Leading Technology Into The Future

NEX FLOW™

AIR BLADE™ IONIZER INSTALLATION & MAINTENANCE

INSTALLATION AND SIZE OF COMPRESSED AIR LINES

It is important to minimize the pressure loss to an Air Blade™ Ionizer or series of Air Blade™ Ionizers connected together to produce a longer length of airflow. Keep airline sizes adequately large. The system consists of a Air Blade™ and a HAUG static bar.

Long lengths of Air Blades Ionizers may be created by connecting two or more Air Blades end to end by using the rear entry ports instead of the end ports so the Air Blades may “butt” together for near continuous flow at longer lengths. Then a longer length Ionizing Bar can be connected to the In this situation, a “manifold” can then feed each of the Air Blades via the rear ports. One single static bar is less costly than several individual units. Contact the factory for pricing.

The following table indicates the recommended pipe sizes for various “total” lengths of Air Blade™ Ionizers. In the case of a manifold system, it also shows the minimum size of the manifold. For hoses, increase the recommend size by one size larger than what is shown.

TOTAL AIR BLADE™ IONIZER LENGTH	**MANIFOLD SIZE**	**SIZE OF INFEED PIPE AND LENGTH OF RUN**		
		10’	**50’**	**100’**
Up to 6"	Not Applic.	¼”	3/8"	½”
Over 6" to 12"	Not Applic.	3/8"	½”	¾”
Over 12" to 24"	Not Applic.	½”	¾”	1"
Over 24" to 36"	Not Applic.	¾”	1"	1-14"
Over 36" to 60"	1"	1"	1-14"	1-1/4"
Over 60" to 84"	1"	1"	1-14"	1-12"
Over 84" to 102"	1-14"	1-14"	1-14"	1-1/2"
Over 102" to 120"	1-14"	1-14"	1-1/2"	2"

When possible, it is best to supply the air into the Air Blade™ Ionizers at the ends. For longer lengths of 24" and longer, it is best to feed both ends. When using rear ports, always feed into each port if there is more than one. There are mounting holes at the rear to assist in mounting if pipe cannot be used. Similarly, when using a Shim” to increase the gap size, always feed at both ends when end feeding.

CARE OF THE COMPRESSED AIR SUPPLY

Because Air Blade™ Ionizers utilize a small “gap” for the air outlet, it is important to keep the air lines free of moisture, oil and dirt which may clog the unit. By using proper filtration the Air Blade™ Ionizers can run maintenance free for many years.

For water removal, a minimum 10 micron filter complete with an automatic (float type) drain is recommended. It should be sized to handle the total air flow of the Air Blade™ Ionizers at the pressure they will be used. If oil could be a concern, an oil removal filter should be added downstream from the water removal filter and should also have an automatic (float type) drain. Again, they should be sized to handle the total flow of the Air Blade™ Ionizers.

Filters should be mounted near any Air Blade™ Ionizer system, typically within 10 to 15 feet.

USING THE AIR BLADE™ IONIZER , INCREASING & REDUCING FORCE, AND THE CONSERVATION OF AIR

The HAUG ionizing bar and power supplies utilize a patented connection system and fully shielded cable. No separate grounding lug is required which makes for a more safe, secure system. The connector is designed so that, if the power supply is accidentally left on when the cable is removed, or connected, there is no danger of a shock.

The Air Blade™ Ionizer should be located after the point where static charge has been created. It should be placed so that the curtain of air flows across the material with the charge. The ionized air from the system will eliminate the static charge from the surface it reaches. When the static charge is extremely high, or the product is moving at high speeds, a more powerful static bar can be provided to address these situations. All HAUG static bars are shockless and may be touched without injury.

Typically very little pressure is required to operate an Air Blade™ Ionizer. Often pressure used is around 30 to 40 PSIG which is controlled utilizing a regulator. The pressure is increased if distance from the Air Blade™ Ionizer is great or, if “dirt” to be blown off is “sticky” and needs extra force to loosen from the material even after neutralization.

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To conserve compressed air, it is best to use a regulator to reduce the pressure to the point where the Air Blade™ Ionizer still performs as it must, but by minimizing compressed air use by utilizing the air at a lower pressure. The Air Blades Ionizers are especially ideal for applications where intermittent blow off is required. A sensor or timer can have the compressed go on and off to the Air Blade™ Ionizer as required utilizing a solenoid valve. Energy is only consumed when the unit is operating.

CLEANING

If the Air Blade™ Ionizer does get clogged from contamination, simply dismantle the unit, clean, and reassemble. Care should be taken to reinstall the wire o-ring prior to putting the two pieces (body and cap) and possibly an added shim, back together.

The static bar itself should be cleaned periodically as dirt build up can reduce the effectiveness of the static bar. Serious dirt buildup may short the static bar which must then be replaced. A HAUG Multicheck is a low-cost device which will indicate if the static bar is working effectively. Contact the factory for details. A HAUG static meter can also be used to check the surfaces to be neutralized and hence the effectiveness of the system. For cleaning the static bar a soft bristle brush, even a toothbrush

works well. Simply clean the emitter points and channel to remove any dirt buildup. Do not use any soaps or cleaners that may leave a residue which is conductive as it can destroy the static bar.

Sometimes a build up of a dirty film can occur on the outside face of the Air Blade™ Ionizer due to vapour in the surrounding atmosphere. Clean this surface using a mild solvent and clean rag. To prevent contaminants from getting pushed back into the Air Blade™ gap, do the cleaning with a small amount of compressed air passing through the Air Blade™.

TROUBLESHOOTING

With zero moving parts, there is little that can go with an Air Blade™ Ionizer. However, certain factors can cause a reduction in flow or force and thereby reducing the performance of an Air Blade™ Ionizing system.

If the force or flow seems to be below normal, install a pressure gage near the inlet of the Air Blade™ Ionizer. If the pressure is low, it may be due to undersized airlines, perhaps restrictive fittings, or from clogged filter elements. These things should be checked, in particular the fittings used and the filter elements.

If the static bar or power supply do not seem to be working, the Multicheck device can be used to check both the static bar and power supply.

If you have any questions or problems, please contact:

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