipes between indoor/outdoor tube calculated.

C. Piping shall be properly supported on, or suspended from, stands, clamps, and hangers as specified and as required. The Contractor shall adequately design all the brackets, saddles, clamps and hangers and be responsible for their structural sufficiency.

D. Wherever pipes pass through a fire rated wall / slab openings, the gaps shall be sealed with fire sealant of approved make.

E. All refrigerant piping shall be laid in cable trays. Direct clipping of pipes on ceiling or wall shall not be acceptable.
F. Refrigerant piping will be installed in following manner
   a. Cut the correct length of pipe with a tube cutter. End of the tube shall be cut at right angle to the axis. All burrs shall be removed with a file.

   b. Clean the outside and inside surface using cleaning pads or fine sand paper.

   c. Apply water soluble thin film of flux to the tube and fittings, to prevent copper from oxidizing and to ensure that the molten solder bonds the tubes and fittings.

   d. Insert the tube into the fitting and push until the stop is reached.
   Wipe off excess flux with clean cloth.

   e. Apply heat on the assembled joints using lamps emitting clean, blue and soot free flame, till complete ring of the solder appears around the mouth of the fitting.

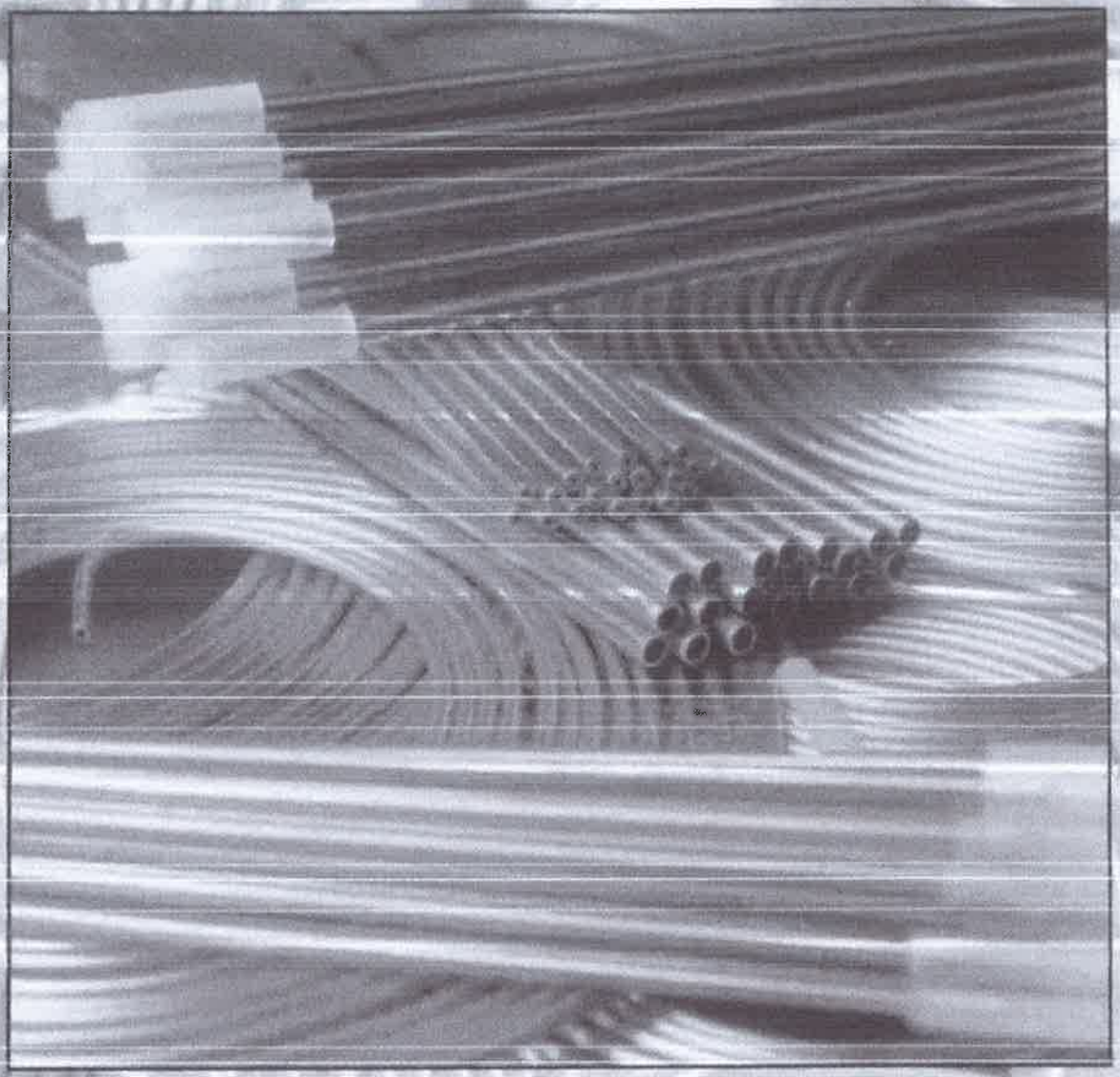
   f. Allow the joint to cool without disturbing the joint. Wipe off excess flux and other foreign matter

   g. Avoid any joints in non accessible areas such as shafts. All refrigerant pipes to be pressure tested before charging refrigerant.

2.
Technical Specification & Catalogue

ACE GLOBAL AIRCON SERVICES LTD. MUMBAI

ACE GLOBAL AIRCON SERVICES LTD. MUMBAI



Parasmani Tubes Pvt. Ltd.

ACE GLOBAL AIRCON SERVICES LTD. MUMBAI

ACE GLOBAL AIRCON SERVICES LTD. MUMBAI

COPPER & COPPER ALLOYS

Parasmani Tubes Pvt. Ltd., has grown into a leading manufacturer of copper tubes with an international as an innovative, dependable and high quality producer of copper based products in India. Known for their quality, consistent supply and sophisticated laboratory testing, in process quality control at every stage of manufacture and commitment to produce the best products to ensure the highest standards and guaranteed performance of our copper tubes for the Air-Conditioning, Refrigeration, Heating, Plumbing, Instrumentation, Medical gas and Oil & Gas Industries.

Our plant is located at Gujarat State, the fastest growing industrial area in the country. The company has ensured non-pollution working conditions in the plant. The proposes to obtain ISO & Allied quality assurance certification shortly.

Our plant is a vital force in India's Non-Ferrous Industries with a blend of experience & technical expertise that is unsurpassed. This enables our organization to successfully service the diverse requirements of copper based alloys market.

ACE GLOBAL AIRCON SERVICES LTD. MUMBAI

ACE GLOBAL AIRCON SERVICES LTD. MUMBAI

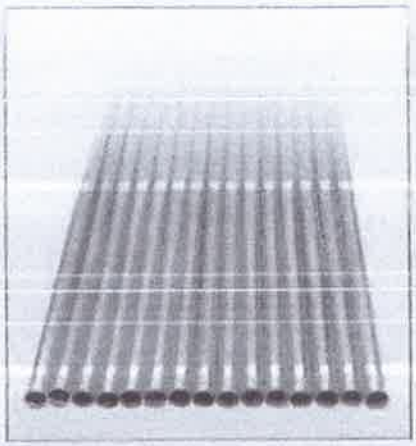
PRODUCTS

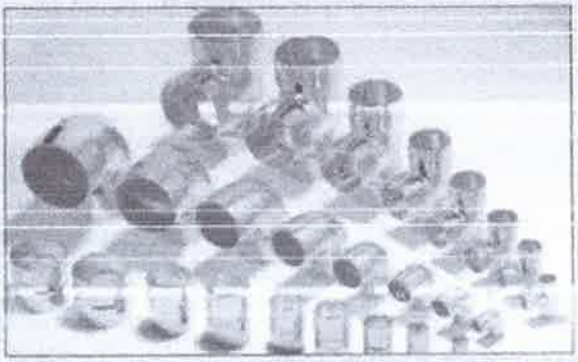
APPLICATION & OUR PRODUCTS

PRODUCTS

- Copper Tubes
- Copper Coils
- Copper Brazing Rod
- Insulation Tubing & Sheets
- G. I. Sheets (Unidal)
- PVC Rigid Pipes & Fittings
- Electric Cable







APPLICATIONS

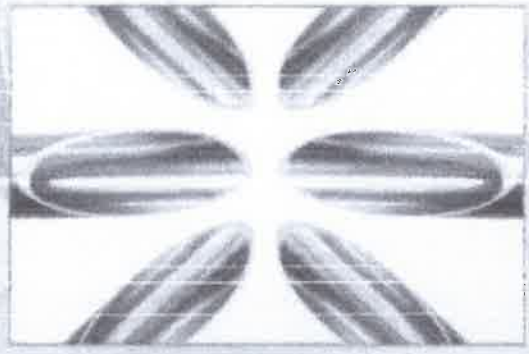
- Air-Conditioning & Refrigeration
- Heat Exchangers
- Cooling Tower
- Water Heater
- Conductors
- Burner

SPECIFICATION FOR COPPER TUBES

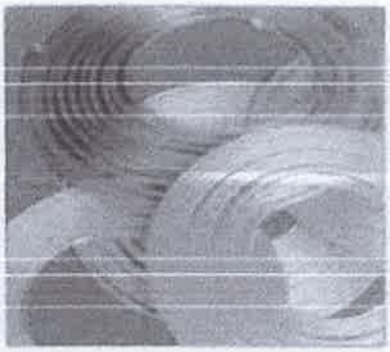
Material Descriptions	Specifications ISS	BSS	Copper %	Arsenic %	Phos-Phorous %	Lead %	Iron %	Nickel %	Other Ele-ments	Tensile Strength Kg/mm	Elongation	Electrical Conductivity ar20°C	Hardness
Phosphorors De-Oxidised Non Arsenical Copper	2501: DHP I DHP II	2871: C106	99.85 Min.	---	0.013 to 0.05	0.01	0.03	—	0.06	Anne. 22 Drawn 28	Anne. 40% Drawn — H.H.		60Max. 105 Min. 80-100
Phosphorors De-Oxidised Non Arsenical Copper	2501: DPA	2871: C107	99.20 Min.	0.3 to 0.5	0.013 to 0.05	0.01	0.03	—	0.07	Anne. 22 Drawn 28	Anne. 40% Drawn		
High Conductivity Copper Tubes	2501: ETP	1977 (2871: C101)	99.9 Min.	---	—	0.005	—	—	0.03	Anne. 20.5 to 25.2 Drawn. 26.8 Min.	Ann. 40% Drawn		
Cupro Nicke Tubes	1545 CuNi10Fe1	BS 2871 Part 2 CN-102	Remdr.	Managanese 0.5-1.1		0.01	0-23	10-11	0.3	Anne 30.5-38.5 Drawn 44 Min.	30 —		80-110HV 150 Min.
Cupro Nickel Tubes	CuNi30	CN-107	Remdr.	0.5-1.5		0.01	0.4/1	30/32	0.3	Anne 37-46 Drawn 51 Min	30 —		90 120 HV 150 Min.

GLOBAL AIRCON SERVICES PVT. LTD. MUMBAI

Air Conditioning & Refrigeration Quality Tubes



Parasmani produces copper tubes in DHP grade for a vide Spectrum of the Heating, Ventilating, Air-Conditioning, Refrigeration, Medical gas & Cooling industry.



Tubes are manufactured to suit various specifications, prominent amongst these are the ASTM B68, ASTM B75, BS 28711, EN 1057, ASTM B289 and the JIS H3300. Tubes are also manufactured to suit international Customer Specification. We are proud to supply to a wide range of refrigeration & Air-Conditioning requirements in hard, half hard quarter or soft annealed condition.

Air-Conditioning & Refrigeration copper tubes are made from phosphorous deoxidies copper (DHP Grade) alloy C-106 or UNS No. C-12200 with minimum copper purity of 99.9% and phosphorous purity of 0.015% to 0.040% with strict dimensional tolerances as per ASTM B251 to ensure the highest standards & guaranteed performance. The internal bore cleanliness meets the requirement of the residue test s specified by the codes to give you a meticulously clean, mirror-like inner surface & also to suit the new refrigeration gages like R134 A, R-600 or R-410 & Refrigeration lubricants like Ester Oil. The tube integrity is will defined by the fact that all tubes meet the standards of ASTM E243 & are eddy current tested to ensure that a **defect free** and flawless tubes is supplied to the customer.

COPPER TUBES : For Air-Conditioning & Refrigeration

As per ASTM B-68/80 and B-280/80 (BS C106)

Chemical requirements :

Copper	**99.95% min.**
Phosphorous	**0.015 to 0.040%**

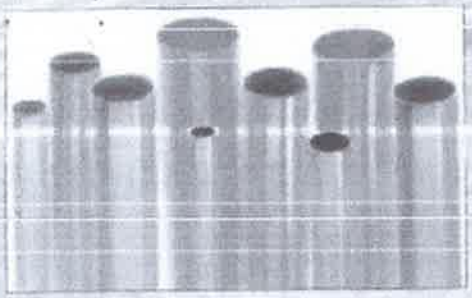
Physical Properties :

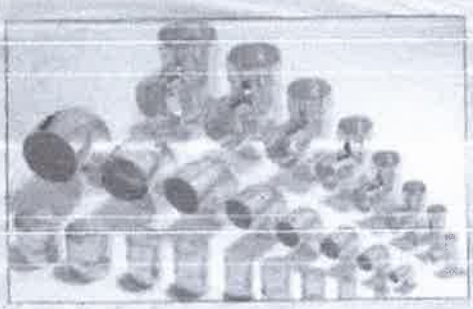
Temper	Tensile	% elongation on
Annealed	22	40

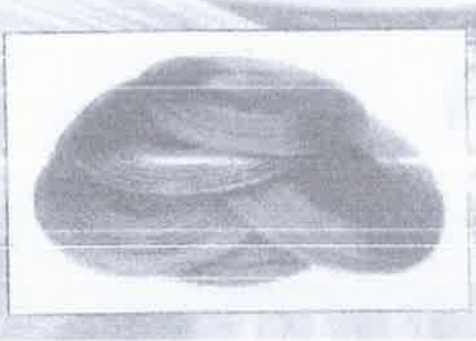
Flattening, Double over test, pneumatics, Hydrogen Embrittlement, Cleanliness and microstructure test as per specification.

GLOBAL AIRCON SERVICES MUMBAI

ACE GLOBAL AIRCON SERVICES PVT. LTD. MUMBAI





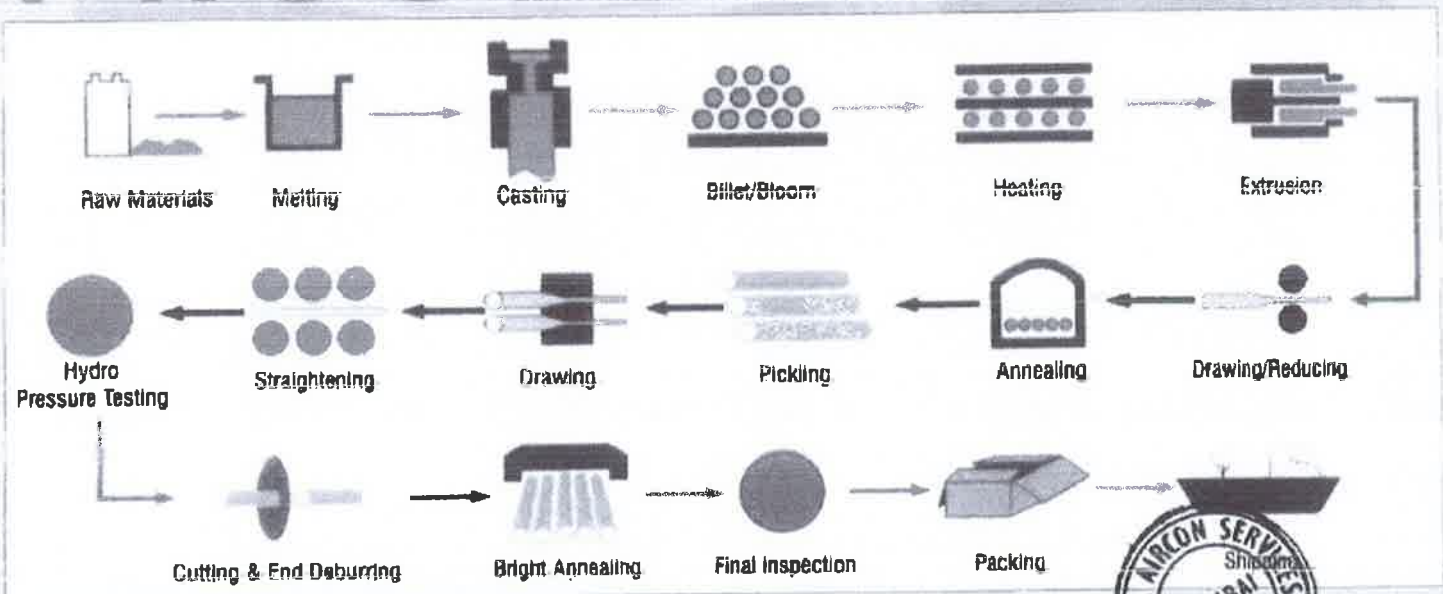


QUALITY

Parasmani defines quality at every step of production is routinely and rigorously inspected and controlled with the highest standard the whole process has yet to go through continuous improvement in order to ensure our product quality and total customer satisfaction, and put us at the forefront of copper processing center in India.

Our factory is equipped with excellence Manufacturing & testing facilities as per International Standard and norms along with wide range of applications to meet the demand of the market. We also supply special items as per customer's specifications.

PROCESS ROUTE

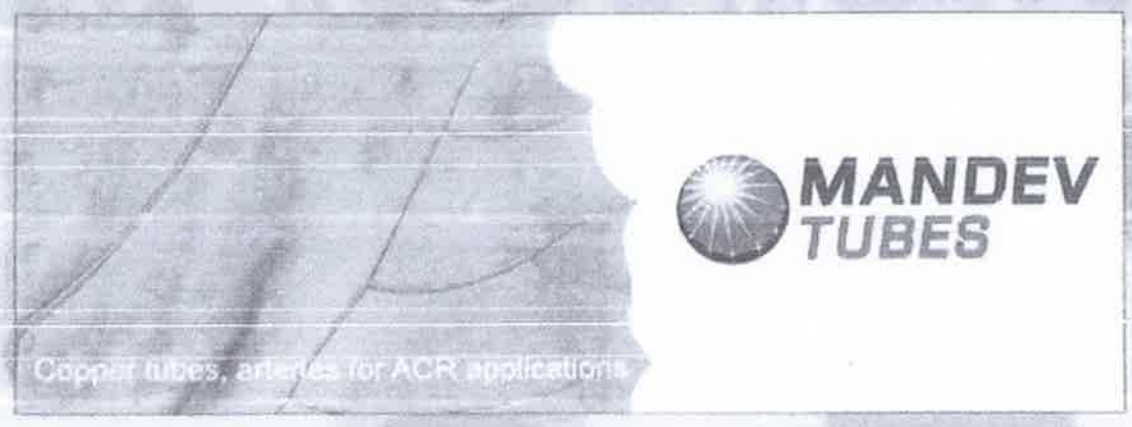


FACTORY :
5/2, G.I.D.C. Umbergaon-396171. Tel.: 0260-3242708 / 9067012841

GLOBAL AIRCON SERVICES LTD. MUMBAI
ACE GLOBAL AIRCON SERVICES LTD. MUMBAI

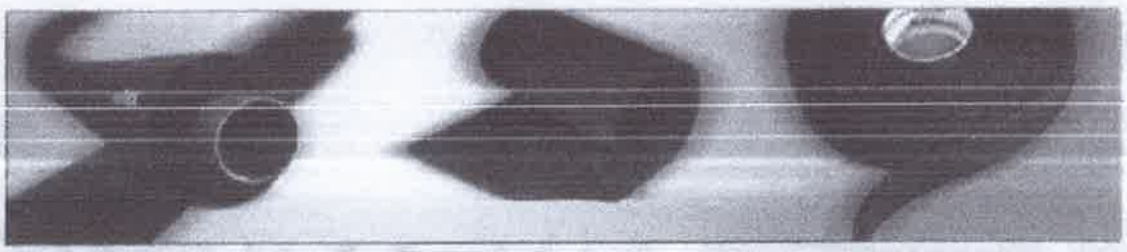
STRAIGHT LENGTH COPPER TUBE

DISTRIBUTORS OF :



VRF / VRV APPROVED COPPER TUBES.

armacell
engineered foams
THE MAKERS OF
Armaflex



Class O Armaflex®

Associate Concern :

Dhyans

GLOBAL AIRCON SERVICES LTD. MUMBAI

Off. : 4, RUNGTA ESTATE, 123E V P ROAD, MUMBAI – 400 004
Email : dhyans99@yahoo.com; dhyans99@gmail.com
Tel. : 022 – 66394125 / 32602795 Fax : 022 - 66394125

GLOBAL AIRCON SERVICES LTD. MUMBAI

WEIGHT OF COPPER TUBES IN VARIOUS SIZES & GAUGES - EXTERNAL DIAMETER

WALL THICKNESS

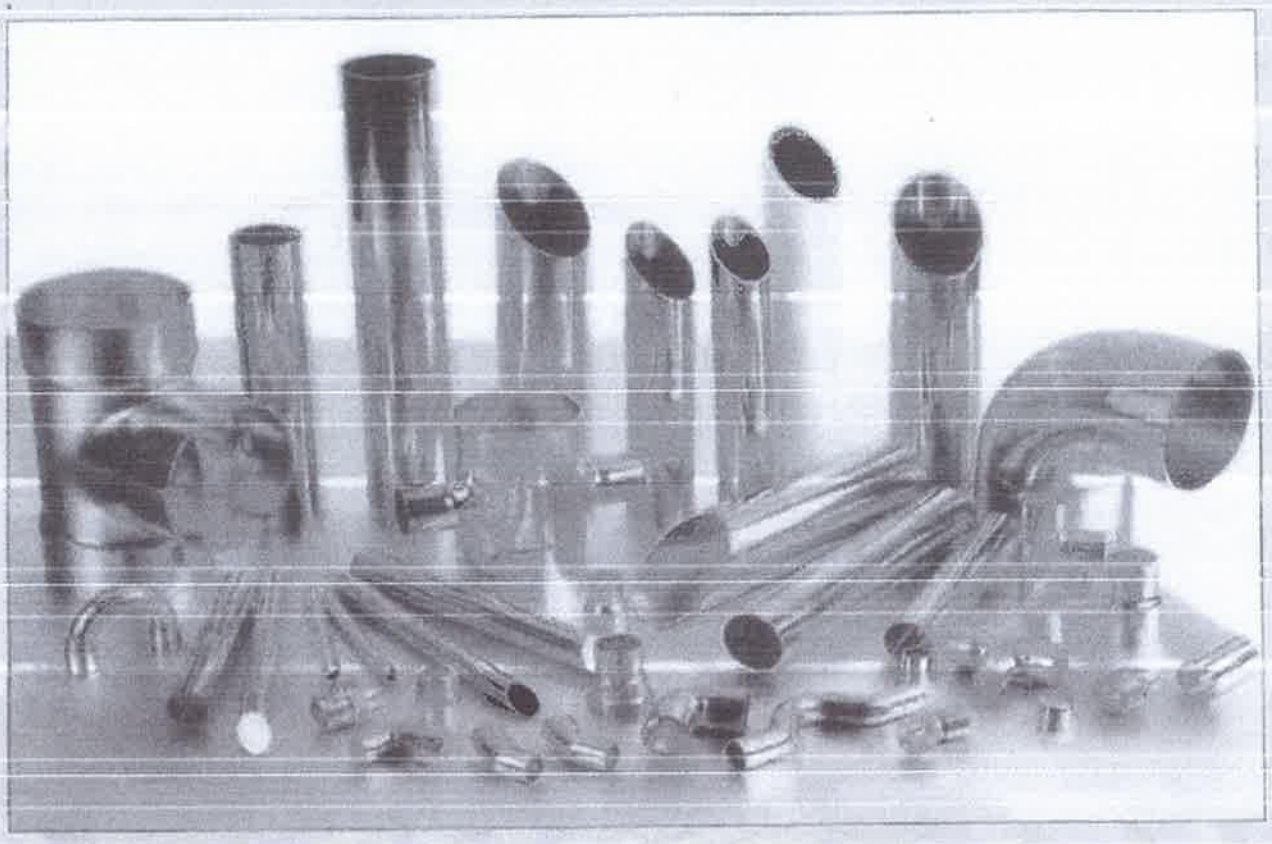
I.S.W.G.	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	I.S.W.G.
Millimeters	4.877	4.470	4.064	3.658	3.251	2.946	2.642	2.337	2.032	1.829	1.626	1.422	1.219	1.016	0.914	0.813	0.711	0.610	0.559	Millimeters
Inches	0.192	0.176	0.160	0.144	0.128	0.104	0.104	0.092	0.080	0.072	0.064	0.056	0.048	0.040	0.036	0.032	0.028	0.024	0.022	Inches

WEIGHT IN KILOGRAMS PER METER

External Diameter IN	External Diameter MM																			External Diameter IN	External Diameter MM
1/4	6.350	-	-	-	-	-	-	0.723	0.262	0.245	0.231	0.214	0.196	0.175	0.151	0.139	0.126	0.112	0.098	0.090	1/4	0.250
5/16	7.938	-	-	-	-	-	-	0.390	0.365	0.335	0.312	0.286	0.259	0.229	0.196	1.79	0.162	0.143	0.125	0.115	5/16	0.313
3/8	9.524	-	0.631	0.619	0.599	0.569	0.541	0.507	0.469	0.425	0.393	0.358	0.322	0.283	0.241	0.220	0.198	0.175	0.152	0.140	3/8	0.375
7/16	11.112	-	0.829	0.799	0.761	0.713	0.671	0.624	0.57	0.515	0.474	0.430	0.385	0.337	0.286	0.260	0.234	0.206	0.179	0.165	7/16	0.438
½	12.700	1.065	1.027	0.979	0.923	0.857	0.802	0.742	0.676	0.605	0.555	0.501	0.448	0.391	0.331	0.301	0.270	0.238	0.206	0.189	½	0.500
9/16	14.288	1.281	1.225	1.160	1.085	1.001	0.933	0.856	0.779	0.695	0.636	0.574	0.511	0.445	0.376	0.341	0.306	0.269	0.233	0.214	9/16	0.563
5/8	15.875	1.497	1.423	1.340	1.247	1.145	1.063	0.976	0.883	0.785	0.717	0.646	0.574	0.499	0.421	3.383	0.342	0.301	0.260	0.239	5/8	0.625
11/16	17.462	1.173	1.621	1.520	1.409	1.289	1.940	1.093	0.986	0.875	0.798	0.718	0.637	0.553	0.466	0.422	0.378	0.332	0.287	0.264	11/16	0.688
3/4	19.050	1.929	1.819	1.700	1.571	1.434	1.324	1.210	1.090	0.965	0.879	0.790	0.700	0.607	0.511	0.563	0.414	0.364	0.314	0.288	3/4	0.750
13/16	20.638	2.145	2.017	1.880	1.733	1.578	1.455	1.327	1.193	1.055	0.960	0.863	0.763	0.661	0.556	0.503	0.450	0.395	0.341	0.313	13/16	0.813
7/8	22.225	2.361	2.215	2.060	1.895	1.722	1.585	1.444	1.297	1.145	1.041	0.935	0.826	0.715	0.601	0.544	0.486	0.427	0.368	0.338	7/8	0.875
15/16	23.812	2.577	2.413	2.40	2.057	1.866	1.716	1.561	1.401	1.235	1.122	1.007	0.889	0.769	0.646	0.584	0.522	0.459	0.339	0.363	15/16	0.938
1	25.400	2.793	2.611	2.240	2.219	2.010	1.845	1.678	1.504	1.325	1.203	1.079	0.952	0.823	0.691	0.625	0.588	0.490	0.442	0.387	1	1.000
1.1/8	28.575	3.225	3.007	2.790	2.543	2.298	2.107	1.912	1.711	1.505	1.365	1.223	1.078	0.931	0.781	0.706	0.630	0.553	0.476	0.437	1.1/8	1.125
1.1/4	31.750	3.657	3.403	3.140	2.868	2.586	2.368	2.146	1.918	1.685	1.527	1.367	1.204	1.039	0.871	0.787	0.702	0.616	0.530	0.486	1.1/4	1.250
1.3/8	34.925	4.090	3.799	3.500	3.192	2.874	2.630	2.380	2.125	1.865	1.689	1.511	1.330	1.147	0.961	0.868	0.774	0.679	0.584	0.536	1.3/8	1.375
1.1/2	38.100	4.522	4.195	3.860	3.516	3.162	2.891	2.614	2.332	2.045	1.851	1.655	1.456	1.255	1.051	0.949	0.846	0.742	0.638	0.585	1.1/2	1.500
1.5/8	41.275	4.954	4.592	4.220	3.840	3.450	3.152	2.848	2.539	2.225	2.013	1.799	1.582	1.363	1.142	1.030	0.918	0.805	0.692	0.635	1.5/8	1.625
1.3/4	44.450	5.386	4.988	4.580	4.164	3.738	3.413	3.082	2.746	2.405	2.175	1.943	1.708	1.471	1.232	1.111	0.990	0.868	0.746	0.684	1.3/4	1.750
1.7/8	47.625	5.818	5.384	4.941	4.488	4.026	3.674	3.316	2.953	2.586	2.337	2.087	1.834	1.579	1.332	1.92	1.062	0.931	0.800	0.734	1.7/8	1.875
2	50.800	6.250	5.780	5.301	4.812	4.314	3.935	3.550	3.161	2.766	2.449	2.231	1.690	1.795	1.412	1.273	1.134	0.994	0.854	0.784	2	2.000
2.1/8	53.975	6.682	6.176	5.661	5.136	4.602	4.196	3.784	3.368	2.946	2.661	2.375	2.086	1.903	1.502	1.354	1.206	1.057	0.908	0.833	2.1/8	2.125
2.1/4	57.150	7.144	6.572	6.021	4.460	4.890	4.457	3.018	3.575	2.126	2.823	2.519	2.212	2.011	1.592	1.435	1.278	1.120	0.962	0.883	2.1/4	2.250
2.3/8	60.325	7.547	6.968	6.381	5.784	5.179	4.718	4.252	3.782	3.306	2.986	2663	2.338	2.011	1.682	1.516	1.350	1.183	1.016	0.932	2.3/8	2.375
2.1/2	63.500	7.979	7.364	6.741	6.108	5.467	4.979	4.487	3.989	3.486	3.148	2.807	2.464	2.119	1.772	1.597	1.422	1.246	1.070	0.982	2.1/2	2.500
		1.327	1.1160	0.922	0.747	0.590	0.485	0.389	0.305	0.230	0.187	0.148	0.113	0.083	0.057	0.047	0.037	0.028	0.021	0.017		

To calculate weight when international diameter is given, add figure at the bottom of column to corresponding figure for weight of external diameter of sizes required.

ACE GLOBAL AIRCON SERVICES LTD. MUMBAI



Parasmani Tubes Pvt. Ltd.

Office : 2A, D.S. Kapol Niwas, Khetwadi 4th Lane, Mumbai - 400 004.
Tel.: 022-3260 2795 / 6633 7296 • Fax : 022-6636 2795 • Cell : 9322253181
E-mail : parasmani_tubes@yahoo.com / piyush@parasmanitubes.com

Factory : 5/2, G.I.D.C., Umbergaon - 396171.
Tel.: 0260-3242708 • Cell : 09377012841

Associate Concern :

PIYUSH METALS (BOMBAY)

Office : 2A, D.S. Kapol Niwas, Khetwadi 4th Lane, Mumbai - 400 004.
Tel.: 022-3260 2795 • Fax : 022-6636 2795 • Cell : 9322253181
E-mail : parasmani_tubes@yahoo.com / piyush@parasmanitubes.com

ACE GLOBAL AIRCON SERVICES LTD. MUMBAI

ACE GLOBAL AIRCON SERVICES LTD. MUMBAI

Fwd: Vendor Appointment for SITC of HVAC work - ACME Ozone Sales Gallery

Mukesh Mahajan

---------- Forwarded message ---------
From: **Santosh Rahate** <[redacted]>
Date: Mon, 14 Feb 2022 12:55
Subject: Fwd: Vendor Appointment for SITC of HVAC work - ACME Ozone Sales Gallery
To: Mukesh Mahajan <[redacted]>

---------- Forwarded message ---------
From: **Rajesh Parab** <[redacted]>
Date: Mon, 14 Feb 2022, 10:52 am
Subject: Vendor Appointment for SITC of HVAC work - ACME Ozone Sales Gallery
To: Avra Laale <[redacted]>, Roshan Singh Chauhan <[redacted]>
Cc: Avra Pantha <[redacted]>, Rakesh Mahadik <[redacted]>, Prashant Desai <[redacted]>, Santosh Rahate <[redacted]>, Rajesh Kumar <[redacted]>, Nitesh Palande <[redacted]>, Bhagwan Bavlekar <[redacted]>, Dushant Ranavare <[redacted]>

Vendor Appointment
Dear All The following Contract has been finalized for- Project **ACME Ozone Sales Gallery**

Vendor Appointment

Dear All

The following Contract has been finalized for-

Project	**ACME Ozone Sales Gallery**
Vendor for	**SITC of HVAC work**
Vendor Details as follows Name of the Company	**M/s. Ace Global Aircon Services Ltd.**
Contact Person	**Mr. Ajay Ubale** **Contact No - 9619899955**

Dear Sir

Please start coordinating with our Project Team and submit the required drawing, local samples immediately for approval to our Design team. We have a very tight schedule for the subject work, requesting you to immediatel, start the work. We are in process of releasing the orders which will follow shortly.
The Contact detail of our site representatives are as follows

Mr. Santosh Rahate ([redacted]**)**

Rajesh Parab
Sr. Executive (Procurement)
[redacted]

Please do not print this email unless it is absolutely necessary

ACE GLOBAL AIRCON SERVICES LTD. MUMBAI