

Technical Data Sheet

Air Cooled Aftercooler



Note: Read and follow the Blastline Air Cooled Aftercooler Operations Manual and provide proper training for all users of the machine and related accessories in order to achieve a safe and effective cooling operation



Description

Air-cooled air aftercoolers cool the compressed air with atmospheric air. A standard screw air compressor will increase compressed air temperature by 100°C over the ambient temperature. This hot, laden air is then directed into the pneumatically driven fan-cooled aluminum radiator, where it is cooled, and water vapor begins to coagulate into large droplets. The cooled air is then directed through a coalescent filter to remove the moisture. There are four different models available for Blastline Aftercoolers, namely BL-450, BL-600, BL-800, and BL-1000. The compressed air is cooled to approximately 9°C above ambient temperature. A sufficient capacity aftercooler can take up to 80% of the moisture present in the compressed air. The BL Series is a complete aftercooler package designed to work on most models of rotary air compressors. To select the appropriate model, simply determine compressor horsepower and select the model from the chart.

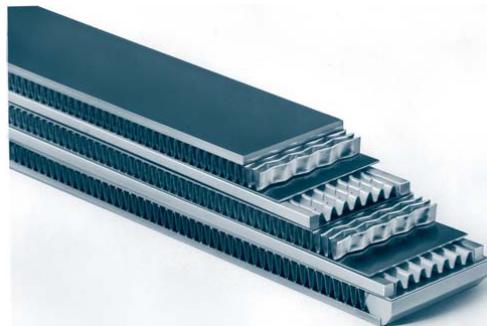
Features and Benefits

- Advanced technology design provides compact cooling with a High-efficiency cooling system - 100% Aluminium-made.
- Rugged, high-performance Bar & Plate technology.
- Designed for maximum heat transfer with minimum compressed air pressure loss.
- High performance & working pressure - Heavy duty.
- Heat transfer is maximized by heavy-gauge brazed aluminum fins that increase cooling air turbulence.
- Maintenance-free product.
- Low noise levels.
- Cost-effective compared with Cu-Br cooler.
- Electric/pneumatic pusher fans options are available.
- All models feature sturdy, corrosion-resistant housing with strong steel brackets for floor mounting.
- Fan blades are made of Polypropylene and feature an aluminum hub, ensuring balanced vibration-free operation.
- Fan motors are chosen for extended service life and low maintenance requirements.

Common Applications

- Aftercoolers are a crucial component in any system that utilizes compressed air.
- Used in conjunction with desiccant or deliquescent dryers for the removal of up to 90% moisture.
- In high-humidity environments, for maximum blasting productivity and reduced abrasive wastage.

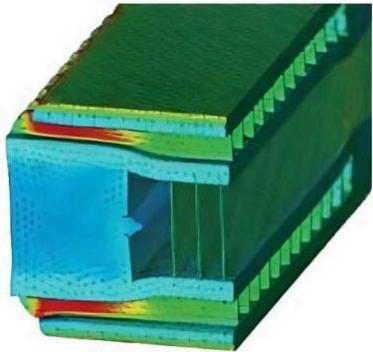
Technological Advantages



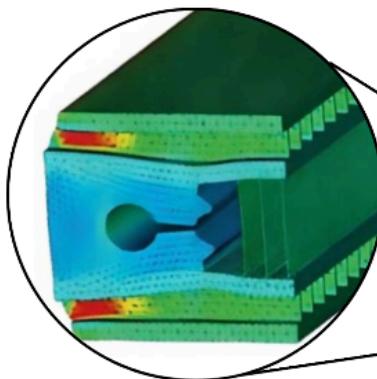
- High-performance bar & plate technology.
- Up to 60% smaller than conventional fin and tube designs.
- Fin spacing allows uniform air distribution while resisting choking of dust/dirt.
- Reduced Air side fouling.
- 99% efficient moisture separator.
- Well-suited for harsh environments. The fin system prevents clogging and is easy to clean.
- Compact and robust design, field-tested during many years of use in rugged, real-life conditions.

Hollow Profile Advantages

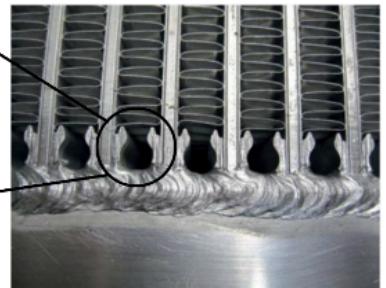
- Reduced Strain: According to strength calculations, the maximum strain is reduced to 2.
- Prolonged Service lifetime: Service life time increases by a factor ranging from 3 to 5.



With Standard Profile
(for normal Aftercoolers)



With Hollow Profile
(for Blastline Aftercoolers)



Technical Data

Model	Internal Max Air flow (CFM)	Compressor Horsepower used
BL AC 54	539	50-75 HP
BL AC 80	785	100-125 HP
BL AC 120	1200	125-160 HP
BL AC 160	1569	150-200 HP
Common Specifications		
Ambient Temperature	-15°C ~ +55°C	
Max. Inlet Temperature	125°C	
Altitude	~ 1000m ASL	
Delta T (Above Ambient)	~ 9°C	
Max. Operating Pressure	250 Psi	