

The Cool Quarterly

In case you missed it...last month's Cool Quarterly discussed the ever increasing debate on Gas versus Electric Machines. To summarize, we recommend Electric over Gas Machines due to the lower cost of maintenance and operation, price point with generator for portability is roughly the same, and operator safety being increased due to the lack of exposure to combustibles and exhaust fumes.

Something to look forward to...

November 4th we will be hosting another Wall Spray Seminar here at Cool Machines. Whether you are new to the Wall Spray game or you just want to brush up on your skills and enhance your techniques...our Wall Spray seminar will help you out! If you're interested and want more information, contact us at 419-232-4871.

But hurry...it's only a few weeks away!



Meet the Editorial Staff:



Dave Krendl:
"Cool" President, (over 40 years in this business), *Seen and heard it all...*but still willing to learn more.



Andy Schulte:
Operations Manager & Electrical 'Guru', 25 years of design in the insulation industry.



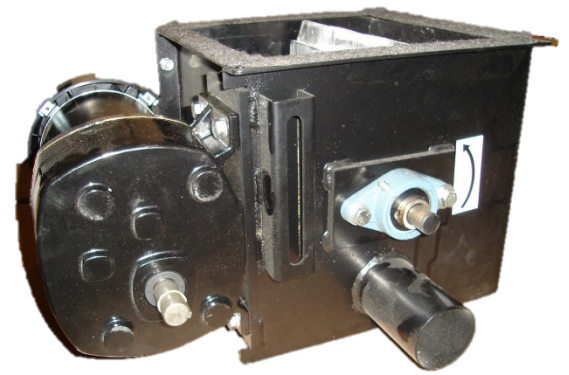
Adam Warren:
CAD Design, Facebook creator/moderator, and purveyor of all things "Cool" to you.

Want more?

We have a very active Facebook page that you will find both informative and entertaining. So please "like" and follow us on Facebook.



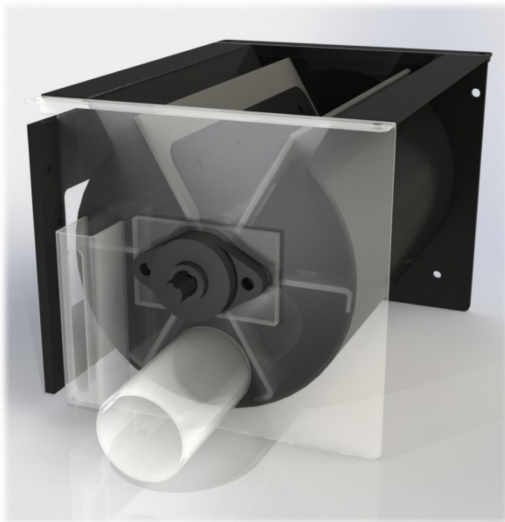
Airlock Seals: The “Heart & Soul” of your machine



How does an airlock work?

The airlock system consists of a precision cylindrical chamber and a multiple blade (vane) rotor rotating inside this chamber.

When the fiber enters the top of chamber (12:00 o'clock position), it is trapped by the tight fitting rubber seals and rotated 180 degrees into the pressurized airstream at the bottom (6:00 o'clock position).



Why are “Cool Airlocks” the best?

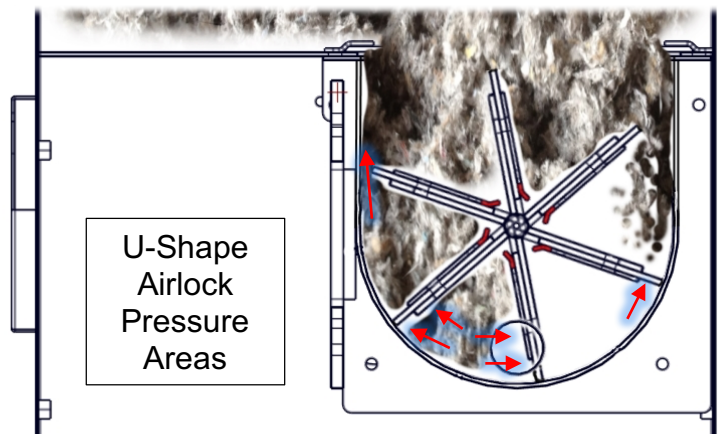
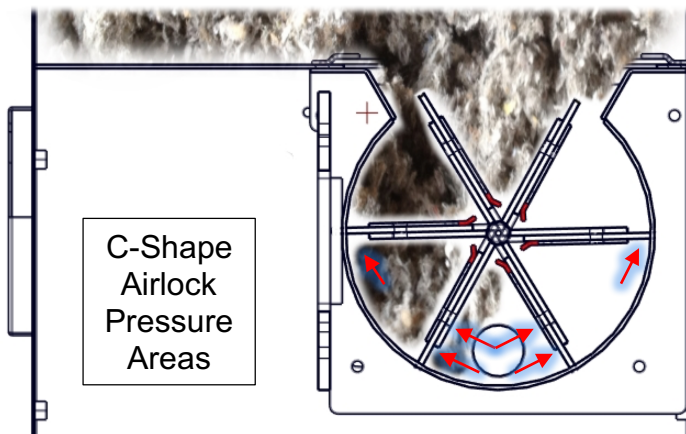
We fabricate our chambers from precision extruded tubing and laser cut it to exact dimensions. Many machine suppliers in the industry use a roll forming process to save costs, and results in a non-concentric cylinder that fails to achieve the pressure and long wear characteristics the customer expects.

“C” shape vs. “U” shape chambers

To achieve the best of wear and pressure retention in the airlock we use a “C” shape cylinder. The “C” cylinder allows four (4) rubber seals to be in contact with cylinder at all times while the “U” shape cylinder only allows for three (3) rubber seals to be in contact which only allows one (1) seal holding the pressure from the blower. This double seal effect on the “C” cylinder provides high airlock pressures while providing a back-up (two seals on each side of pressurized output tube) if a seal gets damaged from a foreign object.

As the rubber seals wear, or if they become damaged, the air pressure pushes the fiber upward into hopper of machine and many problems result. Such as:

- Loss of production
- Loss of coverage
- Fiber bridging in hopper
- Hose clogging (especially IWS systems)
- Inadequate dense packing pressure.



How do you know when rubber seals need replaced?

Including the problems **listed above**, other ways to diagnose bad rubber airlock seals are:

- If fiber or air is blowing back into the hopper from the airlock area. (more noticeable when fiber level is low in machine before reloading)
- Use pressure gauge and check the 'back-pressure' level from the airlock output tube. The pressure gauge should read above 3.5 p.s.i. when blowers on 'high'.
- If wall spraying, you'll see a lack of smooth delivery whereas the fiber stream is pulsating and fluctuating.



The normal life expectancy of airlock seals under normal use is approximately one (1) year. However, there are some factors that can reduce this wearing life including:

- Foreign objects passing through the machine/airlock.
- Abrasive fibers (i.e. Rockwool, fiberglass)
- Faster airlock r.p.m. resulting in increased wear (i.e. commercial spray)
- Corrosion of the chamber caused by leaving damp or moisture laden fiber in airlock.

Updated/New Products



Milwaukee Cordless Wall Scrubber - Update -

We are happy to announce that our Cordless Wall Scrubbers with Milwaukee batteries will now be utilizing a Milwaukee factory approved battery connector. This new battery connector helps to protect those expensive batteries from damage due excess heat and power drainage. For those customers with older Milwaukee Cordless Wall Scrubbers, you can contact us at 419-232-4871 to learn how to get yours upgraded!