

## Oil Cooler

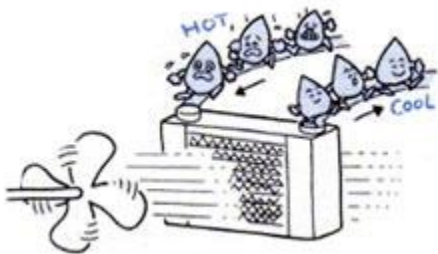
Oil Cooler for Road Making Machines, Transit Mixer, Hydraulic Sensor Paver, Tandem Vibratory Roller, TRACTOR LOADER, CONCRETE MIXER.

BORE WELL, AIR COMPRESSORS, DRILLING RIGS, Inter coolers for Air Compressors.

Also, Oil Cooler for Earth Moving Machines, Like JCB, L&T POCLAIN, TATA Hitachi, BEML Komatsu, Hyundai Robex, Samsung etc.

*AS AND WHEN YOU REQUIRE OIL COOLERS PLEASE SEND FOLLOWING DETAILS.*

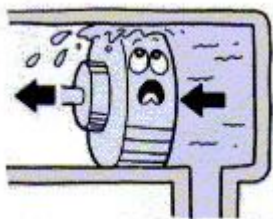
1. In which condition hydraulic system is working
  - a) On stationary on road equipment
  - b) In factory premises etc.
2. Surrounding temperature of air Of Hydraulic system
3. High temperature of oil during working and required temperature after connecting oil cooler
4. Available Space / Size of oil cooler
5. Oil circulation in Liter per Hour
6. Which Liquid will pass through cooler
7. Connection of Oil Cooler in size and place on cooler
8. Electric Load in HP connected to Hydraulic System or engine HP



If the temperature of the hydraulic oil becomes too hot, many different problems can arise. In order to prevent these problems, when the temperature exceeds a set point, the fluid is cooled by the oil cooler.

*EXAMPLES OF PROBLEMS CAUSED BY HIGH TEMPERATURE*

1. Internal leakage in hydraulic devices (especially pumps and motors) increases, and volume efficiency is diminished.
2. Sealing materials used in the packing and oil seals can change their properties.
3. The hydraulic oil will degenerate more quickly.



The precision of hydraulic operations is diminished due to oil leakage in the control valves and actuators.

In case of operation in a hot climate or continuous operation for a long time, the oil cooler prevents temperature increase and mitigating power loss. An air-cooled oil cooler is used in hydraulic system. Generally, the maximum permissible temperature for hydraulic oil is 80°C. When equipment is used in tropical areas, appropriate hydraulic oil must be chosen. If the temperature of the hydraulic oil gets too high, the packing can also be adversely affected.

All Thermal Hydraulic oil coolers are suitable for fitment of on the return line of a Hydraulic oil system. Hence the normal design pressure of these coolers is 10 kg./cm<sup>2</sup>G and is tested for a hydrostatic pressure of 15kg./cm<sup>2</sup>G. However on specific request these coolers can be designed for high pressure circuit as high as 50-75 kg./cm<sup>2</sup>G.

The hydraulic oil coolers designed by us have found extensive usage in power packs, Road Machineries, presses, dredgers, plastics injection equipment and a number of other hydraulic systems. Thermal is a leader in the design of these coolers and these are coolers being exported along with machine tools as O.E. attachment. All Thermal coolers are designed as per IS, DIN or TEMA Standards.

