

Concept Engineering International

# Fin Tube Division

Extensive Range of Heat Transfer Enhancement Solutions



[www.conceptengg.com](http://www.conceptengg.com)  
[www.allturbulators.com](http://www.allturbulators.com)  
[www.pinfin tube.com](http://www.pinfin tube.com)

# The Fin Tube Division

## Wire Wound or Pin Fin tubes



This is our star product and gives a very compact air cooled heat exchanger. Here the Fins consist of Wire loops that are both fastened and soldered to the tube. A specially flattened wire that runs through the base of the wire loop fins does this fastening.

This wire holds in place and the solder bonds the loops. This gives 100% fin efficiency and the airside turbulence created by the looped wire fins gives an airside heat transfer coefficient 2-3 times that of helical fin tubes.

It is possible to further increase efficiency on the tubeside by 3-10 times by fitting internally with a wire Turbulator.

### Advantages:

- 1.Compact design.
- 2.Lower overall airside pressure drop and hence power consumption.
- 3.Customizable fin density and height as per design requirements.

### Can be offered in:

**Tube material:** CS, SS 316, 304, copper, cupronickel, Aluminium brass.

**Fin material:** CS, Stainless Steel 304/316 or copper.

**Tube outer diameter:** 3/8", 1/2", 5/8", 3/4" & 1"

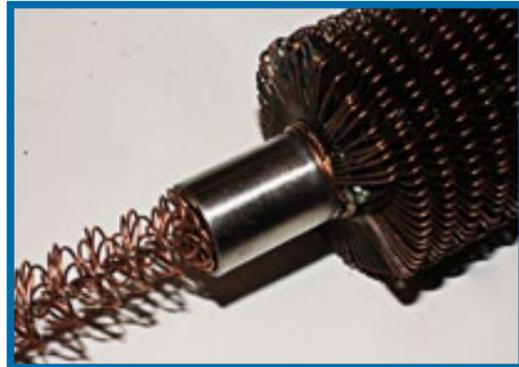
**Fin height:** Maximum 13 mm.

### Limitations:

Is designed for 180 degrees or 280 Centigrade Maximum temperature use, depending on type of solder used. As Aluminium does not solder well, the tube or fin cannot be aluminium.

### Design:

We can assist with designing using our wire wound fin tubes.



## Crimped Type Fin Tubes

### Material of Construction

**Tubes:** Carbon steel, Stainless steel 304/316, copper, cupro nickel, Aluminium brass.

**Fins:** Carbon steel, Stainless steel 304/316, Copper.

**Tube outer diameter:** 3/8", 1/2", 5/8", 3/4", 1"

**Fins per inch:** 8-12

**Turbulators:** Fin tubes can be offered with internally fitted turbulators of your choice.

### Low or Integral Fin tubes:

Our Integral fin tubes are rolled on a high quality machine. We are also able to offer internal grooving.

**Fins per inch:** 19 FPI & 26FPI

**Tube sizes:** 5/8" to 1" OD.

**Tube Material:** Copper, cupro nickel, carbon steel.

### Block Fins:

**Fins:** Copper or Aluminium

**Tubes:** Copper

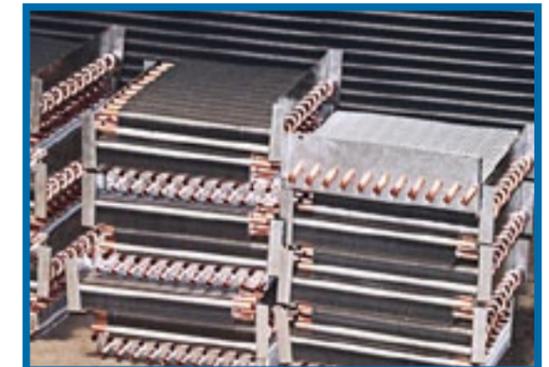
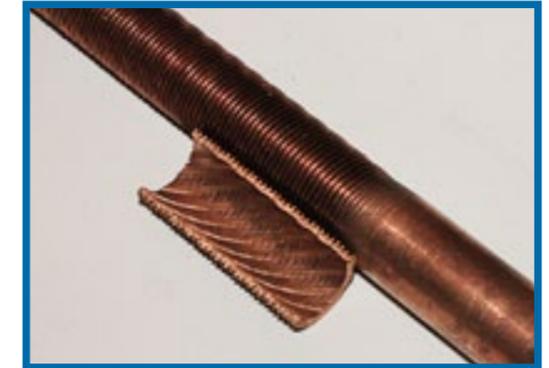
**Tube sizes:** 3/8", 1/2", 5/8".

**Tube thickness:** .4mm- .55 mm

**Fins per inch:** 8-10 for .18-.20 mm thick aluminium.

10-15 for .15-.16 mm thick aluminium.

Turbulators can be fitted inside the block fin tubes for tubeside heat transfer enhancement.





Concept Engineering International  
Fintube Division,  
2nd floor, KK Chambers, Sir P.T. Marg, Fort,  
Mumbai 400001.



Heat Transfer Specialists

Phone: +91-22-4353 3700-99  
Fax: +91-22-4353 3717  
E-mail: [mail@conceptengg.com](mailto:mail@conceptengg.com)  
[www.conceptengg.com](http://www.conceptengg.com)  
[www.allturbulators.com](http://www.allturbulators.com)