# **IPAC**

### AIR-COOLED AFTERCOOLER

### INSTALLATION AND MAINTENANCE INSTRUCTION MANUAL

#### MOUNTING

The after-coolers can be installed with the legs provided for floor mounting. Each leg has predrilled mounting holes. They may also be wall mounted with brackets provided by customer

#### **CAUTION**

When unit is mounted make sure that support is provided for piping so that no additional stress is placed on the pipe manifolds.

#### **INDOOR INSTALLATION**

An air-cooled after-cooler is most effective when installed in the lowest ambient temperature location. If located in a confirmed area the cooler should be placed where an adequate surrounding air for cooling is available. The air is drawn from the fan side and blown through the tube core; the cooler should be operated using an outdoor air supply grille through an external wall during hot seasons. In the winter, heat recovery could be obtained simply by recirculating the in-room air. Suggested location is, therefore, to face the fan side of the cooler against a grilled window (to be closed during winter months) with a minimum clearance of 20 inches in order to permit the motor-fan extraction without moving the cooler.

#### **OUTDOOR INSTALLATION**

Any position is valid. It is necessary to provide a sunshade or screen if the cooler will receive direct rays of the sun. The Air circuitry is shaped to drive, by gravity, the condensate out of the tubes: If the outdoor winter temperatures can fluctuate below 32 degrees F (0 degrees C), it is suggested that a start-stop thermostatic motor-fan control be installed. The control should be set so that when the compressed air outlet temperature approaches 37 degrees F (3 degrees C), the after-cooler fan will shut down: fan should restart when outlet temperature reaches 43 degrees F (6 degrees C).

#### **INSTALLATION CHECK-LIST**

- 1. Inlet and outlet are connected correctly so that outlet air is directed towards separator. Check the labels on the after-cooler connections.
- 2. Sufficient supply of coolest possible surrounding air is available at all times.
- 3. Compressed air-flow does not exceed the rated capacity for desired approach temperature.
- 4. Inlet compressed air temperature at point of installation is same as specified when unit was engineered.
- 5. Flexible discharge hose while not required, it is suggested to connect compressor outlet to after-cooler inlet. Flexible discharge hose should be mounted perpendicular to the direction of the vibration to insure maximum flexibility.
- 6. Drain trap on separator is connected to drain line.
- 7. By-pass piping is installed if desired, or for freezing temperature applications: This permits continuous operation of the air system when the after-cooler must be isolated for maintenance or inspection. Since the by-pass will only be used on a temporary basis, one pipe size smaller than required for the after-cooler may be used.

#### **MAINTENANCE**

To Clean Fins: Inspect fins periodically because dust and dirt accumulations may restrict airflow through the unit. When cleaning is necessary, use compressed air to blow off dust. Never use a brush as this may damage fins. If heavy accumulations are present, exterior of finned tube section may be steam cleaned.

To Clean Tube Interiors: If a compressor has been pumping excessive amounts of oil into the copper tubes and a build-up occurs within the tubes, they can be rod through or cleaned chemically.

On site Cleaning Procedure: Disconnect inlet and outlet from the inline piping. Use a centrifugal pump to force a chlorinated solvent through the air passage, allowing the solution to circulate through the tubes until the oil and carbon are removed.

### **WARNING**

Do not use solvents with a strong acid or alkaline base.

## MOTOR LUBRICATION

Motor contains pre-sealed lubricant: no further maintenance is required.