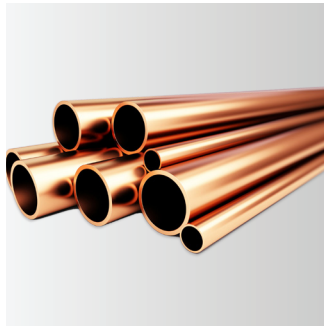




HVAC INSTALLATION MATERIALS



COPPER PANCAKE COIL & STRAIGHT PIPE

DSP Copper Pancake Coil and Straight Copper Pipes are manufactured to stringent quality standards. These seamless copper tubes are manufactured according to ASTM B280 – Standard Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service – and intended for use in the connection, repairs or alternations of air conditioning or refrigeration units in the field.

To ensure excellent performance, the highest quality cathode copper with 99.9% Cu is used. The product line-up offers a wide selection of choices to meet the needs of various air-conditioning and refrigeration applications.

Standard Length Per Coil/Pipe

Type	Temper	Length (m)
Copper Pancake Coil	Annealed	15
Straight Copper Pipes	Hard Drawn	5.8

Chemical Properties

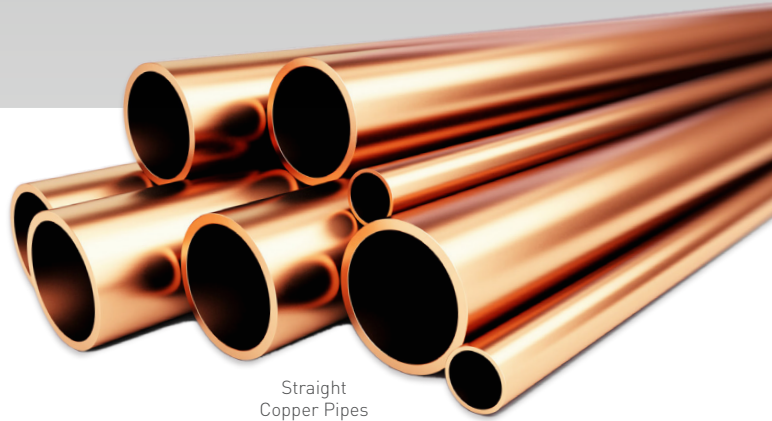
Chemical Properties			
Standard	Grade	Copper, Cu (%)	Phosphorus, P (%)
ASTM B280	C12200	99.9	0.015 - 0.04

Mechanical Properties

Mechanical Properties			
Temper	Tensile Strength (Mpa)	Elongation (%)	Average Grain Size (mm)
H80	min 250	-	-
O60	min 205	min 40	min 0.04

Product Lineup

Product	Model Number	Diameter (inch)	Length (m)	Thickness (mm)
Copper Pancake Coil	PCC-1/4-ASTM	1/4	15	0.76
	PCC-3/8-ASTM	3/8	15	0.81
	PCC-1/2-ASTM	1/2	15	0.81
	PCC-5/8-ASTM	5/8	15	0.89
	PCC-3/4-ASTM	3/4	15	0.89
Straight Copper Pipes	SCP-7/8-ASTM	7/8	5.8	1.14
	SCP-1-ASTM	1	5.8	1.21
	SCP-1 1/8-ASTM	1 1/8	5.8	1.27
	SCP-1 3/8-ASTM	1 3/8	5.8	1.40
	SCP-1 5/8-ASTM	1 5/8	5.8	1.52

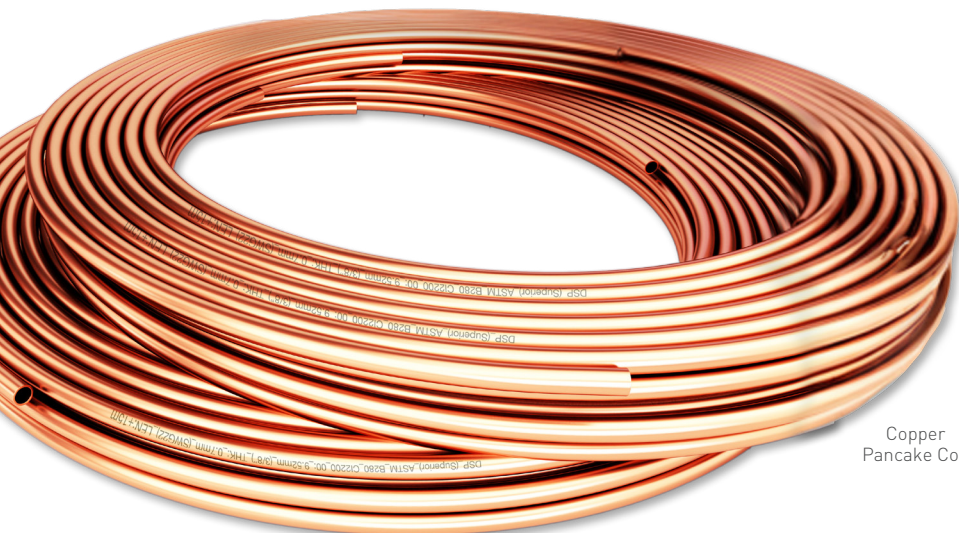


Straight
Copper Pipes

Safe Internal Working Pressure

Copper Pancake Coil							
Nominal / Standard Size (inches)	Annealed						
	Coils						
	S= 6000 psi 100F	S= 5100 psi 150F	S= 4900 psi 200F	S= 4800 psi 250F	S= 4700 psi 250F	S= 4000 psi 300F	S= 3000 psi 400F
1/4	1406	1195	1148	1125	1102	938	703
3/8	984	836	803	787	770	656	492
1/2	727	618	594	581	569	485	363
5/8	618	525	504	494	400	341	256
3/4	511	435	417	409	400	341	256
7/8	582	495	475	466	456	388	291

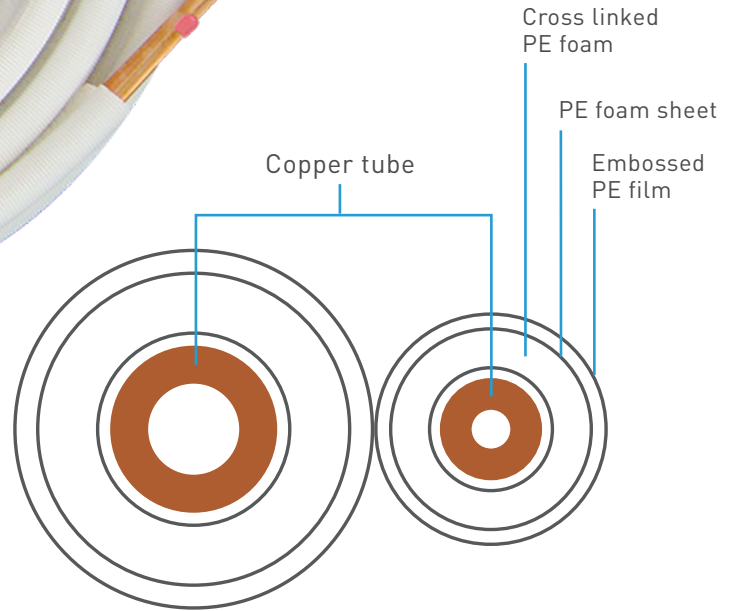
Straight Copper Pipes							
Nominal / Standard Size (inches)	Annealed						
	Coils						
	S= 6000 psi 100F	S= 5100 psi 150F	S= 4900 psi 200F	S= 4800 psi 250F	S= 4700 psi 300F	S= 4000 psi 350F	S= 3000 psi 400F
7/8	583	496	477	467	457	389	292
1 1/8	495	421	404	396	388	330	248
1 3/8	440	374	359	352	344	293	220
1 5/8	409	348	334	327	320	273	205



Copper
Pancake Coil



ASTM B280-16



INSULATED PAIR COIL

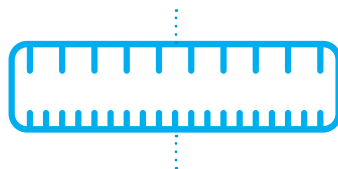
DSP Insulated Pair Coil is made with ASTM B280 grade copper encased in high quality closed cell polyethylene foam, ensuring quality and safety. The insulated coating is durable and more resistant to abrasions than traditional materials. It is easier to install in tight spaces and reduces installation time as the insulation does not need to be measured, cut, and threaded on as a separate job.

ADVANTAGES



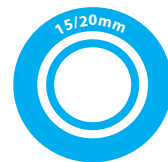
Improved Installation Efficiency

Easy to bend and cut.
Pair Coil can easily be separated by hand.
No tools or cutting are necessary.



Length Markings

Consecutively numbered length markings are clearly printed on insulation surface at 1 meter intervals to indicate remaining length.



Concealed Installation

For concealed pipe installation, thicker insulation types (15 & 20mm) are available to further reduce sweating.

Product Lineup

Product	Model Number	Diameter (inch)	Length (m)	Thickness (mm)	
				Pipe	Insulation
Pair Coil	IPC-23-ASTM	1/4 - 3/8	Up to 30	0.76 - 0.81	8 - 8
	IPC-24-ASTM	1/4 - 1/2	Up to 30	0.76 - 0.81	8 - 10
	IPC-25-ASTM	1/4 - 5/8	Up to 30	0.76 - 0.89	8 - 10
	IPC-35-ASTM	3/8 - 5/8	Up to 30	0.81 - 0.89	8 - 10
	IPC-36-ASTM	3/8 - 3/4	Up to 30	0.81 - 0.89	8 - 10

Safety Compliance

Copper Tube Safeworking Pressure (kPa)			
Copper Tube Dimentions Metric (mm)	@50°C	SWP (kPa) @65°C	@75°C
6.35 x 0.81	10,635	9,545	8,820
9.52 x 0.81	6,800	6,105	5,640
12.70 x 0.81	4,995	4,480	4,140
15.88 x 1.02	5,030	4,515	4,170
19.05 x 1.14	4,697	4,181	3,895

Insulation Properties	
Material	Highly flexible paired, cross linked, closed cell polyethylene
Thermal Conductivity	0.037 W/(m•K) at 20°C
Tensile Strength	34.2 (3.49)min N/cm ² (kgf/cm ²)
Water Absorption	0.0076 max g/100cm ²
Thickness Shrinkage	5% max @ (120 ± 5°C)
Coefficient of Moisture Permeability	10 (0.005) max (per 25mm in thickness) ng/m ² •s•Pa (g/m ² •h•mmHg)
Working Temperature	Up to 120°C

	Item	Result	
1	Fire Retardant	B-S1, d0, EU standard	
		B1, EU/Germany standard	
		M1, EU/France standard	
		Class A (Highest Class)	
2	Appearance Density	Inner tube: 0.028 g/cm ³	Surface tube: 0.030 g/cm ³
3	Tensile Strength	Inner tube: 55.8 N/cm ²	Surface tube: 26.0 N/cm ²
4	Elongation	Inner tube: 65%	Surface tube: 88%
5	Water Absorbtion	Inner tube: 0.15%	Surface tube: 0.13%
6	Water Vapour Permeance	8.6 x 10 ⁻¹¹ g/m ² •s•Pa	
7	Thermal Conductivity	0.035 (0°C) W/m•K	
8	Thermal Resistance	0.23 (23°C) m ² •K/W	
9	ROHS (Restriction of Hazardous Substances)	Pass	
10	UV Resistance	Pass	



For any further enquiries, please contact your local sales office.

Specifications, designs and other content appearing in this catalogue are correct as of June 2024 and subject to change without notice.