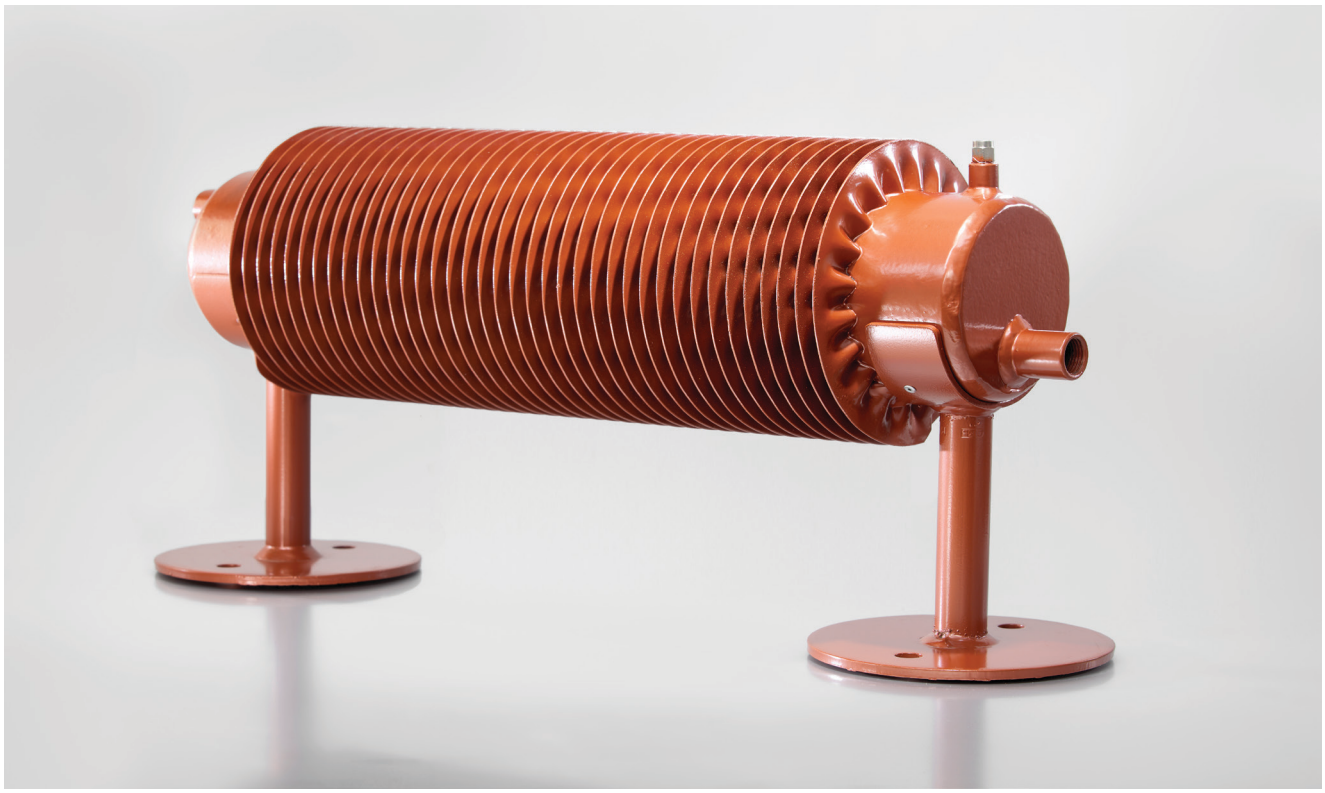
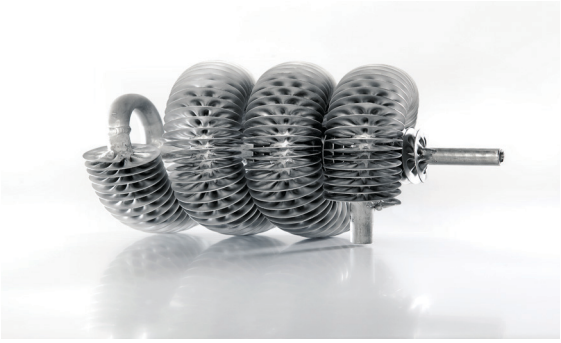
FINNED TUBE RADIATORS



UNIQUE HEATING

FLEXIBLE DESIGN



Eino Talsi Oy is part of Ekocoil Group. The company has already for decades specialized in developing and manufacturing finned tube products. The product range also includes economizers, air pre-heaters and water to air heaters.

Eino Talsi is responsible for the whole end-to-end process from design to production. This enables us to offer unique, flexible and reliable service for each customer.

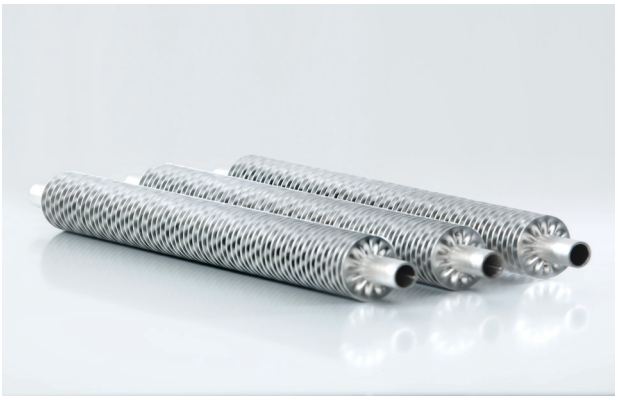
Eino Talsi Oy follows the ISO 9001 quality standard in its production.

SEVERAL APPLICATIONS

Finned tube radiators are used for heating different kinds of spaces. The finned tube radiators from Eino Talsi Oy are efficient, reliable, cost efficient and also aesthetically pleasing.

Features of the finned tube radiators can be specified case by case. This ensures that the radiator will match the architectural requirements and individual heating needs of each case. Since finned tube radiators don't take up much height, they are ideal for cases where wall space is at premium, such as areas with large glass walls. These include, for example, conservatories, reception spaces and exhibition halls. In addition, the "vintage" style appearance makes finned tube radiators well suited for renovation and refurbishment projects.

DIFFERENT KINDS OF SPACES



The finned tube structure of the radiators enable efficient heat transfer. The radiators take up little space, are easy to keep clean and their structure is simple. The product consists of helical finned tube and joints and it can have wall or floor mount as needed.

Eino Talsi finned tube radiatos can me manufactured in several different shapes, such as bent or spiral and in any color according to RAL coding. Thus it blends well with the surrounding environment and architectural design.

ADJUTED ACCORDING TO REQUIREMENTS

FINNED TUBE RADIATORS BESIDES A GLASS WALL

FINNED TUBE RADIATORS BELOW WINDOW

FINNED TUBE RADIATORS CAN BE MADE IN DIFFERENT COLORS

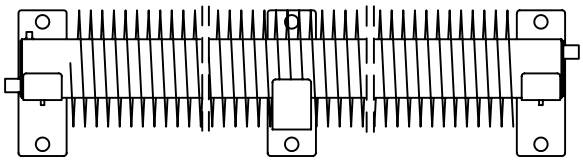
DIMENSIONS

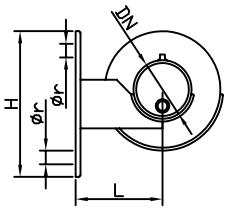
DN	ø tube x wall	ø top of tube	Heat surface m²/m	Weight kg/m	Power W/m		Max length m
					Water 80/60°	Water 70/40°	
15	21.3x2	53	1.14	2.8	342	239	6
20	26.9x2.3	67	1.49	3.8	440	308	6
25	33.7x2.6	74	1.65	4.6	479	335	6
32	42.4x2.6	82	1.83	5.5	530	371	6
40	48.3x2.6	88	2.00	6.1	560	392	6
50	60.3x2.9	120	2.07	11.2	569	398	6
65	76.1x2.9	136	2.37	13.3	613	429	6
80	88.9x3.2	148	2.61	15.6	630	441	6
100	114.3x3.6	174	3.54	22.0	797	558	6

The radiators are delivered powder coated in RAL-color selected by the customer. They can be delivered either with wall or floor mount. Custom dimensions available through special order.

Wall mount dimensions

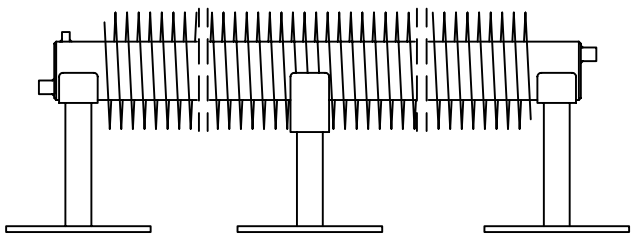
DN	H	L	ør
15	70	40	6
20	85	50	6
25	100	55	8
32	110	60	8
40	120	65	9
50	150	90	12
65	170	100	14
80	185	110	14
100	220	130	16

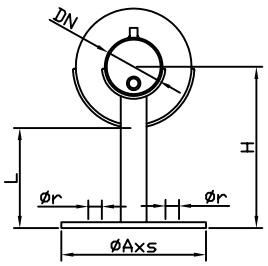




Floor mount dimensions

DN	øAxs	ør	H	L
15	68x2	8	127	100
20	68x2	8	134	100
25	100x4	10	137	100
32	100x4	10	141	100
40	100x4	10	144	100
50	150x6	14	160	100
65	150x6	14	168	100
80	150x6	14	174	100
100	150x6	14	187	100





PRODUCT CODING

TRP - 100 - 3000 - 1/2" - L - RAL

- Finned tube
- DN
- Tube length
- Joint
- Mount (S = wall, L = floor)
- Color code

Radiators must be supported from the middle to avoid bending, when:

- Tubes DN 15 ... 25; length over 2m
- Tubes DN 32 ... 40; length over 3m

HEAT EMISSION

HEAT EMISSION

$Q = k \times A \times \Delta T$
Q = heat emission W/m
k = heat transfer coefficient W/m^2 °C
A = heat area of finned tube m^2/m
ΔT = difference °C of internal temperatures mean value and external temperature

Design values for heat transfer coefficient (k):
In free convection:
Tube Ø 21.3…60.3mm; k = 6.0…5.5
Tube Ø 60.3…114.3mm; k = 5.5…4.5

In forced convection:
Air flow speed 3…5m/s
Tube Ø 21.3…26.9mm; k = 25…35

Calculation example:
Water 80/60 °C
Room temperature 20°C
ΔT = (80 + 60):2 - 20 = 50°C
Free convection; k = 5.0 W/m^2 °C
Finned tube Ø 76.1 x 2.9 ; A = 2.37 m^2/m
$Q = k \times A \times \Delta T$
$= 5.0 \times 2.37 \times 50$
= 592.5 W/m

WE MANUFACTURE FINNED TUBES MAINLY WITH THE FOLLOWING FEATURES:

Outer diameter of basic tube: 21,3 ... 114,3mm

Fin height: 12 ... 30mm

Fin division: 4 ... 12mm

Fin thickness: 0,5 ... 1,25mm

Diameter top of fin: 45,3 ... 174,3mm

Material options for basic tube: Carbon steel, stainless steel and acid proof steel

Material options for fins: Carbon steel, stainless steel and acid proof steel

Fin type: Blazed spiral fin

Max. lenght for basic tube: 6m

Tube material	Ø Tube x wall thickness	Fin height x thickness mm	Fins pc /m	Ø mm at top of fin	Heat surface (A) m²/m	Weight kg/m
Unalloyed and low alloyed steel	21.3 x 2	12 x 0.5	250	45	0.92	2.4
	21.3 x 2	16 x 0.5	200	53	1.14	2.8
	21.3 x 2	20 x 0.5	167	61	1.35	3.1
	26.9 x 2.3	20 x 0.5	167	67	1.49	3.8
	33.7 x 2.6	20 x 0.5	167	74	1.65	4.6
	42.4 x 2.6	20 x 0.5	167	82	1.86	5.5
	48.3 x 2.6	20 x 0.5	167	88	2.00	6.1
	60.3 x 2.9	30 x 1	83	120	2.07	11.2
	76.1 x 2.9	30 x 1	83	136	2.37	13.3
	88.9 x 3.2	30 x 1	83	148	2.61	15.6
	114.3 x 3.6	30 x 1	97	174	3.54	22.0
Stainless and acid resistant steel	17.2 x 1.5	12 x 0.5	222	41	0.75	1.8
	21.3 x 1.5	12 x 0.5	222	45	0.82	2.0
	26.9 x 1.5	12 x 0.5	222	51	0.94	2.4
	60.3 x 2	30 x 0.6	83	120	2.07	7.2
	76.1 x 2	30 x 0.6	83	136	2.37	8.5
	114.3 x 2	30 x 0.6	97	174	3.54	12.8

More precise values available on request.

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