



Compressed Air System Products

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**Installation and Maintenance Operating Instructions
Air-Cooled Aftercoolers Models ATS-20 thru ATS-100**

GENERAL INFORMATION

1. Air Cooled Aftercoolers are built for operation with maximum air pressure of 250 psi and temperatures of 400° F.
2. The motors furnished are built for fan duty. Consideration should be given to the installation location so motors are not subjected to extreme conditions.
3. Air cooled aftercoolers are generally installed at floor level. If the unit is to be used to reclaim this waste heat for space heating, it is recommended that the unit be mounted 7 to 14 feet above the floor, depending on the structure, for proper heat distribution.

INSTALLATION

1. Air cooled aftercoolers are designed for mounting either by mounting legs, or by suspension from brackets attached to the cabinet. (Hanger rod not included).
2. Aftercoolers should not be located in corrosive atmospheres as rapid deterioration of casing, cooling coil, fan and motor may take place resulting in reduced life.
3. Piping should be sized based on air flow and pressure drop requirements and not on the aftercooler's supply and return connection sizes. The piping must also be properly supported to prevent manifold stress.
4. A strainer located ahead of the aftercooler should be installed to trap scale, dirt or sludge that may be present in piping and equipment, or that may accumulate with use.
5. A separator/trap/drain should be installed in the outlet piping of the aftercooler to remove condensate.
6. Flexible connectors should be installed to prevent the stressing of manifolds. (Must be properly installed to validate warranty).
7. Arrange the outlet pipe so that the moisture that will condense within the aftercooler can drain freely by gravity.
8. For proper air flow, a minimum of 12" clearance should be allowed between the aftercooler fan and any walls or obstructions.

ELECTRICAL

1. CAUTION: To prevent possible electrical shock, it is important to properly ground this unit using grounding screw provided. Be sure not to disconnect the motor grounding wire when making this connection.
2. Connect motor only to a power supply of the same characteristics as shown on the motor nameplate. Be sure to provide proper fusing to prevent motor burnout. Before starting motor, follow manufacturers recommendations.
Turn fan by hand to eliminate possible motor burnout in the event the fan has been damaged in shipment. Observe operation after motor is started for the first time.
3. In a typical compressor aftercooler installation, the aftercooler is interlocked to the compressor so it runs whenever the compressor is turned on.

MAINTENANCE

1. Inspect the unit regularly for loose bolts and connections, rust, and corrosion and dirty or clogged heat transfer surface (cooling coil).
2. Heat Transfer Surface: Dirt and dust should be removed by brushing the fins and tubes and blowing loose dirt off with an air hose. Should the surface be greasy, the motor should be removed and the fins and tubes brushed or sprayed with a non-flammable degreasing fluid. Follow with a hot water rinse and dry thoroughly. A steam hose may also be used effectively.
3. Casing, Fan and Motor: Dirt and grease should be removed from these parts. Rusty or corroded surfaces should be sanded clean and repainted.
4. Internal Cleaning: Once a year piping should be disconnected and a degreasing agent circulated through the unit to remove sludge from internal tube surfaces to return the unit to full capacity. A thorough cleaning of the entire system in the same manner is desirable to avoid carry-over from uncleaned piping. The strainer or any filtering devices should be removed and serviced following this cleaning operation.
5. Motor: Keep outside surface free of dirt and grease so motor will cool properly. Make sure cooling air over motor is not obstructed. Sleeve bearing motors are normally furnished and require lubrication every six months.
Add a few drops of S.A.E. 20 oil to each bearing. When TEFC Motors are furnished, they are normally prelubricated ball bearing motors and require no grease for about five to ten years.
6. Repairs or Replacement of Parts: When ordering replacement parts or making an inquiry regarding service, mention model number, serial number and the original purchase order number. Any reference to the motor must carry full nameplate data.
7. Caustic cleaners should not be used to clean these heat exchangers.

AIR/TAK WARRANTY POLICY

Air/Tak products will be warranted to be free from defects in materials and workmanship for a period of one year from date of shipment or up to one year from the verified date of installation not to exceed 15 months. Date of installation will be verified upon receipt of the completed Warranty Registration Card. All Air/Tak refrigerated dryers will additionally be warranted on parts only (excluding fan motors and drain valves) for a period of two years from the date of shipment. Also, deliquescent and regenerative air dryer pressure vessels and refrigerated air dryer heat exchangers have a 5-year prorated warranty.

All damaged pressure vessels and heat exchangers returned to AIR/TAK for warranty consideration must be returned freight prepaid. Warranty will be determined after factory inspection. Failure to return a damaged heat exchanger or pressure vessel will result in warranty denial.

Repairs, adjustments, parts, etc. are limited to actual labor cost provided that such defects are promptly reported and approved following AIR/TAK's warranty procedures. In no event shall the cost of repairs exceed the actual cost of materials and labor.

AIR/TAK or its representatives reserve the right to decide which warranty items are authorized. AIR/TAK shall not be liable for incidental or consequential damages which may result from a breach of the warranty described above.

For more information on warranty policies and procedures, contact your authorized AIR/TAK Distributor.

AIR/TAK's line of quality compressed air system products includes:

**COMPRESSED AIR SYSTEM FILTERS * AIR-COOLED AFTERCOOLERS
REFRIGERATED AIR DRYERS * CAD COMBINATION AFTERCOOLER DRYER SYSTEMS
RAD-PAK REFRIGERATED AIR DRYER/FILTER PACKAGES * HEATLESS REGENERATIVE AIR DRYERS
HLD-PAK HEATLESS REGENERATIVE AIR DRYER/FILTER PACKAGES
BLOWER PURGE REGENERATIVE AIR DRYERS * EXTERNALLY HEATED REGENERATIVE AIR DRYERS
AIR CHILLERS * FLUID CHILLERS**

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