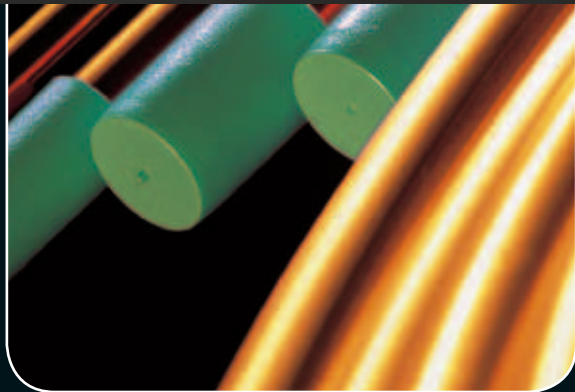


Superior Quality, Reliable Performance

AIR-CONDITIONING, REFRIGERATION
AND MEDICAL GAS COPPER TUBE



Crane Copper Tube is a manufacturer and international supplier of a wide range of refrigeration, air-conditioning and medical gas tube. Crane Copper Tube manufactures quality copper tube in accordance with Australian, American and European Standards.

Specification

AS/NZS 1571	Copper Alloy N°.	C12200 CW024A or CuDHP
ASTM B280		
BSEN 1057- Medical	Chemical Requirement	Cu+Ag min. 99.9% P 0.015-0.040%
	Tolerances	As required by the standard
	Cleanness	0.038g/m ³

Working Pressures

Safe working pressures for copper tube are calculated on the basis of annealed temper tube with the maximum allowable outside diameter and minimum wall thickness, thus allowing for softening of the tube due to brazing or heating. All safe working pressures are based on the following formula:

$$P_{sw} = \frac{2000 \times S_D \times t_m}{D - t_m}$$

where:

- P_{sw} = safe working pressure (kPa)
- S_D = maximum allowable design stress for annealed copper (MPa)
- t_m = minimum wall thickness of tube (mm)
- D = outside diameter of tube (mm)

Tube Integrity

All Crane copper tube is electronically tested by Eddy Current method to ensure tube integrity as part of Crane Copper Tube quality system.

Interpolation of allowable design stress as defined by table D7 of AS4041 for the below temperatures.

Temperature (°C)	50.0	55.0	60.0	65.0	70.0	75.0
S_D (MPa)	41.0	39.6	38.2	36.8	35.4	34.0



Air-conditioning and Refrigeration Grade Tube

Capping

The standard air-conditioning and refrigeration grade copper tube is distinguished by yellow coloured capping.

Ink Marking

The tube is also identified with ink marking along its length stating the Manufacturer's Name, Country of Origin, Conforming Standard, Temper and Size.

eg: "CRANE COPPER TUBE AUSTRALIA AS/NZS 1571 ½H 19.05 x 0.91"

eg: "CRANE COPPER TUBE AUSTRALIA ASTM B280 3/8 H"



R410A Rated Tube

Crane Copper Tube has extended its range of refrigeration tube with the introduction of R410A rated copper tube. The R410A rated copper tube is especially designed to comply with AS4041 Pressure Piping Code. Our R410A rated copper tube is capable of withstanding working pressures of 4131kPa when the refrigerant is operating at a temperature of 65°C, which is the recommended operating temperature as per AS/NZS 1677 Refrigerating systems.

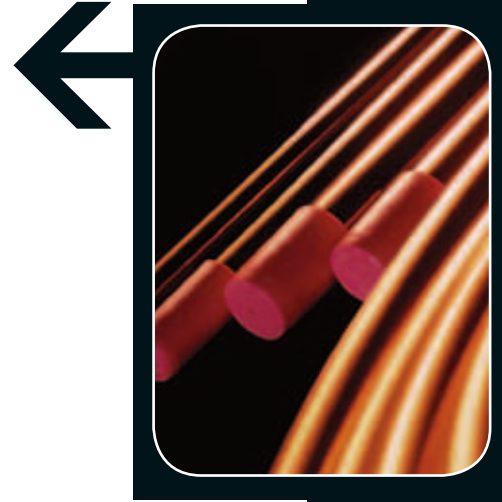
Capping

The R410A rated copper tube is distinguished by rose coloured capping.

Ink Marking

The tube is also identified with ink marking along its length stating the Manufacturer's Name, Country of Origin, Conforming Standard, Temper, Size and Special Usage.

eg: "CRANE COPPER TUBE AUSTRALIA AS/NZS 1571 ½H 12.7 x 0.91 R410A RATED"



Medical Gas Grade Copper Tube

Crane Copper Tube offers a range of copper tube for use in Medical Gas applications. The medical gas copper tube has specific internal cleanliness requirements that require the tube to go through a degreasing, cleaning, checking, additional cleaning and checking if required before being capped.

Medical gas tube is also available for AS1571 and ASTM B280 copper tube with the same size configuration and temper as the standard refrigeration grade tube.

Medical gas tube can also be manufactured in accordance with EN13348 - Seamless, round copper tubes for medical gases or vacuum. This standard specifically relates to copper tube used for medical gas applications.

Capping

The medical gas copper tube is distinguished by green coloured capping.

Ink Marking

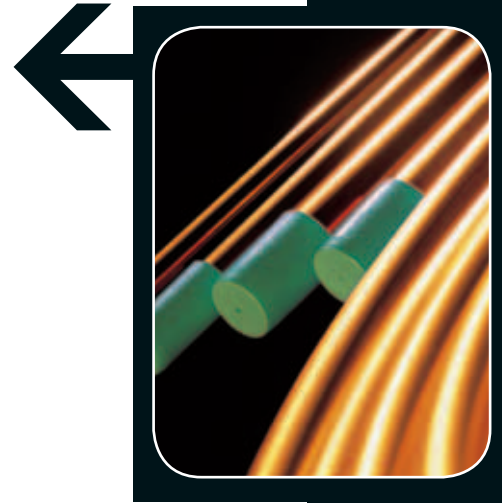
The tube is also identified with ink marking along its length stating the Manufacturer's Name, Country of Origin, Conforming Standard, Temper, Size and Special Usage.

eg: "CRANE COPPER TUBE AUSTRALIA AS/NZS 1571 H 28.6 x 0.91 MEDICAL GAS"

eg: "CRANE COPPER TUBE AUSTRALIA EN 13348 R290 H 28 x 0.9 MEDICAL GAS"

eg: "CRANE COPPER TUBE AUSTRALIA (VPSB) LISTED TO BSEN 1057 HH 28 x 1.2 TYPE Y MEDICAL GAS"

eg: "CRANE COPPER TUBE AUSTRALIA ASTM B280 3/8 H MEDICAL GAS"



Straight Seamless Tubes for Air-conditioning and Refrigeration

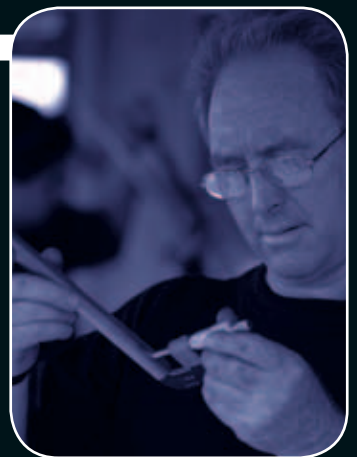
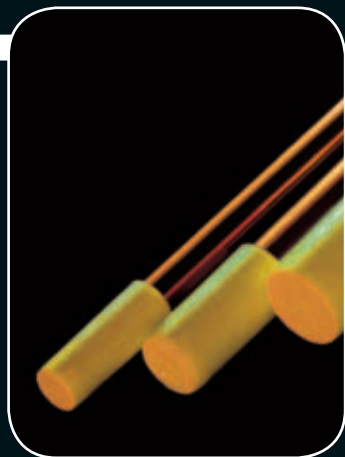
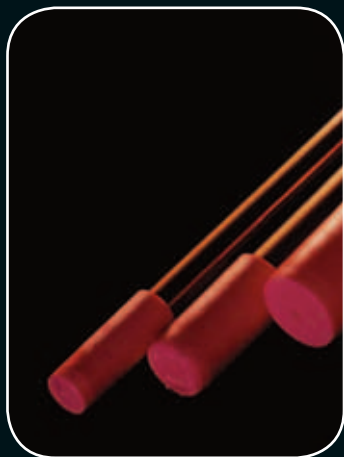
Australian Standard AS/NZS 1571

Standard sizes and data for straight copper tubes

Crane Item Number	Outside Diameter (mm)	Wall Thickness (mm)	Imperial Equivalent O.D. and swg	Nominal Weight (kg/m)	Form	Temper	Safe working pressure (kPa) at service temperature				
							50 °C	55°C	60°C	65°C	70°C
50106405	6.35	0.71	1/4" x 22	0.112	5.8m Straight	H	9175	8862	8548	8235	7922
50129021	6.35	0.81	1/4" x 21	0.126	5.8m Straight	H	10635	10272	9908	9545	9182
50106465	6.35	0.91	1/4" x 20	0.139	5.8m Straight	H	12142	11727	11313	10898	10484
50106464	9.53	0.71	3/8" x 22	0.176	5.8m Straight	H	5893	5692	5491	5290	5088
50127985	9.53	0.81	3/8" x 21	0.198	5.8m Straight	H	6792	6560	6328	6096	5864
50106467	9.53	0.91	3/8" x 20	0.220	5.8m Straight	H	7710	7446	7183	6920	6657
50106463	12.7	0.71	1/2" x 22	0.239	5.8m Straight	H	4344	4196	4048	3899	3751
50127986	12.7	0.81	1/2" x 21	0.270	5.8m Straight	1/2H	4994	4823	4653	4482	4312
50103068	12.7	0.91	1/2" x 20	0.301	5.8m Straight	1/2H	5653	5460	5267	5074	4880
*	12.7	1.02	1/2" x 19	0.335	5.8m Straight	1/2H	6389	6171	5953	5735	5516
50103081	15.88	0.71	5/8" x 22	0.303	5.8m Straight	H	3438	3321	3203	3086	2968
50116054	15.88	0.91	5/8" x 20	0.383	5.8m Straight	H	4459	4307	4155	4002	3850
50106466	15.88	1.02	5/8" x 19	0.426	5.8m Straight	H	5031	4859	4688	4516	4344
50108674	15.88	1.02	5/8" x 19	0.426	5.8m Straight	1/2H	5031	4859	4688	4516	4344
50106476	15.88	1.22	5/8" x 18	0.502	5.8m Straight	1/2H	6091	5883	5675	5467	5259
50103161	19.05	0.71	3/4" x 22	0.366	5.8m Straight	H	2846	2749	2652	2554	2457
50103162	19.05	0.91	3/4" x 20	0.464	5.8m Straight	H	3684	3558	3432	3306	3181
*	19.05	1.02	3/4" x 19	0.517	5.8m Straight	1/2H	4152	4010	3868	3726	3585
50106475	19.05	1.22	3/4" x 18	0.611	5.8m Straight	H	5015	4844	4673	4502	4330
50108675	19.05	1.22	3/4" x 18	0.611	5.8m Straight	1/2H	5015	4844	4673	4502	4330
50106404	22.23	0.71	7/8" x 22	0.429	5.8m Straight	H	2427	2344	2261	2178	2095
50103199	22.23	0.91	7/8" x 20	0.545	5.8m Straight	H	3137	3030	2922	2815	2708
50106577	22.23	1.22	7/8" x 18	0.720	5.8m Straight	1/2H	4261	4115	3970	3824	3679
50106473	22.23	1.63	7/8" x 16	0.943	5.8m Straight	H	5794	5596	5398	5200	5002
50106468	25.4	0.91	1" x 20	0.626	5.8m Straight	H	2732	2639	2546	2452	2359
50106592	25.4	1.22	1" x 18	0.829	5.8m Straight	H	3705	3578	3452	3325	3199
50108676	25.4	1.63	1" x 16	1.088	5.8m Straight		5026	4855	4683	4511	4340

Denotes R410A tube requires safety shut off limit of 3800kPa.
 * Denotes tube made to order where minimum order quantities required.
 ■ Denotes R410A rated tube.

Quality, reliability, and performance



Straight Seamless Tubes for Air-conditioning and Refrigeration

Australian Standard AS/NZS 1571

Standard sizes and data for straight copper tubes – continued

Crane Item Number	Outside Diameter (mm)	Wall Thickness (mm)	Imperial Equivalent O.D. and swg	Nominal Weight (kg/m)	Form	Temper	Safe working pressure (kPa) at service temperature				
							50 °C	55°C	60°C	65°C	70°C
50130169	28.57	0.81	1 1/8" x 21	0.632	5.8m Straight	H	2147	2074	2000	1927	1854
50103253	28.57	0.91	1 1/8" x 20	0.707	5.8m Straight	H	2420	2337	2255	2172	2089
50119320	28.57	1.02	1 1/8" x 19	0.789	5.8m Straight	H	2722	2629	2536	2443	2350
50103256	28.57	1.22	1 1/8" x 18	0.937	5.8m Straight	H	3277	3165	3054	2942	2830
50107234	28.57	1.27	1 1/8" x 17.5	0.974	5.8m Straight	H	3417	3301	3184	3067	2951
50106586	28.57	1.63	1 1/8" x 16	1.233	5.8m Straight	H	4438	4287	4135	3984	3832
50106472	28.57	1.83	1 1/8" x 15	1.374	5.8m Straight	H	5016	4845	4674	4502	4331
50106469	31.75	0.91	1 1/2" x 20	0.788	5.8m Straight	H	2171	2097	2023	1949	1875
*	31.75	1.22	1 1/2" x 18	1.046	5.8m Straight	H	2937	2837	2737	2636	2536
50106580	31.75	2.03	1 1/2" x 14	1.694	5.8m Straight	H	5007	4836	4665	4494	4323
50103274	34.92	0.91	1 3/8" x 20	0.869	5.8m Straight	H	1969	1902	1835	1768	1700
50106470	34.92	1.22	1 3/8" x 18	1.155	5.8m Straight	H	2662	2571	2480	2389	2298
# 50106474	34.92	2.03	1 3/8" x 14	1.875	5.8m Straight	H	4527	4372	4218	4063	3909
*	38.1	0.91	1 1/2" x 20	0.951	5.8m Straight	H	1801	1740	1678	1617	1555
50106471	38.1	1.22	1 1/2" x 18	1.264	5.8m Straight	H	2433	2350	2267	2184	2101
50106406	41.27	0.91	1 5/8" x 20	1.032	5.8m Straight	H	1660	1604	1547	1490	1433
50103297	41.27	1.02	1 5/8" x 19	1.153	5.8m Straight	H	1865	1802	1738	1674	1611
50110507	41.27	1.22	1 5/8" x 18	1.372	5.8m Straight	H	2241	2165	2088	2012	1935
50103309	41.27	1.63	1 5/8" x 16	1.815	5.8m Straight	H	3022	2919	2816	2713	2609
# 50108678	41.27	2.41	1 5/8" x 12.5	2.630	5.8m Straight	H	4549	4393	4238	4083	3927
*	44.45	0.91	1 3/4" x 20	1.113	5.8m Straight	H	1539	1487	1434	1382	1329
50108644	44.45	1.22	1 3/4" x 18	1.481	5.8m Straight	H	2077	2006	1935	1864	1793
50112249	50.8	0.91	2" x 20	1.275	5.8m Straight	H	1344	1298	1252	1206	1160
*	50.8	1.22	2" x 18	1.699	5.8m Straight	H	1812	1750	1688	1626	1564
50108664	50.8	1.63	2" x 16	2.251	5.8m Straight	H	2438	2355	2272	2189	2105
50112249	53.97	0.91	2 1/8" x 20	1.356	5.8m Straight	H	1264	1220	1177	1134	1091
50103325	53.97	1.02	2 1/8" x 19	1.517	5.8m Straight	H	1419	1370	1322	1274	1225
50106460	53.97	1.22	2 1/8" x 18	1.807	5.8m Straight	H	1703	1645	1587	1528	1470
50103330	53.97	1.63	2 1/8" x 16	2.396	5.8m Straight	H	2291	2213	2135	2056	1978
50106461	66.68	1.22	2 5/8" x 18	2.243	5.8m Straight	H	1373	1326	1279	1232	1185
*	66.68	1.63	2 5/8" x 16	2.978	5.8m Straight	H	1845	1782	1719	1656	1593
50107520	66.68	2.03	2 5/8" x 14	3.686	5.8m Straight	H	2310	2231	2152	2073	1995
50106843	79.4	1.63	3" x 16	3.560	5.8m Straight	H	1544	1491	1438	1385	1333
*	101.6	1.63	4" x 16	4.577	5.8m Straight	H	1201	1160	1119	1078	1037

Denotes R410A tube requires safety shut off limit of 3800kPa.

* Denotes tube made to order where minimum order quantities required.

■ Denotes R410A rated tube.

Annealed Seamless Tubes for Air-conditioning and Refrigeration

Australian Standard AS/NZS 1571

Standard sizes and data for annealed copper tubes

Crane Item Number	Outside Diameter (mm)	Wall Thickness (mm)	Imperial Equivalent O.D. and swg	Nominal Weight (kg/m)	Form	Temper	Safe working pressure (kPa) at service temperature				
							50 °C	55°C	60°C	65°C	70°C
50108642	4.76	0.56	3/16" x 24	0.066	15m Coil	0	9711	9142	8723	8420	8202
50102949	4.76	0.71	3/16" x 22	0.081	15m Coil	0	12715	11971	11422	11025	10739
50108671	4.76	0.91	3/16" x 20	0.098	15m Coil	0	17041	16043	15308	14776	14393
50102960	6.35	0.56	1/4" x 24	0.091	15m Coil	0	7069	6656	6350	6130	5971
50102968	6.35	0.61	1/4" x 22	0.098	15m Coil	0	7760	7306	6971	6729	6555
50102970	6.35	0.71	1/4" x 22	0.112	15m Coil	0	9175	8638	8242	7955	7750
50115755	6.35	0.81	1/4" x 21	0.126	15m Coil	0	10635	10012	9553	9221	8983
50102974	6.35	0.91	1/4" x 20	0.139	15m Coil	0	12142	11431	10907	10528	10256
*	6.35	1.22	1/4" x 18	0.176	15m Coil	0	17143	16140	15400	14864	14480
50102980	7.94	0.56	5/16" x 24	0.116	15m Coil	0	5558	5233	4993	4819	4694
50102982	7.94	0.71	5/16" x 22	0.144	15m Coil	0	7177	6757	6447	6223	6062
50108672	7.94	0.91	5/16" x 20	0.180	15m Coil	0	9431	8879	8472	8177	7966
50102996	9.53	0.56	3/8" x 24	0.141	15m Coil	0	4579	4311	4113	3970	3867
50102997	9.53	0.61	3/8" x 22	0.153	15m Coil	0	5013	4719	4503	4346	4234
50102996	9.53	0.56	3/8" x 24	0.141	15m Coil	0	4579	4311	4113	3970	3867
50103007	9.53	0.71	3/8" x 22	0.176	15m Coil	0	5893	5548	5294	5110	4978
50115722	9.53	0.81	3/8" x 20	0.198	15m Coil	0	6792	6395	6101	5889	5737
50103016	9.53	0.91	3/8" x 20	0.220	15m Coil	0	7710	7258	6925	6685	6512
50103023	12.7	0.56	1/2" x 24	0.191	15m Coil	0	3389	3190	3044	2938	2862
50103031	12.7	0.61	1/2" x 22	0.207	15m Coil	0	3705	3488	3328	3212	3129
50103039	12.7	0.71	1/2" x 22	0.239	15m Coil	0	4344	4090	3903	3767	3669
50115719	12.7	0.81	1/2" x 21	0.271	15m Coil	0	4994	4701	4486	4330	4218
50103065	12.7	0.91	1/2" x 20	0.301	15m Coil	0	5653	5322	5078	4901	4774
50103080	15.88	0.56	5/8" x 24	0.241	15m Coil	0	2688	2531	2415	2331	2270
50103114	15.88	0.61	5/8" x 22	0.262	15m Coil	0	2936	2765	2638	2546	2480
50103115	15.88	0.66	5/8" x 22.5	0.282	15m Coil	0	3186	3000	2862	2763	2691
50103107	15.88	0.71	5/8" x 22	0.303	15m Coil	0	3438	3237	3088	2981	2904
50103123	15.88	0.81	5/8" x 21	0.343	15m Coil	0	3946	3715	3544	3421	3333
50103128	15.88	0.91	5/8" x 20	0.383	15m Coil	0	4459	4198	4006	3866	3766
50108669	15.88	1.02	5/8" x 19	0.426	15m Coil	0	5031	4737	4519	4362	4250
50108484	19.05	0.56	5/8" x 24	0.291	15m Coil	0	2228	2098	2002	1932	1882
50103149	19.05	0.61	5/8" x 22	0.316	15m Coil	0	2433	2291	2186	2110	2055
50103150	19.05	0.71	3/4" x 22	0.366	15m Coil	0	2846	2679	2557	2468	2404
50106642	19.05	0.89	5/8" x 20.2	0.454	15m Coil	0	3599	3389	3233	3121	3040
50103160	19.05	0.91	3/4" x 20	0.464	15m Coil	0	3684	3468	3309	3194	3111
50103183	19.05	1.22	3/4" x 18	0.611	15m Coil	0	5015	4722	4505	4349	4236
50103197	22.23	0.91	7/8" x 20	0.545	15m Coil	0	3137	2953	2818	2720	2649

Denotes R410A tube requires safety shut off limit of 3800kPa.

* Denotes tube made to order where minimum order quantities required.

■ Denotes R410A rated tube.



Straight Seamless Tubes for Air-conditioning and Refrigeration

American Standard ASTM B280

Standard sizes and data for straight copper tubes

Crane Item Number	Std size	Outside diameter		Wall Thickness		Nominal Weight		Form	Temper	Safe working pressure at service temperature									
		in	(mm)	in	(mm)	lb/ft	(kg/m)			120°F	130°F	140°F	150°F	160°F					
										[48.9°C]	[54.4°C]	[60°C]	[65.5°C]	[71.1°C]					
PSI	(kPa)	PSI	(kPa)	PSI	(kPa)	PSI	(kPa)	PSI	(kPa)										
50109034	3/8"	0.375	[9.52]	0.03	[0.76]	0.126	[0.187]	5.8m Straight	H [H58]	792	[5464]	770	[5313]	756	[5216]	747	[5149]	739	[5099]
50109035	1/2"	0.5	[12.7]	0.035	[0.89]	0.198	[0.295]	5.8m Straight	H [H58]	705	[4859]	685	[4725]	673	[4638]	664	[4579]	658	[4535]
50107521	5/8"	0.625	[15.9]	0.04	[1.02]	0.285	[0.426]	5.8m Straight	H [H58]	653	[4500]	635	[4376]	623	[4295]	615	[4241]	609	[4200]
50107522	3/4"	0.75	[19.1]	0.042	[1.07]	0.362	[0.542]	5.8m Straight	H [H58]	571	[3936]	555	[3828]	545	[3757]	538	[3710]	533	[3674]
50106962	7/8"	0.875	[22.2]	0.045	[1.14]	0.455	[0.674]	5.8m Straight	H [H58]	526	[3630]	512	[3530]	502	[3465]	496	[3421]	491	[3387]
50103255	1 1/8"	1.125	[28.6]	0.05	[1.27]	0.655	[0.975]	5.8m Straight	H [H58]	447	[3080]	434	[2995]	426	[2940]	421	[2903]	417	[2875]
50103279	1 3/8"	1.375	[34.9]	0.055	[1.4]	0.884	[1.317]	5.8m Straight	H [H58]	397	[2735]	386	[2660]	379	[2611]	374	[2578]	370	[2553]
50103305	1 5/8"	1.625	[41.3]	0.06	[1.52]	1.14	[1.698]	5.8m Straight	H [H58]	369	[2545]	359	[2475]	352	[2429]	348	[2398]	344	[2375]
50109036	2 1/8"	2.125	[54.0]	0.07	[1.78]	1.75	[2.611]	5.8m Straight	H [H58]	328	[2265]	319	[2202]	313	[2162]	309	[2134]	307	[2114]
*	2 5/8"	2.625	[66.7]	0.08	[2.03]	2.48	[3.687]	5.8m Straight	H [H58]	303	[2092]	295	[2034]	290	[1997]	286	[1971]	283	[1952]
*	3 1/8"	3.125	[79.4]	0.09	[2.29]	3.33	[4.959]	5.8m Straight	H [H58]	286	[1975]	278	[1920]	273	[1885]	270	[1861]	267	[1843]
*	3 5/8"	3.625	[92.1]	0.1	[2.54]	4.29	[6.389]	5.8m Straight	H [H58]	274	[1890]	267	[1838]	262	[1804]	258	[1781]	256	[1764]
*	4 1/8"	4.125	[104.8]	0.11	[2.79]	5.38	[7.993]	5.8m Straight	H [H58]	265	[1826]	257	[1775]	253	[1743]	250	[1721]	247	[1704]

* Denotes tube made to order where minimum order quantities required.

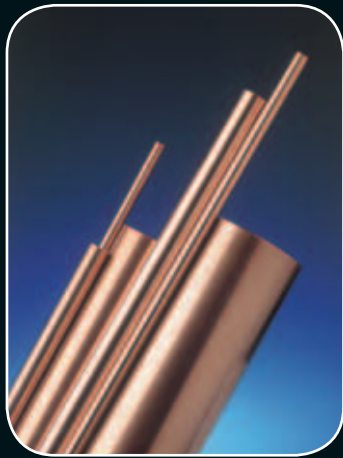
Annealed Seamless Tubes for Air-conditioning and Refrigeration

American Standard ASTM B280

Standard sizes and data for annealed copper tubes

Crane Item Number	Std size	Outside diameter		Wall Thickness		Nominal Weight		Form	Temper	Safe working pressure at service temperature									
		in	(mm)	in	(mm)	lb/ft	(kg/m)			120°F	130°F	140°F [60°C]	150°F	160°F					
										[48.9°C]	[54.4°C]	[60°C]	[65.5°C]	[71.1°C]					
PSI	(kPa)	PSI	(kPa)	PSI	(kPa)	PSI	(kPa)	PSI	(kPa)										
50109029	3/16"	0.187	[4.76]	0.03	[0.76]	0.057	[0.085]	15m Coil	O [O60]	1746	[12039]	1698	[11708]	1666	[11492]	1645	[11346]	1629	[11236]
50102969	1/4"	0.25	[6.35]	0.03	[0.76]	0.080	[0.119]	15m Coil	O [O60]	1268	[8747]	1233	[8506]	1211	[8350]	1195	[8244]	1184	[8164]
50109030	5/16"	0.312	[7.92]	0.032	[0.81]	0.109	[0.162]	15m Coil	O [O60]	1079	[7444]	1050	[7239]	1030	[7106]	1017	[7015]	1007	[6947]
50102992	3/8"	0.375	[9.52]	0.032	[0.81]	0.134	[0.198]	15m Coil	O [O60]	887	[6118]	863	[5950]	847	[5840]	836	[5766]	828	[5710]
50103043	1/2"	0.5	[12.7]	0.032	[0.81]	0.182	[0.271]	15m Coil	O [O60]	656	[4521]	638	[4396]	626	[4316]	618	[4261]	612	[4220]
50109031	5/8"	0.625	[15.9]	0.035	[0.89]	0.251	[0.375]	15m Coil	O [O60]	557	[3843]	542	[3737]	532	[3668]	525	[3621]	520	[3586]
50103152	3/4"	0.75	[19.1]	0.035	[0.89]	0.305	[0.455]	15m Coil	O [O60]	461	[3180]	448	[3092]	440	[3035]	435	[2997]	430	[2968]
50109033	3/4"	0.75	[19.1]	0.042	[1.07]	0.362	[0.542]	15m Coil	O [O60]	570	[3928]	554	[3820]	544	[3750]	537	[3702]	532	[3666]
50103201	7/8"	0.875	[22.2]	0.045	[1.14]	0.455	[0.674]	15m Coil	O [O60]	525	[3621]	511	[3521]	501	[3456]	495	[3412]	490	[3379]
*	1 1/8"	1.125	[28.6]	0.05	[1.27]	0.665	[0.975]	15m Coil	O [O60]	446	[3075]	434	[2990]	426	[2935]	420	[2898]	416	[2870]
*	1 1/8"	1.375	[34.9]	0.055	[1.4]	0.884	[1.317]	15m Coil	O [O60]	404	[2788]	393	[2712]	386	[2662]	381	[2628]	377	[2602]

* Denotes tube made to order where minimum order quantities required.



Medical Gases or Vacuum Tube

Quality Control & Cleanness

The critical nature of medical gas and vacuum applications demands rigorous cleaning levels during production of these copper tubes. Crane Copper Tube ensures that we remove all residues, easily achieving the cleanness requirements, in order to prevent gas contamination or potential explosions from combustion of residual oils.

Safety standards for oxygen and other medical gases also require the use of specially cleaned tubing in order to prevent gas or potential explosion.

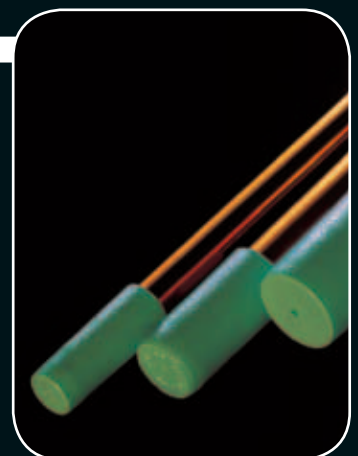
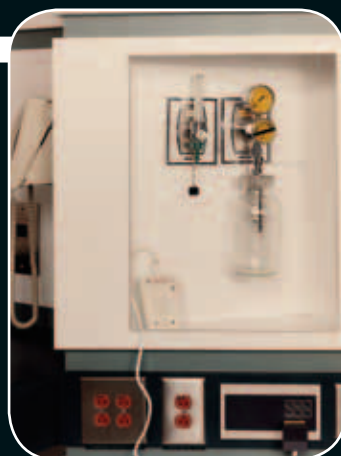
Test Pressures

Medical and breathing gas – 415kPa

Compressed gas for tools – 1400kPa

Medical pipeline suction – 60kPa

Quality, reliability, and performance



Seamless Round Copper Tubes for Medical Gases or Vacuum

Australian Standard AS/NZS 1571

Standard Sizes and Data

Crane Item Number	Outside Diameter (mm)	Wall Thickness (mm)	Nominal Weight (kg/m)	Form	Temper	Safe working pressure (kPa) at up to 50°C
50103067	12.7	0.91	0.301	5.8m Straight	½H	5653
50130219	12.7	0.91	0.301	5.8m Straight	½H	5653
50121634	15.9	1.02	0.426	5.8m Straight	½H	5024
50120806	19.1	0.91	0.465	5.8m Straight	½H	3674
50109258	19.1	1.02	0.518	5.8m Straight	½H	4140
50103229	25.4	1.22	0.829	5.8m Straight	H	3705
50111020	31.8	1.22	1.048	5.8m Straight	H	2933
50111030	38.1	1.22	1.264	5.8m Straight	H	2433
50118931	50.8	1.22	1.699	5.8m Straight	H	1812
50120805	63.5	1.22	2.134	5.8m Straight	H	1443
50120807	76.2	1.63	3.414	5.8m Straight	H	1610
50110592	101.6	1.63	4.577	5.8m Straight	H	1201

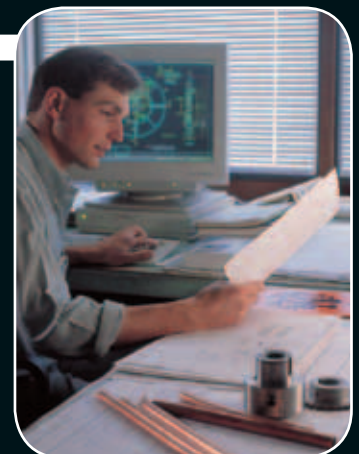
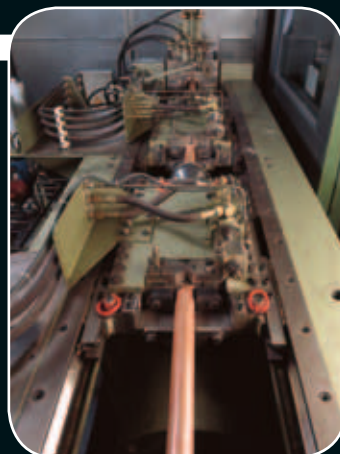
Seamless Round Copper Tubes for Medical Gases or Vacuum

British Standard BSEN 1057

Standard Sizes and Data

Crane Item Number	Outside Diameter (mm)	Wall Thickness (mm)	Nominal Weight (kg/m)	Form	Temper	Safe working pressure (kPa) at up to 50°C
50109188	15	0.7	0.281	5.8m Straight	½H (R250)	3595
50111368	15	1.0	0.393	5.8m Straight	½H (R250)	5234
50109189	22	0.9	0.533	5.8m Straight	½H (R250)	3135
50109190	28	0.9	0.685	5.8m Straight	½H (R250)	2443
50103244	28	1.2	0.903	5.8m Straight	½H (R250)	3290
50109194	35	1.2	1.139	5.8m Straight	H (R290)	2611
50109195	42	1.2	1.375	5.8m Straight	H (R290)	2164
50109197	54	1.2	1.780	5.8m Straight	H (R290)	1674
50109199	66.7	1.2	2.208	5.8m Straight	H (R290)	1350
50109201	76.1	1.5	3.143	5.8m Straight	H (R290)	1481
50109202	108	1.5	4.487	5.8m Straight	H (R290)	1038

Quality, reliability, and performance



Pressure-Temperature Conversion Chart

The table below gives values of saturated vapour pressures of some of the most common refrigerants. This table is supplied for guidance purposes only. Operating pressures for specific refrigerants should be obtained from your refrigerant supplier.

Temp	°C	45.0	50.0	55.0	60.0	65.0	70.0
	°F	113.0	122.0	131.0	140.0	149.0	158.0
R11	kPa	105.0	140.0	176.0	212.0	252.0	307.0
	psig	15.2	20.3	25.5	30.7	36.5	44.5
R12	kPa	981.0	1120.0	1268.0	1428.0	1586.0	1784.0
	psig	142.2	162.4	183.9	207.1	230.0	258.7
R123	kPa	78.0	114.0	147.0	182.0	228.0	276.0
	psig	11.3	16.5	21.3	26.4	33.1	40.0
R134a	kPa	1054.0	1234.0	1383.0	1571.0	1789.0	2016.0
	psig	152.8	178.9	200.5	227.8	259.4	292.3
R22	kPa	1649.0	1855.0	2095.0	2345.0	2592.0	2895.0
	psig	239.1	269.0	303.8	340.0	375.8	419.8
R404A	kPa	1967.0	2224.0	2503.0	2805.0	3093.0	3292.0
	psig	285.2	322.5	362.9	406.7	448.5	477.3
R407C	kPa	1735.0	1970.0	2235.0	2520.0	2933.0	3262.0
	psig	251.6	285.7	324.1	365.4	425.3	473.0
R408A	kPa	1822.0	2060.0	2319.0	2600.0	2842.0	3160.0
	psig	264.2	298.7	336.3	377.0	412.1	458.2
R409A	kPa	1037.0	1191.0	1363.0	1550.0	1990.0	2217.0
	psig	150.4	172.7	197.6	224.8	288.6	321.5
R410A	kPa	2609.0	2945.0	3308.0	3702.0	4131.0	4599.0
	psig	378.3	427.0	479.7	536.8	599.0	666.9
R502	kPa	1766.0	1977.0	2215.0	2475.0	2865.0	3090.0
	psig	256.1	286.7	321.2	358.9	415.4	448.1
R507	kPa	2021.0	2281.0	2572.0	2890.0	3236.0	3566.0
	psig	293.0	330.7	372.9	419.1	469.2	517.1

Information contained in this brochure is provided as a guide only. Crane Copper Tube does not warrant that the information is accurate or without error or omissions. Crane Copper reserves the right to correct any errors or misprints.

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Quality
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SAI GLOBAL



Your local agent:

 **Crane Copper Tube**