



Comform to JIS H3300 C1200T / JIS A9511-PE-C-2 PEF8,10-N / JCDA0009

Egenskaper;

- Dobbeltlagstrukturerisolasjoner har 30 ganger utvidet crosslinkedpolyethylene skum med varmebestandighet opp til 120.
- Sømløs ekstruderingsstøping forbedrer minimum klaring av kobberør og ioslasjon, noe som oppnår høy forebygging av duggkodens.
- Preging på overflatelimen gir høy ripebestandighet. Fleksibelt materialet gjør det lett å bøye og
- sparer arbeidstid.

Materialer og karakteristik for kobberørmateriale - JIS H3300 : 2012 C1220T

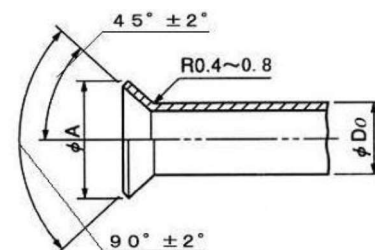
Material	Chemical Composition (%)		Mechanical Property			
	Cu	P	Temper	Tensile strength (N/mm2)	Elongation	Grain size(mm)
Phosphorous-deoxidized seamless copper pipe	≥ 99.90	0.015 ~ 0.040	O	≥ 205	≥ 40	0.025 to 0.060
			1/2H	245 to 325	-	-
			H	≥ 315	-	-

Materialer og karakteristik for kobberørmateriale JIS A9511 : 2017 A-PE-C-2

Material	Type	Code	Thermal Conductivity W/(m·K)	Thermal resistant (°C)	Tensile strength (N/cm2)	Water Absorbent (g/100cm2)	Thickness shrinkage 120±5°C
30 timeexpanded independent polyethylene foam with emboss film	Polyethylene Material class A and Polyethylene foam mould class 2	A-PE-C-2	≤ 0.043	Up to 120	≥ 14	≤ 2.0	≤ 7%

Påføring av kjølegass

Indication No.	Ref. category	Applying refrigeration gas
①	1	R22, R407C, R404A, R507A etc...
②	2	R22, R410A, R407C, R404A, R507A, R32 etc...
③	3	High pressure refrigeration gas less than 4.80 Mpa

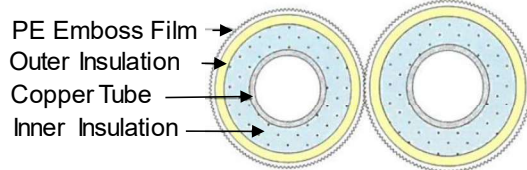


$$t = \frac{P D_o}{2 \sigma_a \eta + 0.8 P}$$

t : Wall thickness of copper pipe (mm)
 P : Designed pressure (Mpa)
 D_o : Outer diameter of copper pipe (mm)
 σ_a : Allowable tensile stress (N/mm²)
 η : Efficiency of welded joint (I)

Pipe Outer Diameter (mm)	A +0/-0.4	
	Cat.1	Cat.2
6.35	9.0	9.1
9.52	13.0	13.2
12.70	16.2	16.6
15.88	19.4	19.7
19.05	23.3	24.0

TD Twin Dia – 20m / 30m coil



Egenskaper;

- Integrert væskerør og gassrør

*O.D : Outer Diameter / **W.T : Wall Thickness

Lengde (m)	modell#	kategori kuldemedie	Kobberrør(mm)		Isolasjonsrør(mm)		Antall
			O.D*	W.T**	O.D*	W.T**	
20	TD-2320	3	6.35	0.8	24	8	1
			9.52	0.8	27	8	
	TD-2320W	3	6.35	0.8	24	8	2
			9.52	0.8	27	8	
	TD-2420	2	6.35	0.8	24	8	1
			12.70	0.8	34	10	
TD-3520	2	9.52	0.8	27	8	1	
		15.88	1.0	37	10		
TD-3620Z	2	9.52	0.8	27	8	1	
		19.05	1.2	41	10		
30	TD-2330	3	6.35	0.8	24	8	1
			9.52	0.8	27	8	
	TD-2430	2	6.35	0.8	24	8	1
			12.70	0.8	34	10	

SD Singel Dia – 20m coil



Modell#	Ref cat.	Kobberrør (mm)		Isolasjonsrør (mm)		antall
		O.D*	W.T**	O.D*	W.T**	
SD-220	3	6.35	0.8	24	8	3
SD-320	3	9.52	0.8	27	8	3
SD-420	2	12.70	0.8	34	10	2
SD-520	2	15.88	1.0	37	10	1
SD-620Z	2	19.05	1.2	41	10	1

TDS Twin Dia – 20m coil

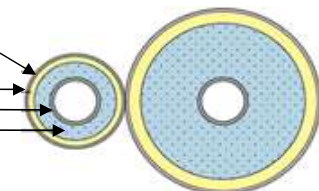


Modell#	Ref cat.	Kobberrør (mm)		Isolasjonsrør (mm)		antall
		O.D*	W.T**	O.D*	W.T**	
TDS-2320	3	6.35	0.8	24	8	1
		9.52	0.8	51	20	
TDS-2420	2	6.35	0.8	24	8	1
		12.7	0.8	54	20	
TDS-3520	2	9.52	0.8	27	8	1
		15.88	1.0	57	20	

SDS Single Dia – 20m coil

Modell#	Ref cat.	Kobberrør (mm)		Isolasjonsrør (mm)		antall
		O.D*	W.T**	O.D*	W.T**	
SDS-220	3	6.35	0.8	48	20	1
SDS-320	3	9.52	0.8	51	20	1
SDS-420	2	12.70	0.8	54	20	1
SDS-520	2	15.88	1.0	57	20	1
SDS-620Z	2	19.05	1.2	61	20	1

PE Emboss Film
Outer Insulation
Copper Tube
Inner Insulation



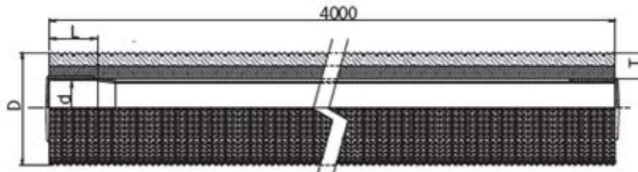
DHF 4M rette rør med utvidet ende/temper 1/2H

4M Straight Tube / Temper 1/2H

DHN

egenskaper;

- Precised expansion machining is done at one side of copper tube
- Copper tubes apply 1/2H hardness



*O.D : Outer Diameter / **W.T : Wall Thickness / ***Inner Diameter

End Expansion	Modell #	Ref cat.	Kobberrør(mm)				Isolasjonsrør (mm)		Cap Color	Qty
			O.D*	W.T**	Expansion I.D*** (d)	Expansion Length (L)	O.D*	W.T**		
Yes	DHF-034	3	9.52	0.8	9.62	9	27	8	Red	12
	DHF-044	3	12.70	0.8	12.81	10	34	10	Green	12
	DHF-054	3	15.88	1.0	16.00	12	37	10	Blue	8
	DHF-064	3	19.05	1.0	19.19	16	41	10	Yellow	8
	DHF-064A	3	19.05	1.05	19.19	16	41	10	Yellow	8
	DHF-074	3	22.22	1.0	22.36	18	44	10	Gray	6
	DHF-074A	3	22.22	1.2	22.36	18	44	10	Gray	6
	DHF-104	3	25.40	1.0	25.55	21	47	10	Red	6
	DHF-114	2	28.58	1.0	28.75	22	50	10	Green	5
	DHF-124	2	31.75	1.1	31.93	24	53	10	Blue	4
	DHF-134	2	34.92	1.2	35.11	25	56	10	Yellow	4
	DHF-144Z	2	38.10	1.35	38.3	27	60	10	Gray	3
	DHF-154	2	41.28	1.45	41.50	27	64	10	Red	3
	DHF-164	2	44.45	1.55	44.67	30	66	10	Green	3
	DHF-204	1	50.80	1.4	51.04	33	73	10	Blue	2
	DHF-214	1	53.98	1.5	54.22	33	76	10	Black	2
	DHF-2064	3	19.05	1.0	19.19	16	61	20	Yellow	4
	DHF-2074	3	22.22	1.0	22.36	18	64	20	Gray	4
	DHF-2104	3	25.40	1.0	25.55	21	67	20	Red	3
	DHF-2114	2	28.58	1.0	28.75	22	70	20	Green	3
DHF-2124	2	31.75	1.1	31.93	24	73	20	Blue	3	
DHF-2144Z	2	38.10	1.35	38.30	27	80	20	Gray	2	
No	DHN-034	3	9.52	0.8	-	-	27	8	Red	12
	DHN-044	3	12.70	0.8	-	-	34	10	Green	12
	DHN-054	3	15.88	1.0	-	-	37	10	Blue	8
	DHN-064	3	19.05	1.0	-	-	41	10	Yellow	8
	DHN-064A	3	19.05	1.05	-	-	41	10	Yellow	8
	DHN-074	3	22.22	1.0	-	-	44	10	Gray	6
	DHN-074A	3	22.22	1.2	-	-	44	10	Gray	6
	DHN-104	3	25.40	1.0	-	-	47	10	Red	6
	DHN-114	2	28.58	1.0	-	-	50	10	Green	5
	DHN-124	2	31.75	1.1	-	-	53	10	Blue	4
	DHN-134	2	34.92	1.2	-	-	56	10	Yellow	4
	DHN-144Z	2	38.10	1.35	-	-	60	10	Gray	3
	DHN-154	2	41.28	1.45	-	-	64	10	Red	3
	DHN-164	2	44.45	1.55	-	-	66	10	Green	3
	DHN-204	1	50.80	1.4	-	-	73	10	Blue	2
	DHN-214	1	53.98	1.5	-	-	76	10	Black	2

Notes : When refrigeration gas apply R410A with following models, its bending radius shall be 4 times of copper tube outer diameter;
 DHF-114, DHF-124, DHF-144Z, DHF-2114, DHF-2124, DHF-2144Z, DHN-114, DHN-124, DHN-144Z
 Model # written in Red on above table is MAKE TO ORDER.