MULTIBLAST
PERFORMANCE BLASTING

Table of Contents

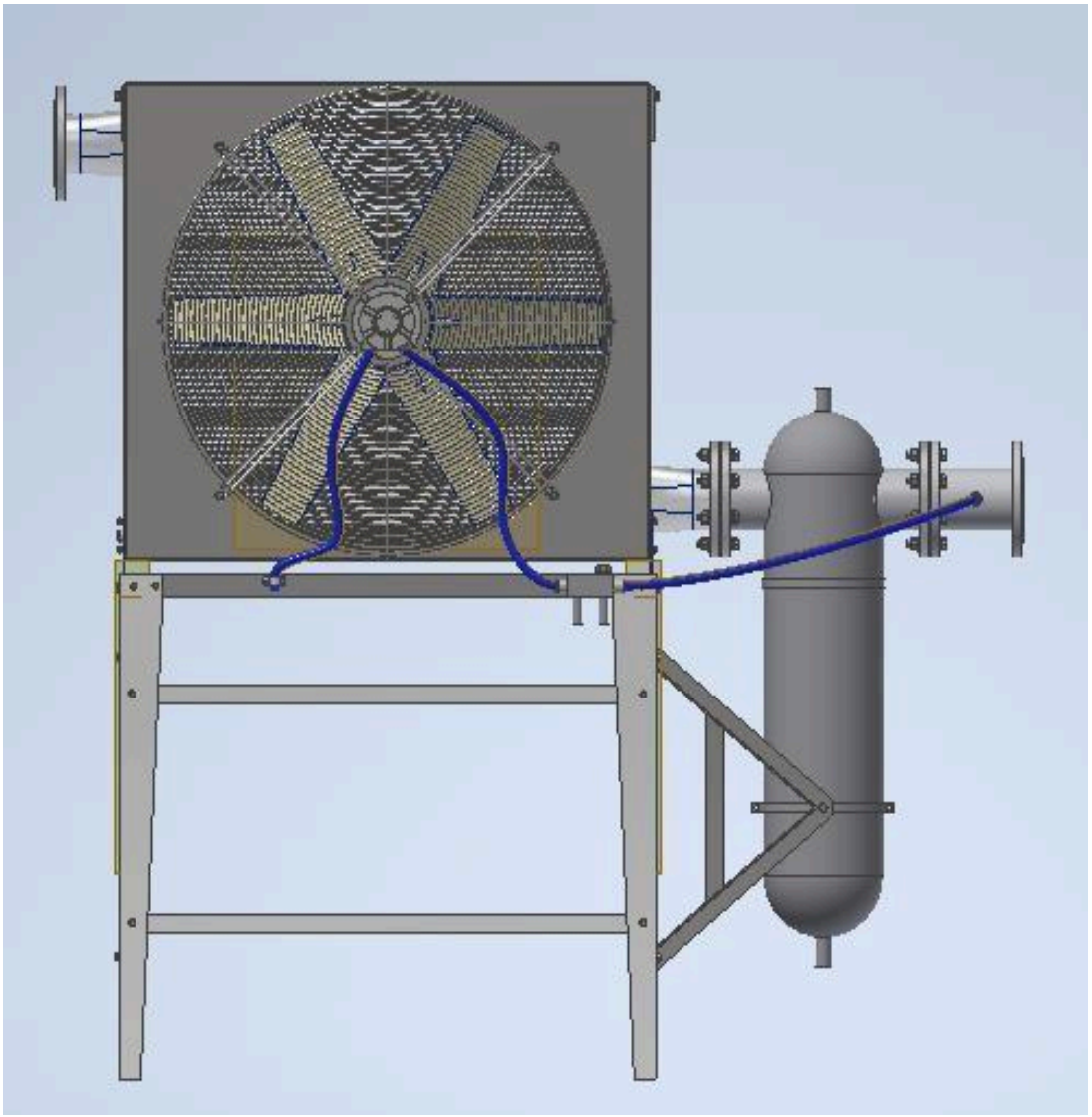
Introduction

This manual outlines standard procedures for the proper installation, operation, and maintenance of aftercoolers and their associated components. Please note that specific details may vary between models. Only qualified personnel should perform operation and servicing of this equipment.

Inspection Upon Delivery

Upon delivery, do not immediately unload the equipment from the transport vehicle. First, inspect the shipment carefully to ensure all components are present and free from damage. Goods should only be accepted once the inspection is complete.
If any damage is identified during transit, report it straight away and lodge a claim with the freight carrier.

Installation



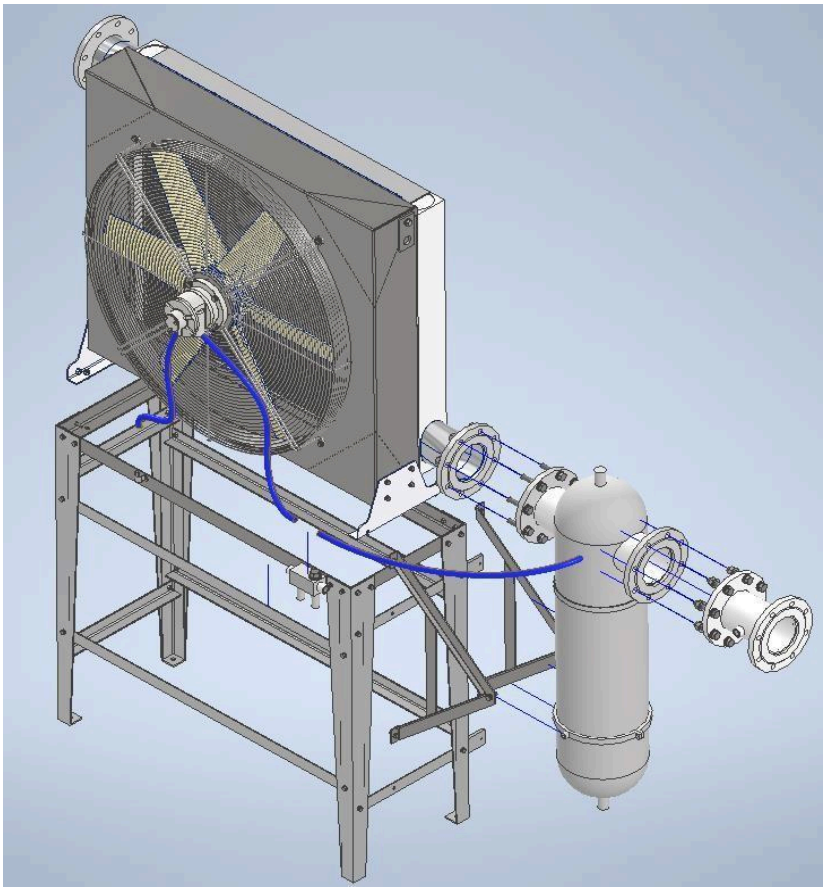
1. Carefully unload the cooler from the truck using the designated lifting ring or a forklift. For smaller coolers that do not feature lifting points, use a woven fabric sling to avoid damaging the unit. Do not lift or move the cooler by its pipe connections, motor, or any other component not designed for lifting, as this may cause serious damage.

2. Some smaller units may require on-site assembly of various parts. These should be assembled using the fasteners and lock washers (supplied by the user). Ensure all fixings are tight enough to withstand normal operating vibration.

3. Position the cooler in an area with unrestricted airflow. Ensure the exhaust of hot air is unobstructed so it cannot recirculate back into the cooler's air intake.

4. The cooler must be installed in a vertical position. Its support frame should be securely anchored either to a concrete foundation or to a structural element of the building. Units installed on rooftops must be firmly fixed to the building's structural steel to minimise vibration. Care must be taken to prevent vibration from nearby machinery from transferring to the cooler's support structure.
   Allow adequate clearance around the cooler, fan, and motor to enable routine maintenance and servicing.

Pipe Connection



1. All relevant local regulations and standards must be strictly followed.

2. When connecting pipework to the cooler, always use a pipe wrench to ensure a secure and leak-free fit. For all threaded steel and aluminium connections, apply a suitable silicone sealant.

3. Ensure all pipework is properly supported to prevent undue stress on the cooler or its fittings, which could lead to deformation or failure. Position all connections and flanges to allow easy access for installation and ongoing maintenance.

4. Pipe installation must be carried out by qualified technicians in accordance with current plumbing standards and specifications.

5. Before beginning installation, inspect all pipe ends and cooler inlets to ensure they are free of debris, such as plastic cap fragments or foreign matter, which could cause blockages or operational issues.

Electrical Installation

1. All electrical connections to the fan motor must comply with applicable local and national regulations, standards, and safety codes. For outdoor installations, appropriate weatherproofing must be implemented to protect electrical components.

2. All electrical work must be carried out by qualified and licensed technicians familiar with relevant standards and best practices.

3. A fuse or circuit protection device (to be supplied by others) must be included in the installation to ensure the system can be safely shut down if necessary.

4. Correct fan rotation is critical. Always refer to the “Fan Speed Label” on either the motor or fan housing to verify the direction of rotation before operation.

Start-Up and Operation

Before starting the system, thoroughly inspect all pipework for leaks. Compressed air may be used to carry out this check.

Aftercooler

- Release any residual air from the aftercooler system before operation.
- The cooler’s inlet and outlet valves should only be opened *after* the exhaust valve has been fully closed.
- If a circuit breaker is fitted, ensure the fan power supply is switched on.

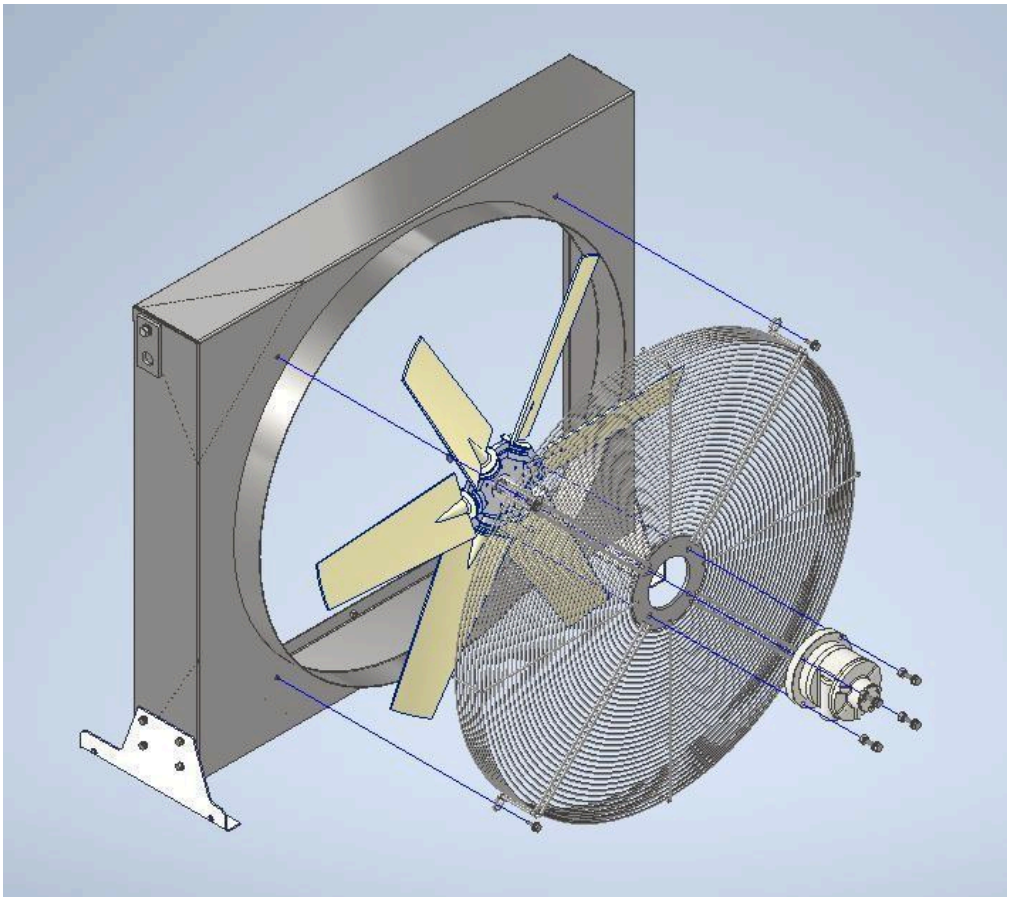
Warning

- The fan deflector must be properly installed and in place whenever the fan is running.
- Do not exceed the maximum working pressure stated on the heat exchanger's nameplate under any circumstances.

Maintenance

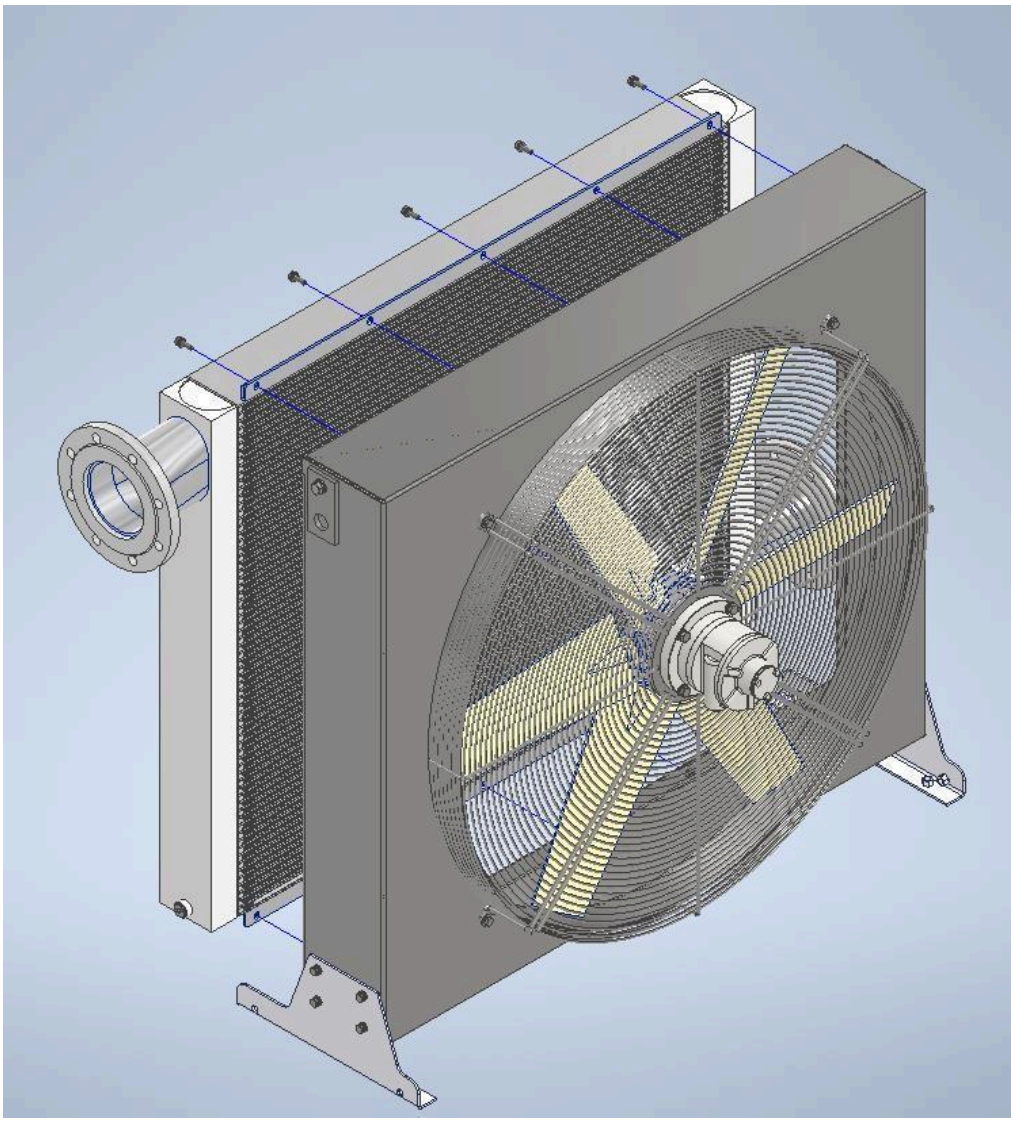
Note: Before carrying out any repairs or adjustments to the cooler, ensure the gas supply is fully shut off and all system pressure is safely released.

When servicing the fan, both the fan blades and motor should be removed as a complete assembly to ensure safe handling and prevent damage.



1. When the medium temperature inside the channel exceeds the design temperature, it may be necessary to clean the external fins. Before cleaning, the cooler should be disassembled. Cleaning can be done with a low-pressure steam gun (add a detergent if necessary).

Note: do not use alkaline chemicals. Check the supplier's cleaning plan to ensure compatibility with aluminum.



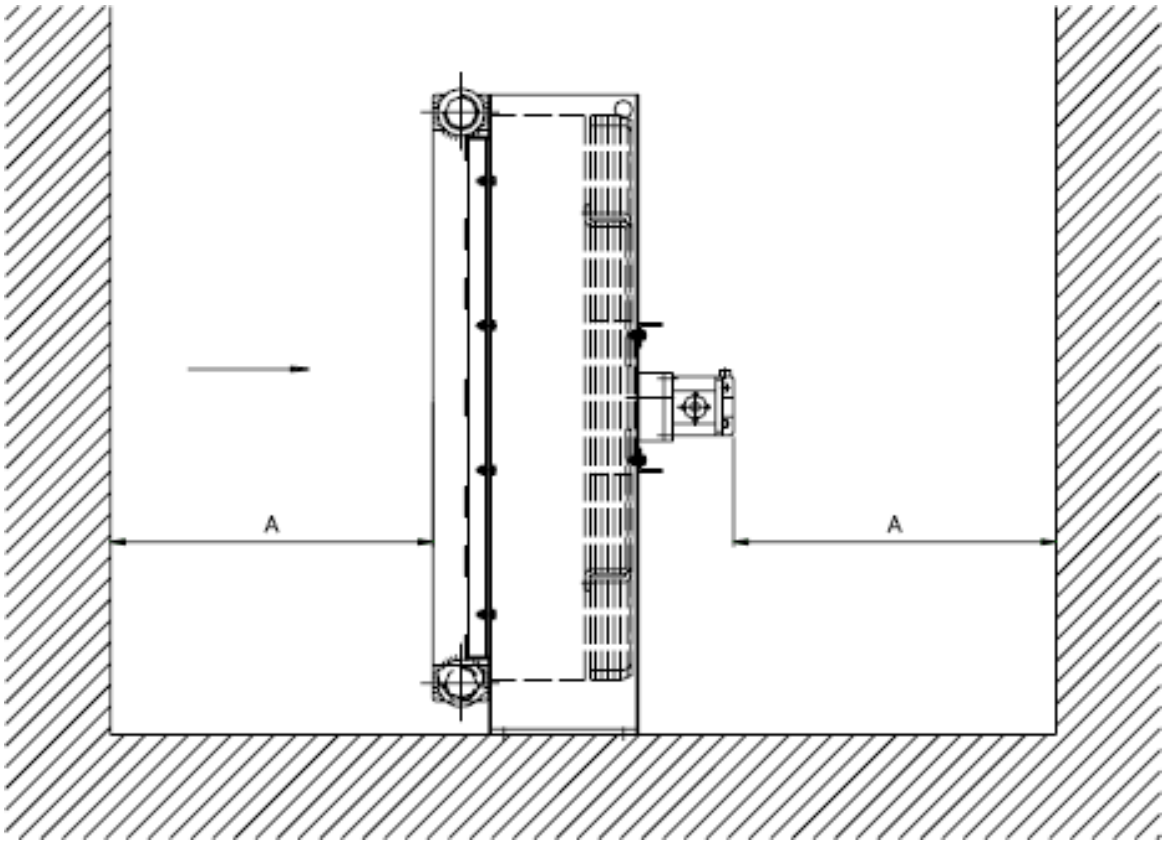
Internal Cleaning

The internal fin surfaces can be cleaned by circulating degreasing agents or approved cleaning solutions through the cooler's internal channels.

Note: The cleaning method must be suitable for use with aluminium components. Alkaline substances must not be used under any circumstances, as they may cause damage.

Cooler Rack Placement

1. The cooler must be installed in a way that prevents recirculation of heated air. Choose a location that allows proper air circulation away from heat sources.
2. The cooler should be positioned in an area with free-flowing air. A minimum clearance equal to half the cooler's height must be maintained between the unit and any wall or obstruction.



3. If the cooler is installed in an enclosed space, adequate ventilation must be provided to prevent the discharged hot air from raising the room temperature.
4. For outdoor installations, be aware that low ambient temperatures can affect the internal medium temperature, reducing the cooler's heat exchange efficiency. If the system operating pressure exceeds the pressure rating of the filter, a pressure-reducing valve must be installed at the cooler outlet to protect the filter and system components.