PT. Gemilang Reksa Buana

Mechanical, Electrical & Heat Transfer Engineering

winter tech

www.gemilangreksabuana.com

FINNED TUBE

Air Cooled Heat Exchanger

Brief Introduction

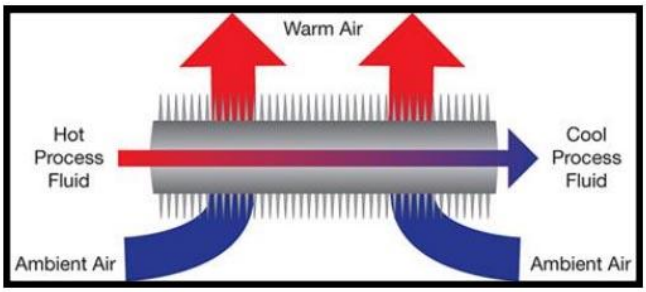
Air Cooled Heat Exchanger (ACHE) is a heat rejection equipment where the excess process heat is rejected to the atmosphere. It works on the principle of convection and conduction to dissipate heat from process fluid to air.

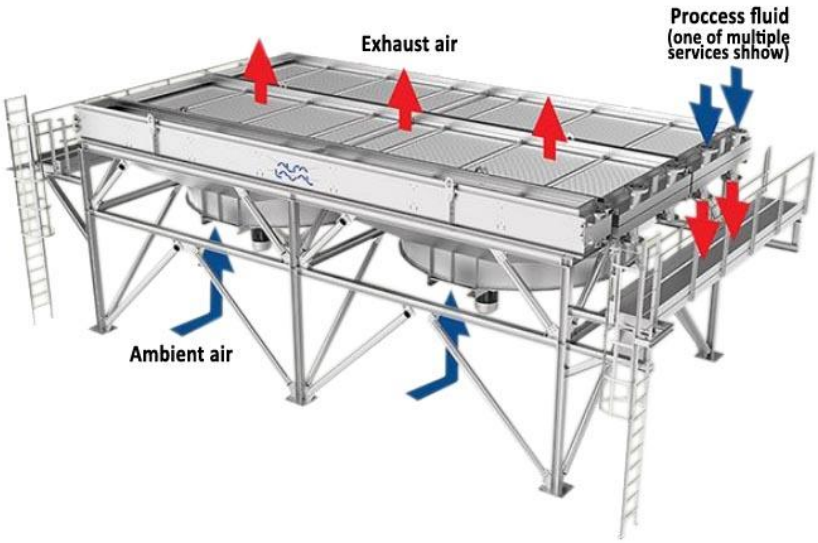
Heating media can use Steam, Thermal Oil, Flue gas.

Cooling media can use Cooling Water, Chilled Water, Ambient Air

Very easy installation and placement of the unit does not require a large area

Fluid process





We perform Design and fabrication according to customer requirements using very accurate Software Engineering.

Then we carry out fabrication in our workshop by going through very strict quality control procedures and stages.

We are committed to maintaining the quality of materials and the end result of excellent unit performance as our commitment to maintaining customer trust.

Application Unit

- Air Cooler Heat Exchanger
- Gas Cooler
- Oil Cooler
- Thermal Oil Air Heater
- Radiator cooler
- Air Heater
- After Cooler
- Dehumidifier
- Inter Cooler
- Steam Air Heater
- Economizer
- Charge Air Cooler

Features

1. Excellent heat transfer enables a compact device design
2. Materials can be selected according to the specifications
3. Heaters can be combined according to the specifications
4. A combination type, therefore replacement of individual sections is possible
5. Combinations can be selected according to the objective, from low pressure to high pressure

STEAM TO AIR FOR AIR HEATER

GAS COOLER HEAT EXCHANGER

Tension wound finned tubes, embedded finned tubes and extruded finned tubes

are main devices for air coolers and the common application fields are:

- Heat exchangers for power plants (electric, nuclear, thermal and geothermal power plants)
- Steam condensate systems
- Chemical and petrochemical industry
- Food processing plants and refrigeration technology
- Industrial (steel mills, incinerators, gas compression facilities).

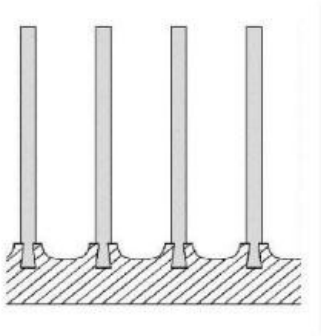
By providing a choice of tube and fin materials according to application needs by adjusting to the type of fluid used, we provide a choice of standard tubes with a very unique construction.

We offers different finned tubes: tension wound finned tubes, embeddedfinned tubes and extruded finned tubes.

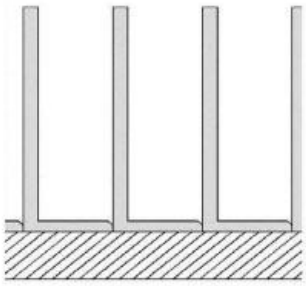
Tension wound finned tubes are formed by winding a strip made of aluminium or copper around the tube under tension. The strip winding technology provides different types of fins: G-Fin, L-Fin, LL-Fin, KL-Fin.

Embedded fins (G-Fins) are made by winding aluminium or copper strip into a helical groove machined on the outer surface of the tube.

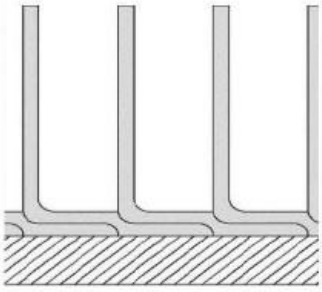
G- FIN



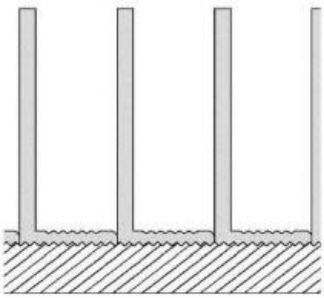
L-FIN



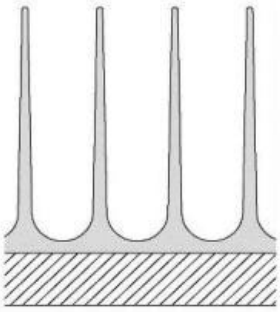
LL-FIN



KL- FIN



EXTRUDED-FIN



Extruded finned tubes are bimetallic tubes whose outer aluminium surface is finned by cold plastic deformation.

Fin Material – Extruded-fin Finned Tubes		
Fins	SB209 – B209 Aluminium Alloy 1050 or 1060	SB75 – B75 Cooper

Fin Material – G-fin; L-fin; LL-fin; KL-fin Finned Tubes

Fins	EN573 – 3 Aluminium Alloy 1050 or 1060	SB152 – B152 Coope

Technical Spesification-G-fin; L-fin; LL-fin; KL-fin; Extruded-fin Finned Tubes

Fin Type	Length		Tube OD		Thk		Fins Diameter		Fins Dencity	
	m	ft	mm	inch	mm	BWG	mm	Inch	Fins/m	Fins/inch
L-fin	0.3	1	15.88	5/8”	0.89	20	38.10	1-1/2	236	6
LL-fin										
KL-fin	18	59	50.8	2”	3.76	9	76.20	3”	472	12
G-fin										
Extruded										

Technical Spesification-G-fin; L-fin; LL-fin; KL-fin; Extruded-fin Finned Tubes

Fin Type	Working Temp	Resistance	
		Corrosion	Mechanical
L-fin	135 ~ 155 °C	↑	↓↓
LL-fin	155 ~ 165 °C	↑	↓
KL-fin	165 ~ 185 °C	↑	↑
G-fin	380 ~ 420 °C	↑	↑
Extruded	280 ~ 300 °C	↑↑	↑↑

Inspections and Test

G-fin; L-fin; LL-fin; KL-fin; Extruded-fin Finned Tubes

Chemical Composition
Mechanical Properties
Hydrostatic Test
Pneumatic Test
Boroscopic Inspection
Eddy Current Test
Tensile Test (Only for Bimetallic Tube)

Contact Information

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