

# **silmét** S.P.A. CONDY COPPER TUBE

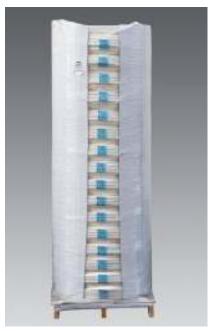
**CONDY**, the copper tube ideal for transporting cooling gases. It is supplied with caps at the ends to retain the high level of cleanliness of the internal surface required for installation.

The particularly well-designed coating is made from very low-density closed cell expanded polyethylene and guarantees an excellent resistance to the spread of water vapour with the resulting reduction in the formation of humidity on the outer surface of the tube.

The coating is odourless, non-toxic and made without the use of CFC. Its external surface is corrugated giving further mechanical protection. It is classified as **Class 1** fire resistant and is suitable for use in plants with operating temperatures ranging from  $-80^{\circ}$ C to  $+98^{\circ}$ C.

The CONDY copper tube is supplied in 50-metre coils marked at intervals also indicating the relative meters.

The core of the CONDY is the SILMET copper tube manufactured according to the European standard EN 12735-1 and with a level of internal cleanliness that also complies with standard ASTM B280.





INSULATION DENSITY : 45 kg/m<sup>3</sup>

THICKNESS OF THE INSULATING SHEATH : from 7.5 to 10 mm : -80 °C +98 °C **USAGE TEMPERATURE** 

WATER VAPOUR DISPERSION COEFFICIENT: 5482

THERMAL CONDUCTIVITY : 0.0397 W · m<sup>-1</sup> · K<sup>-1</sup> FIRE RESISTANCE : Class 1 (self-extinguishing)

WRAPPING : coils individually wrapped with transparent film giving further protection

#### **CHARACTERISTICS OF THE COPPER TUBE**

Alloy	Cu-DHP CW024A (Cu = 99.90% min. – P = 0.015 – 0.040%)
Physical state	Annealed
Unit tensile strength	220 MPa/mm² min.
Elongation percentage	40% min.
Internal cleanliness	C max. 0.20 mg/dm <sup>2</sup>
Dimensions and tolerances <sup>1</sup>	according to standard EN 12735-1
Internal surface roughness	RA 1/10 micron
Linear thermal expansion coefficient	0.00168 mm/m °C
Thermal conductivity at 20 °C	364 W/m k

<sup>&</sup>lt;sup>1</sup> Products with marking, dimensional tolerances and various lengths can be prepared on specific Customer request.

## CONDY COPPER TUBE **silmet** S.P.A.



### TABLE OF DIMENSIONS OF THE SILMET CONDY COPPER TUBE

dimensions without insulation	diameter with insulation	thickness of insulating sheath	bursting pressure	operating pressure	coil length	water content per meter
mm	mm	mm	MPa	MPa	m	l/m
thickness 0,80 mm						
6,35 X 0,80 – 1/4"	21,35	7,5	56,54	14,14	50	0,0177
7,94 X 0,80 – 5/16"	22,94	7,5	45,22	11,30	50	0,0316
9,52 X 0,80 – 3/8"	25,52	8	37,71	9,43	50	0,0493
12,70 X 0,80 - 1/2"	32,7	10	28,27	7,07	50	0,0968
thickness 1 mm						
6,35 X 1 – 1/4"	21,35	7,5	70,68	17,67	50	0,0149
9,52 X 1 – 3/8"	25,52	8	47,14	11,79	50	0,0444
12,70 X 1 – 1/2"	32,7	10	35,34	8,83	50	0,0899
15,87 X 1 – 5/8"	35,87	10	28,28	7,07	50	0,1511
19,05 X 1 – 3/4"	39,06	10	23,55	5,89	50	0,2286

### PALLETISATION OF SILMET CONDY COATED COILS

measurement Ø x thickness	coil length	coils per pallet	meters per pallet	approx. gross pallet weight	dimensions of pack
mm	m	n	m	kg	cm
thickness 0,80 mm				-	
6,35 X 0,80 - 1/4"	50	16	800	128	h 220 X Ø 80
7,94 X 0,80 - 5/16"	50	15	750	147	h 220 X Ø 80
9,52 X 0,80 - 3/8"	50	14	700	162	h 220 X Ø 80
12,70 X 0,80 - 1/2"	50	15	750	225	h 220 X Ø 80
thickness 1 mm					
6,35 X 1 - 1/4"	50	16	800	150	h 220 X Ø 80
9,52 X 1 - 3/8"	50	14	700	190	h 220 X Ø 80
12,70 X 1- 1/2"	50	15	750	290	h 220 X Ø 80
15,87 X 1 - 5/8"	50	12	600	288	h 220 X Ø 90
19,05 X 1 - 3/4"	50	10	500	285	h 220 X Ø 90

The packs cannot be stacked.

A maximum of 2 packs with a large diameter (h 220 x Ø 90 cm) and available for other coated products, are loaded onto the pallet side-by-side together with a third smaller pallet.

The others can be loaded side-by-side in threes.