Steel fin tubes

Double & Single fin tubes

Technical information

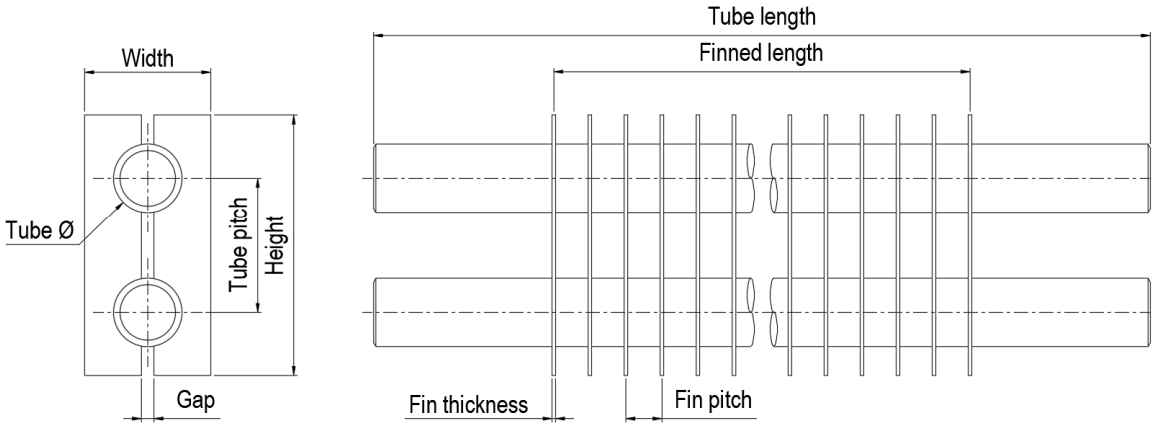
Resistant welded rectangular steel fin tubes normally used for Economisers and Flue gas coolers for solid fuel or oil fired boilers or other industrial applications with dust-containing gases.

The inline arrangement makes maintenance and cleaning easy.

Ekströms offer Single and Double fin tubes in a wide range of dimensions

EKSTRÖMS VÄRMETEKNISKA AB
Glasfibergatan 10 - SE-12545 ÄLVSJÖ - Sweden
www.ekstromsvarme.se
+46 8 710 09 70

Double fin tube



Double Fin tube				
Tube OD [mm]	**Fin Height [mm]**	**Width [mm]**	**Tube pitch c/c [mm]**	**Gap [mm]**
Ø31,8	195	95	100	10
	145	**70**	**75**	**7**
	145	65	75	7
	125	80	65	10
	125	60	65	6
Ø38	**195**	**95**	**100**	**10**
	180	95	92	10
	175	84	90	7
	153	74	79	7
	145	**70**	**75**	**7**
Ø44,5	246	121	126	14
	195	**95**	**100**	**10**
	175	85	90	8
Ø48,3	248	109	127	14
	195	**95**	**100**	**10**
Ø51	248	121	127	14
	195	**95**	**100**	**10**
Bolded figures are so called standard dimensions Other dimensions to be discussed on request				

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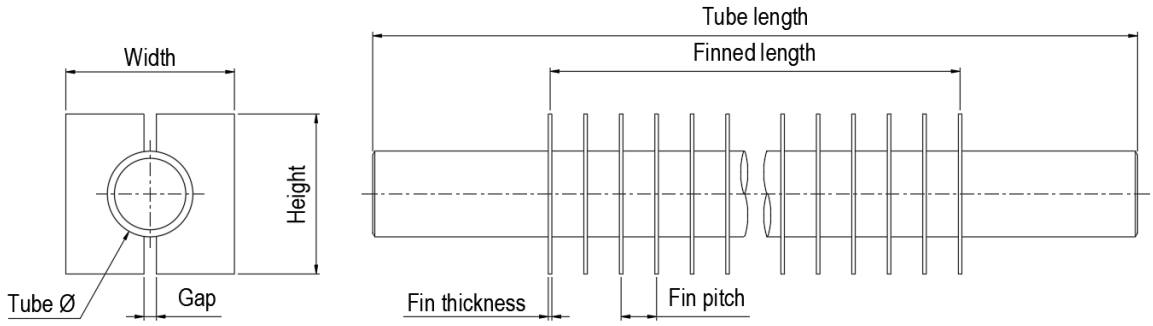
Single fin tube



Single fin tubes			
Tube OD [mm]	**Fin Height [mm]**	**Fin Width [mm]**	**Gap [mm]**
Ø31,8	60	80	10
Ø38	**90**	**95**	**10**
	74	74	7
	70	70	7
Ø48,3	**90**	**95**	**10**
Ø51	144	124	14
	121	109	14
	121	121	14
Ø58	121	121	13
Bolded figures are so called standard dimensions Other dimensions to be discussed on request			

Other production limits for Double & Single fin tubes	
Maximum tube length	15m
Fin thickness	2,0, 2,5 or 3,0mm
Fin pitch range	10 – 40mm
Min. tube wall thickness	2,9mm for Double fin 3,2mm for Single fin

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Materials available for Double and Single fin tubes

Welded steel fin tubes is normally manufactured in carbon steel but can be produced in many combinations of steel material. Following tables showing the most common materials. Other materials to be discussed on request.

Tube material			
Material group acc. CR-EN-ISO 15608	**Material No.**	**EN Steel grade**	**ASTM Steel grade**
1.1	1.0345	P235GH	A106 Gr. A / A179/A192
	1.0425	P265GH	A106 Gr. B / A210 Gr. A1
-	-	Corten	A423 A Gr.1
1.2	1.5415	16Mo3	A209 T1 / A335 P12
5.1	1.7335	13CrMo44	A213 T12 / A335 P12
5.2	1.7338	10CrMo9-10	A213 T22 / A355 P22
8.1	1.4301	X5CrNi18-10	TP 304
	1.4307	X2CrNi18-9	TP 304 L
	1.4404	X2CrNiMo17-12-2	TP 316
	1.4401	X5CrNiMo17-12-2	TP 316 L
	1.4571	X6CrNiMoTi17-12-2	TP 316 Ti

Fin material				
Material group acc. CR-EN-ISO 15608	**Material No.**	**EN Steel grade** EN 10130 / EN 10088	**ASTM Steel grade**	**Maximum fin tip temperature**
1.1	1.0330	S235JR	A 284 Gr. C, D	470°C
-	-	Corten	Corten	470°C
7.1	1.4512	X2CrTi12	A 409 / A240	650°C
8.1	1.4301	X5CrNi1810	A 304 / A240	850°C
8.1	1.4436	X3CrNiMo17-13-3	A 316 / A240	850

Heating surface and weight

for the most common fin dimensions with tube Ø38 and Ø48,3

	Tube Ø38x3,6mm Fin 145x70x2,0mm		Tube Ø38x3,6mm Fin 145x70x3,0mm		Tube Ø48,3x4,0mm Fin 195x90x2,0mm		Tube Ø48,3x4,0mm Fin 195x90x3,0mm	
Fin pitch [mm]	Heating surface [m²/m]	Weight [kg/m]	Heating surface [m²/m]	Weight [kg/m]	Heating surface [m²/m]	Weight [kg/m]	Heating surface [m²/m]	Weight [kg/m]
10	1,79	17,6	1,84	23,4	3,21	30,5	3,27	41,4
12	1,53	15,7	1,57	20,5	2,72	26,9	2,78	35,9
15	1,27	13,8	1,31	17,6	2,24	23,9	2,28	30,5
17	1,15	12,9	1,18	16,3	2,01	21,6	2,05	27,9
20	1,01	11,9	1,04	14,8	1,75	19,7	1,79	25,1
25	0,86	10,7	0,88	13,0	1,46	17,5	1,49	21,8
30	0,76	9,9	0,77	11,9	1,27	16,0	1,29	19,6

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