



SUPERIOR QUALITY COPPER TUBE FOR MEDICAL USE

CTA offers a complete solution for all your medical and health copper installations



Modern medical equipment carries with it the absolute strictest requirements so as not to jeopardize the health and safety of patients and medical practitioners. Copper and its alloys offer outstanding benefits for this industry, the primary of which include its biostatic and non-permeable properties. Beyond these benefits, liquids and fuels cannot penetrate copper tube walls and slime build up doesn't occur.

It has been proven that copper is able to kill off harmful bacteria. In fact, laboratory tests have demonstrated that copper is effective against a number of disease-causing bacteria. 99% of MRSA, the hospital acquired "superbug", is killed within minutes of being exposed to copper.

CTA's Copper Tubes for Medical Gas and Vacuum Services are fully accredited and conform to the specifications, BSI EN13348:2016 / ASTM 819:2000 / SANS 1453:2018 and other international specifications. We manufacture these tubes in various sizes ranging from 5/16" to 2". In the half hard condition, we manufacture tube sizes from 5/16" to 7/8" and 1" to 2" in the hard condition.

Before being released for use in the medical industry, all the tubes we manufacture are thoroughly cleaned using a chemical process. Thereafter, we use a mechanical method to ensure that all impurities and carbon film layers are removed, making it safe for medical usage.

ASTM 819:2000 Half Hard and Hard Drawn Condition

CTA Code		Sizes (Inches)	Description	Weight lb	Wall thickness"	Maximum working pressure	Temper
MED 6,35	HD	1/4"	20 Foot Length	1,47	0,28	2 MPA	R290
MED 9,53	HH	3/8"	20 Foot Length	2,20	0,28	2 MPA	R250
MED 12,70	HH	1/2"	20 Foot Length	3,69	0,30	2 MPA	R250
MED 15,88	HH	5/8"	20 Foot Length	4,62	0,32	2 MPA	R250
MED 19,05	HH	3/4"	20 Foot Length	5,84	0,35	2 MPA	R250
MED 22,23	HH	7/8"	20 Foot Length	7,77	0,40	2 MPA	R250
MED 28,58	HD	1 1/8"	20 Foot Length	10,09	0,40	2 MPA	R290
MED 34,93	HD	1 3/8"	20 Foot Length	14,88	0,48	2 MPA	R290
MED 41,28	HD	1 5/8"	20 Foot Length	19,97	0,55	2 MPA	R290
MED 53,98	HD	2 1/8"	20 Foot Length	29,65	0,65	2 MPA	R290
MED 66,68	HD	2 5/8"	20 Foot Length	43,43	0,70	2 MPA	R290
MED 79,38	HD	3 1/8"	20 Foot Length	59,03	0,80	2 MPA	R290
MED 7,95 HP	HD	5/16"	20 Foot Length	3,79	0,64	2 MPA	R290
MED 15,88 HP	HD	5/8"	20 Foot Length	15,37	1,28	2 MPA	R290
MED 22,23 HP	HD	7/8"	20 Foot Length	23,51	1,28	2 MPA	R290
MED 25,40 HP	HD	1"	20 Foot Length	27,13	1,28	2 MPA	R290

CTA MEDICAL GRADE RANGE (20ft straight lengths)

- Identification: Individual red end-caps.
- High Pressure
- Half Hard & Hard Drawn Condition
- Phosphor Deoxidized as Per Specification.

Particular		EN 13348 Standard			CTA
CHEMICAL COMPOSITION		Copper (Cu) + Silver (Ag)		99.90%	Mass Spectrometer Analysis done per ISO 1553 and ISO 4741 Testing Standards.
		Phosphorous		0.015% to 0.04%	
CARBON CONTENT TEST		Determining lubricant residue as total Carbon Content by measuring Carbon Dioxide Generated.			Tested with Combustion Method as per EN723:2009
		Tensile/ Elongation Test			
Temper		Tensile Strength Mpa min.	Elongation A% min	Hardness (indicative) HV5	Specifications maintained with help of a In house hardness testing facility. Per EN ISO 6507-1
As per EN1773	Common Term				
R220a	annealed	220	40	(40 to 75)	
R250	half hard	250	30	(75 to 100)	
R290	hard	290		(min. 100)	
DRIFTING TEST		Depending on Size and Temper Mandatory/ Agreed Terms			Conical Mandrel @ 450 with tube end expanding 300
FREE FROM DEFECT TEST		Every Tube is EDDY Current Tested for detection of local defects			EDDY Current Test conducted in accordance with EN 1971-2
CLEANLINESS		Proper Degreasing and End Capped			Our pipes are Degreased as per standard and End Caps are affixed.

SIZE RANGES Imperial Sizes

O.D	Wall mm	Temper
6,35	0,71	R290
9,53	0,76	R250
12,70	0,81	R250
15,88	0,89	R250
19,05	1,02	R250
22,23	1,02	R250
28,58	1,02	R290
34,93	1,22	R290
41,28	1,4	R290
53,98	1,65	R290
66,68	1,78	R290
79,38	2,03	R290
7.95 HP	1,58	R290
15.88 HP	3,25	R290
22.23 HP	3,25	R290
25.40 HP	3,25	R290

APPROVED COPPER TUBE & FITTINGS MEDICAL INSTITUTIONS CAN DEPEND ON

