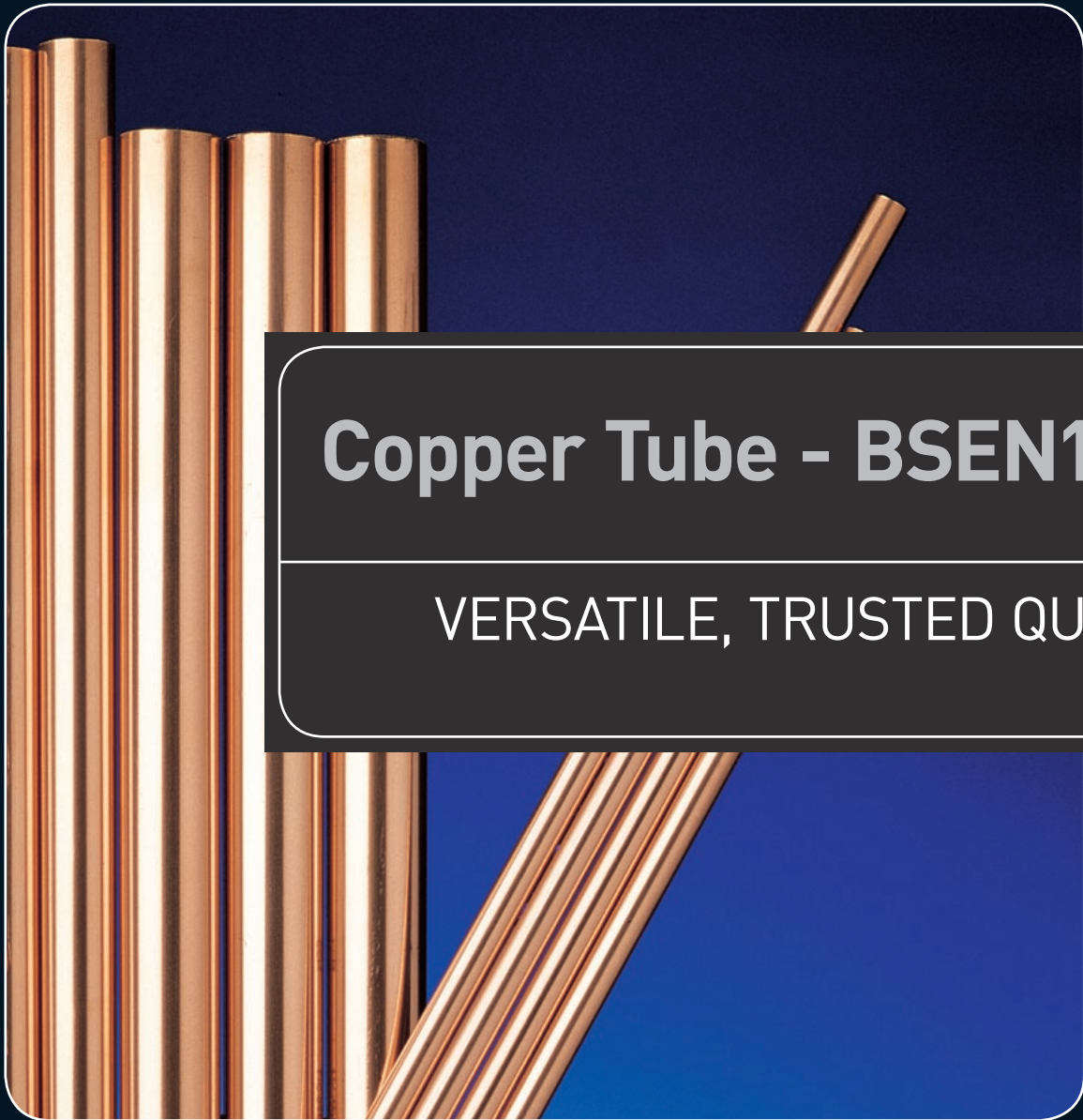




Crane Copper Tube



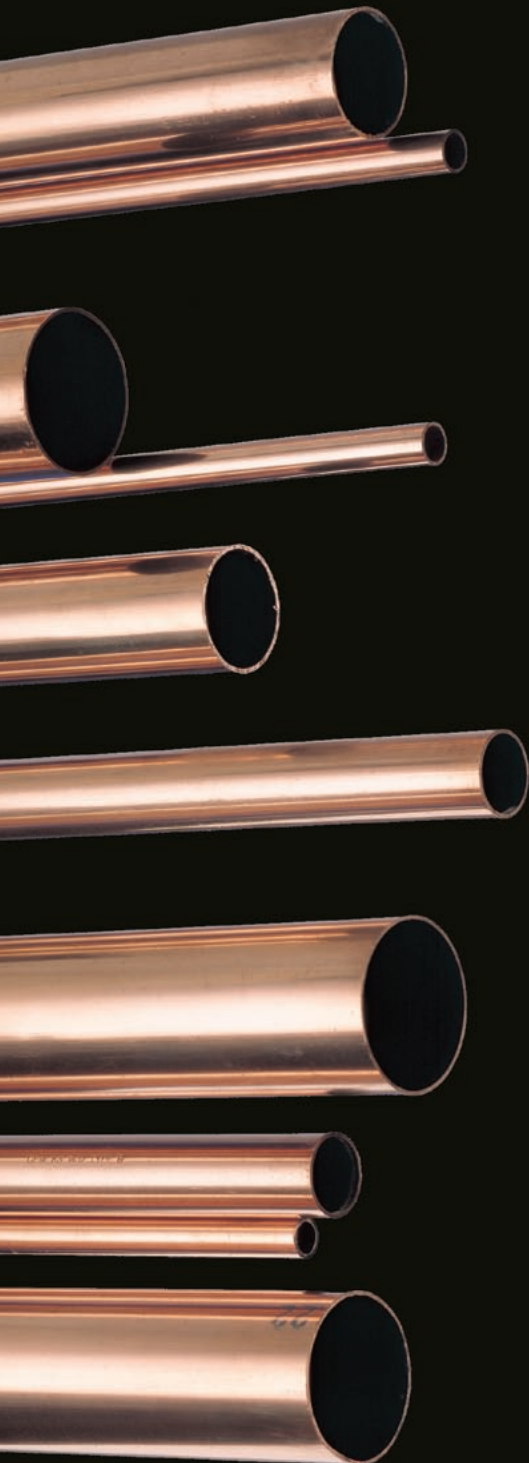
## Copper Tube - BSEN1057

VERSATILE, TRUSTED QUALITY

COPPER TUBE → PLUMBING → GAS FITTING → DRAINAGE



Crane copper tube is manufactured to BSEN1057 standards using the highest grade raw materials and modern extruding and drawing technology to provide superior products for water, gas and waste in domestic, commercial and industrial applications.



## Crane Copper Tube – BSEN1057

- **Quality Certified:** Crane copper tube is Australian made, and is certified to comply with BSEN1057 - Seamless, round copper tubes for water and gas in sanitary and heating applications.
- **Internal Surface Quality:** Crane Copper Tube uses special manufacturing processes to provide enhanced internal bore characteristics that offer improved corrosion resistance and levels of carbon residue well below the values set by the Standard.
- **Multi Applications:** Crane copper tube has great versatility for multiple uses including hot and cold water, above and below ground services, gas reticulation, sanitary and drainage, heating and general plumbing applications.
- **Pre-insulated Tube:** Crane copper tube also manufactures 'Polylag', a pre-insulated tube which provides increased thermal insulation, reduces noise transmission and better condensation control.
- **Inherent Strength:** Copper tube has inherent strength, providing good resistance to external damage, puncture, abrasion, vibration bumps, and has a wide operating range for pressure and vacuum.
- **Impervious:** Copper tube is impervious to oxygen, insecticide, solvents and toxins.
- **Non-Flammable:** Copper tube is non-flammable and does not emit toxic fumes during fire.
- **Full Flow Joints:** Copper tube jointing does not reduce the bore of the tube, therefore providing high flow performance.
- **Low Friction Loss:** Copper tube provides high flow rates with minimal external dimensions.
- **U.V. Resistant:** Copper tube does not degrade from direct sunlight or become brittle with age.
- **Resists Rodent Attack:** Copper tube is not prone to damage due to rodent attack.
- **Standard Industry Sizes:** Copper tube is made to industry standard sizes not a unique brand size.
- **Stability:** Copper tube does not creep with age and has 7 to 15 times less lineal expansion than other materials with heat, and continues to perform at high temperatures.
- **Healthier & Non-tainting:** Copper tube does not adversely affect the taste of water, and \*reduces the number of harmful micro-organisms in water.  
\*Study conducted by INCRA under project N°348 – 1984 using water contaminated with coliforms.
- **Proven Track Record:** Crane copper tube is part of a superior system with a proven track record.
- **Add Value For Life:** Copper tube adds value and is recognised as the superior plumbing material.
- **Recyclable:** Copper tube is a valuable recyclable material.

## BSEN1057 TYPE X COPPER TUBE

Crane Item Number	Outside Diameter (mm)	Wall Thickness (mm)	Nominal Weight (kg/m)	Form	Temper	Safe working pressure (Bar) at up to 65°C
50103093	15	0.7	0.281	5.8m Straight	½H (R250)	58.7
50103193	22	0.9	0.533	5.8m Straight	½H (R250)	51.2
50103242	28	0.9	0.685	5.8m Straight	½H (R250)	39.9
50103286	35	1.2	1.139	5.8m Straight	H (R290)	51.5
50103311	42	1.2	1.375	5.8m Straight	H (R290)	42.6
50103334	54	1.2	1.780	5.8m Straight	H (R290)	33.0
50103354	66.7	1.2	2.208	5.8m Straight	H (R290)	26.6
50103361	76.1	1.5	3.143	5.8m Straight	H (R290)	29.2
50103377	108	1.5	4.487	5.8m Straight	H (R290)	20.4
50103381	133	1.5	5.540	5.8m Straight	H (R290)	16.5
50103389	159	2.0	8.819	5.8m Straight	H (R290)	18.5

## BSEN1057 TYPE Y COPPER TUBE

Crane Item Number	Outside Diameter (mm)	Wall Thickness (mm)	Nominal Weight (kg/m)	Form	Temper	Safe working pressure (Bar) at up to 65°C
50103095	15	1.0	0.393	5.8m Straight	½H (R250)	85.7
50103195	22	1.2	0.701	5.8m Straight	½H (R250)	69.2
50103245	28	1.2	0.903	5.8m Straight	½H (R250)	53.7
50103240	35	1.5	1.411	5.8m Straight	H (R290)	64.9
50103314	42	1.5	1.706	5.8m Straight	H (R290)	53.7
50103335	54	2.0	2.921	5.8m Straight	H (R290)	55.8
50103355	66.7	2.0	3.634	5.8m Straight	H (R290)	44.8
50103363	76.1	2.0	4.162	5.8m Straight	H (R290)	39.1
50103378	108	2.5	7.408	5.8m Straight	H (R290)	34.4

1 Bar = 0.1N/mm<sup>2</sup> = 100kPa.

# Quality, reliability, and performance



## BSEN1057 TYPE X – POLYLAG

Crane Item Number	Outside Diameter (mm)	Wall Thickness (mm)	Nominal Weight (kg/m)	Form	Temper	Safe working pressure (Bar) at up to 65°C
50103091	15	0.7	0.281	5.8m Straight	½H (R250)	58.7
50103190	22	0.9	0.533	5.8m Straight	½H (R250)	51.2
50103226	28	0.9	0.685	5.8m Straight	½H (R250)	39.9
50103235	35	1.2	1.139	5.8m Straight	H (R290)	51.5
50103236	42	1.2	1.375	5.8m Straight	H (R290)	42.6
50103237	54	1.2	1.780	5.8m Straight	H (R290)	33.0
50103238	67	1.2	2.218	5.8m Straight	H (R290)	26.4
50103239	76	1.5	3.139	5.8m Straight	H (R290)	29.2

## BSEN1057 TYPE X – POLYLAG PREMIUM

Crane Item Number	Outside Diameter (mm)	Wall Thickness (mm)	Nominal Weight (kg/m)	Form	Temper	Safe working pressure (Bar) at up to 65°C
50103092	15	0.7	0.281	5.8m Straight	½H (R250)	58.7
50103191	22	0.9	0.533	5.8m Straight	½H (R250)	51.2
50103227	28	0.9	0.685	5.8m Straight	½H (R250)	39.9
50103300	35	1.2	1.139	5.8m Straight	H (R290)	51.5
50103301	42	1.2	1.375	5.8m Straight	H (R290)	42.6
*	54	1.2	1.780	5.8m Straight	H (R290)	33.0

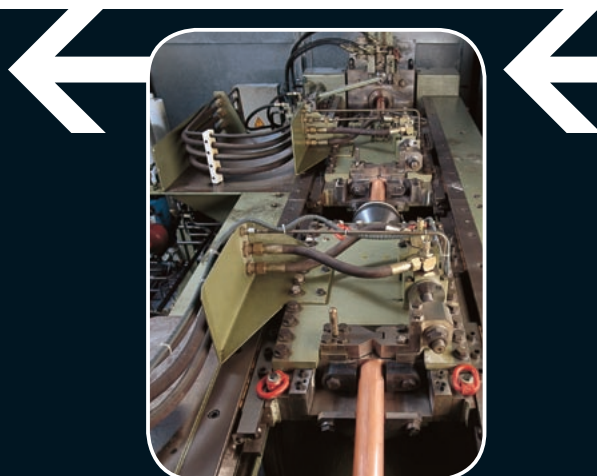
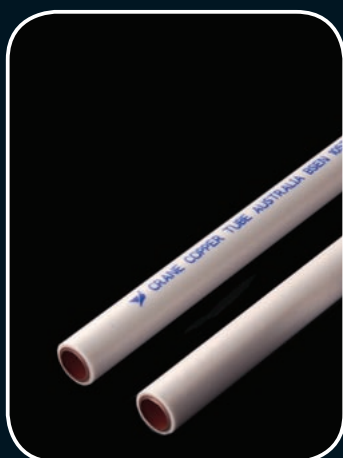
## BSEN1057 TYPE Y – POLYLAG

Crane Item Number	Outside Diameter (mm)	Wall Thickness (mm)	Nominal Weight (kg/m)	Form	Temper	Safe working pressure (Bar) at up to 65°C
50103097	15	1.0	0.393	5.8m Straight	½H (R250)	85.7
*	22	1.2	0.701	5.8m Straight	½H (R250)	69.2
50103241	28	1.2	0.903	5.8m Straight	½H (R250)	53.7
50113413	35	1.5	1.411	5.8m Straight	H (R290)	64.9
*	42	1.5	1.706	5.8m Straight	H (R290)	53.7
*	54	2.0	2.921	5.8m Straight	H (R290)	55.8
*	67	2.0	3.651	5.8m Straight	H (R290)	44.6
*	76	2.0	4.157	5.8m Straight	H (R290)	39.2

## BSEN1057 TYPE Y – POLYLAG PREMIUM

Crane Item Number	Outside Diameter (mm)	Wall Thickness (mm)	Nominal Weight (kg/m)	Form	Temper	Safe working pressure (Bar) at up to 65°C
50103096	15	1.0	0.393	5.8m Straight	½H (R250)	85.7
*	22	1.2	0.701	5.8m Straight	½H (R250)	69.2
*	28	1.2	0.903	5.8m Straight	½H (R250)	53.7
*	35	1.5	1.411	5.8m Straight	H (R290)	53.7
*	42	1.5	1.706	5.8m Straight	H (R290)	44.4

\* Tube made to order where minimum order quantities are required.  
1 Bar = 0.1N/mm<sup>2</sup> = 100kPa.



## Crane Copper Tube

Crane Copper Tube Polylag is manufactured with a plastic sleeve over quality BSEN1057 Crane copper tube. This provides the benefits of fast installation plus improved thermal insulation, reduced noise transmission and condensation, and protection from corrosion.

### Crane Copper Tube – Polylag

- **Polylag Plastic Sleeved Tube:** Crane Copper Tube Polylag is manufactured with non-castellated plastic lagging. This product is particularly useful in aggressive environments and below ground applications.
- **Polylag Premium:** Crane Copper Tube Polylag Premium has a castellated plastic sleeve which forms air pockets around the tube, creating an effective thermal barrier (since air is a poor conductor of heat), and improving thermal insulation properties.
- **Reduced Noise & Condensation:** The castellated plastic sleeve significantly reduces noise transmission and condensation.
- **Ideal for Laying in Concrete:** The plastic sleeve around Polylag tube protects the tube from corrosive environments and abrasion.
- **Fast & Cost Effective:** Ready to install – reduces costs compared to time consuming hand lagging.

Quality, reliability, and performance





## Physical Properties of Copper Tube

<b>Composition</b>	Alloy C12200 Copper= 99.90%min; Phosphorus=0.015-0.040%
<b>Melting point</b>	1083°C
<b>Density</b>	8.94 x 10 <sup>3</sup> kg/m <sup>3</sup>
<b>Thermal Expansion</b>	0.177mm/10°C.m
<b>Modulus of Elasticity</b>	17,000 MPa

Tube Temper	Nominal Outside Diameter	MPa*	Minimum Elongation	Hardness‡
R220 Annealed	6 to 54mm	220	40%	40 to 70
R250 Half Hard	6 to 66.7mm	250	30%‡	75 to 100
R250 Half Hard	6 to 159mm	250	20%‡	75 to 100
R290 Hard	6 to 267mm	290	3%	100 min.

‡ Elongation for half hard tubes depends on the ratio of outside diameter to wall thickness

\* MPa = Minimum tensile strength

‡ Hardness HV/5 indicative

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

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