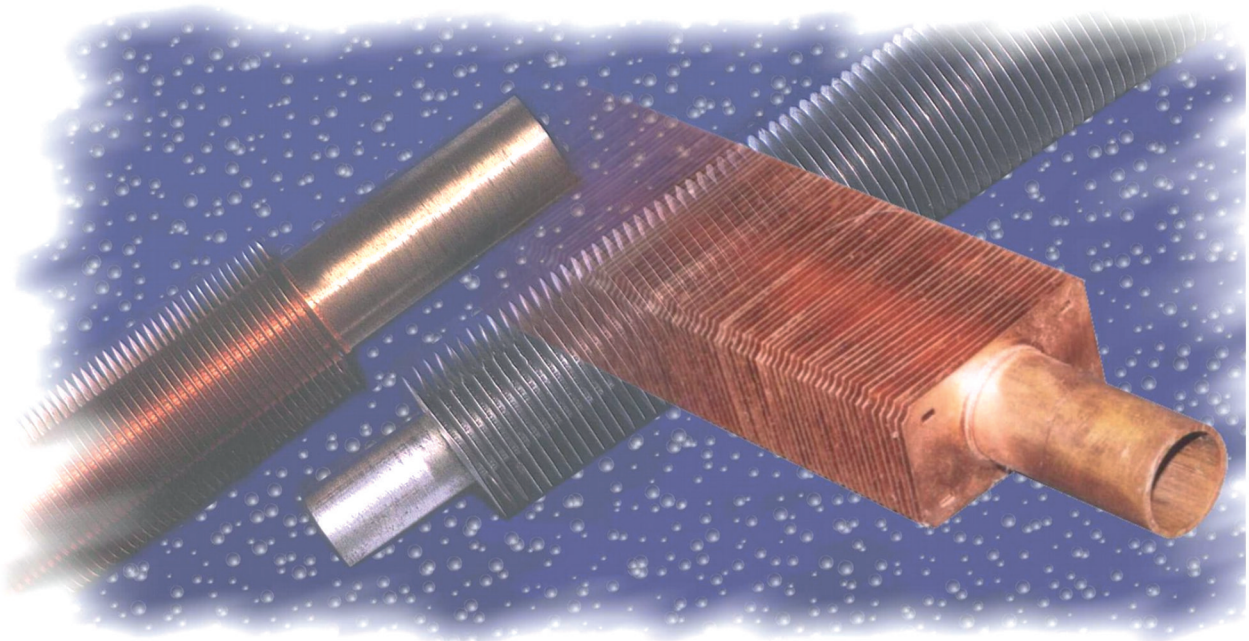




Air Cooled HEAT EXCHANGER



Unit Application :

*Radiator
Oil Cooler
Fluid Cooler
After Cooler
Cooling Coil
Heat Pipe*

*Evaporator
Gas Cooler
Air Heater
Condenser
Heating Coil
Chiller*

*Air Cooled Heat Exchanger
Charge Air Cooler
Inter Cooler
Air Cooler
Dehumidifier
Hydrogen Cooler*

FINNED TUBE COIL / RADIATOR

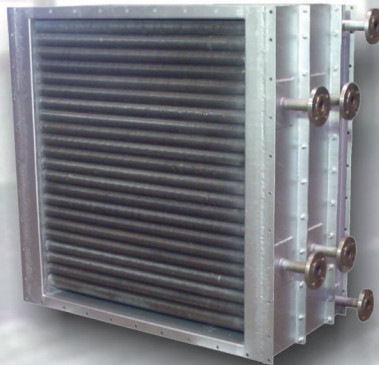
Radiator use in many industrial applications and it's an important part in process, both in Cooling or Heating. We design and manufacture many type of Radiators, for Low or High Temperature, used for many kind of process. Radiator used in so wide in industry and so many size and type of material or size in used, we always keep in stock a wide range of Finned Tube or fast delivery. For a new installation we have a wide choice of standard radiator size with many type of Finned Tube for many different applications. We keeping improving technology and quality control to meet customer's request is the reason why we got great reputation in Heat Transfer Equipment.



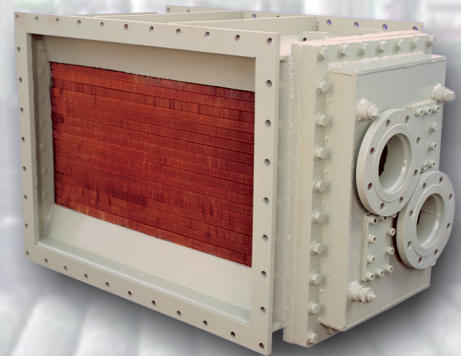
Thermal Oil to Air for Air Heater



Steam to Air for Air Heater



Steam to Air for Air Heater
SUS 304 Fin and Tube



Sea Water to Air for Turbo Cooler
Rectangular Fin Tube , Copper Fin - Cu/Ni Tube

SPIRAL FINNED TUBE SPECIFICATION :

Fin Height = 10 mm

Fin Height = 12 mm

Fin Height = 16 mm

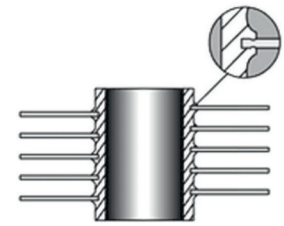
Fpi	d(mm)	D(mm)	A(m ² /m)	Fpi	d(mm)	D(mm)	A(m ² /m)	Fpi	d(mm)	D(mm)	A(m ² /m)
6,5	15.9	35.9 + 0.5	0.45	6.5	15.9	39.9 + 0.6	0.57	6.5	21.7	53.7 + 0.7	1.01
	17.3	37.3 + 0.5	0.47		17.3	41.3 + 0.6	0.60		25.4	57.4 + 1.0	1.11
	19.0	39.0 + 0.5	0.5		19.0	43.0 + 0.6	0.63	8	21.7	53.7 + 0.7	1.23
12,5	21.7	41.7 + 0.5	0.55	12.5	21.7	45.7 + 0.6	0.69	10	25.4	57.4 + 1.0	1.35
	25.4	45.4 + 0.6	0.62		25.4	49.4 + 0.7	0.77		21.7	53.7 + 1.0	1.52
	27.2	47.2 + 0.6	0.65		27.2	51.2 + 0.7	0.81	25.4	57.4 + 1.0	1.67	
Material : Tube : Cu ; Cu/Ni ; SUS 304 Fin : Alum ; Cu ; SUS 304								11	21.7	53.7 + 1.0	1.66
									25.4	57.4 + 1.0	1.82
								12.5	21.7	53.7 + 1.0	1.88
									25.4	57.4 + 1.0	2.06

Helically Wound High Fin Tube

' G ' Fin

(Embadded Fin) The fin strip is wound into a machined groove and securely locked into place by back filing with base tube material. This ensures that maximum heat transfer is maintained at high tube metal temperatures .

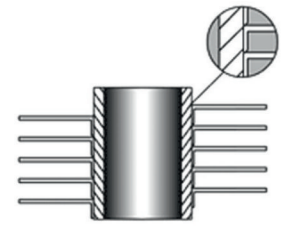
Maximum operating temperature for this fin type is 450°C .



' L ' Fin

The strip material is subjected to controlled deformation under tension giving the optimum contact pressure of the foot of the fin onto the base tube thus maximising the heat transfer properties . The foot of the fin considerably enhances the corrosion protection of the base tube .

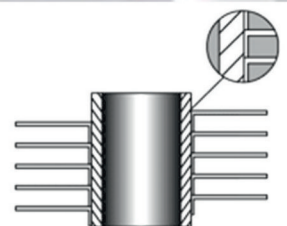
Maximum operating temperature for this fin type is 150°C.



' KL ' Fin

Manufactured exactly as the “ L “ fin except that the base tube is knurled before application of the fin foot . After application the fin foot is knurled into the corresponding knurling on the base tube thereby enhancing the bond between the fin and the tube resulting in improved heat transfer characteristics .

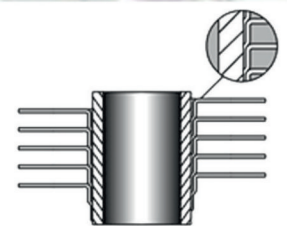
Maximum operating temperature for this fin type is 260°C



' LL ' Fin

Manufactured in the same way as the “ L “ fin type except that the fin foot is overlapped to completely enclose the base tube thereby giving excellent corrosion resistance . This type of tube is often used as an alternative to the the more expensive extruded type fin in corrosive environments .

Maximum operating temperature for this fin type is 180°C



Material Specification :

Base tube O/D	: From 5/8 “ (15.88 mm) to 2 “ (50.8 mm)
Fin heigh	: From 1/4 “ (6.35 mm) to 1 “ (25.4 mm)
Fin pitch	: From 5 fins per inch to 12 fins per inch (196 fins / meter to 473 fins / meter)
Fin thickness	: Form 0.012 “ (0.03) to 0.031 “ (0,76 mm)
Base tube material	: Carbon Steel , Cr - Mo. Steel , Stainless Steel , Copper , Copper alloys , etc .
Fin material	: Aluminium or copper

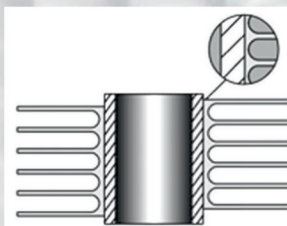
Extruded High Fin

This fin type is formed from a bi - metallic tube consisting of an aluminium outer tube and inner tube of almost any material . This fin is formed by rolling material from the outside of the exterior tube to give an integral fin with excellent heat transfer properties and longevity . Extruded fin offers excellent corrosion protection of the base tube.

Maximum operating temperature for this fin type is 385°C.

Material specification :

Fin material	: Aluminium
Tube material	: Carbon Steel , Cr - Mo. Steel , Copper , Copper alloys , etc .





PT. METALINDO PRIMA ENGINEERING
Heat Transfer Equipment Engineering

Jl. K.H. Zainal Mustafa No. 17 – Jakarta - Indonesia
Phone : 62 21 856 1234 (Hunting)
Fax : 62 21 851 3109
Webside : www.metalindoprima.com
Email : julfika1@metalindoengineering.com