

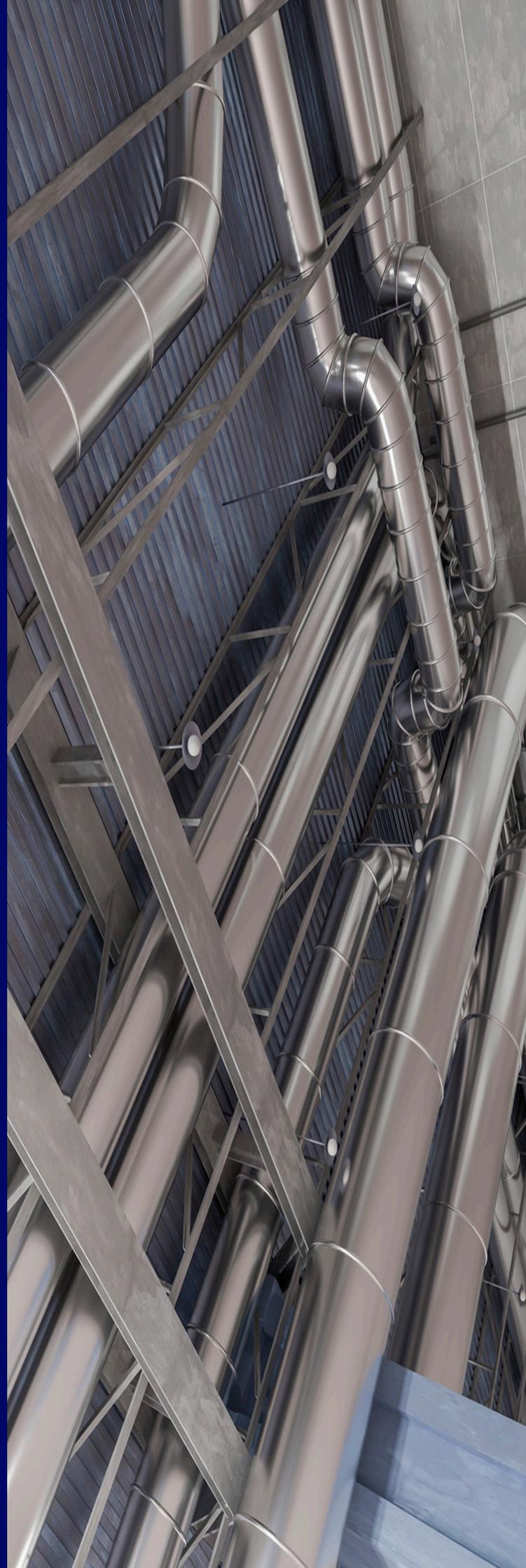


**CASE STUDY**

# **POSITIVE PRESSURE**

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# POSITIVE PRESSURE

## ➔ What is Positive Pressure?

Positive pressure is defined as pressure within a system that is greater than the environment that surrounds it. This pressure is created by forcing air into a contained space, usually with a fan. Air is pushed through a controlled area or pipe. Conversely, in an adverse pressure scenario, the air is sucked. If there are any leaks in a positive-pressure system, the pressure is weakened, and air in the system will bleed into the surrounding environment. Thus, the vessel used to harness and direct the pressure must be completely airtight. We can use this system to filter contaminants out of an environment, such as a clean room, where air is forced into the room and filtered through the return.

## ➔ Why US Tubing?

If it is correctly used, US Tubing is the perfect solution for a positive pressure situation.

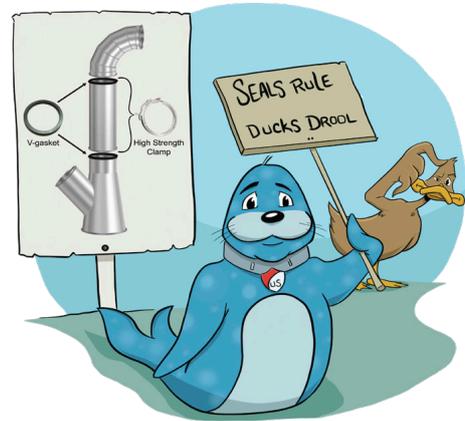
The max positive pressure for light gauge tubing is 80"WC, and for heavy gauge, it is 120"WC. Calculations must be made based on your machine and the pressure needed to maintain proper flow in the system. Then, select your tubing. US Tubing's pipe and fittings are completely air and water-tight. With EPDM gaskets and a clamp-together system that is as strong as any flanged system, this is perfect for positively pressurized applications.



# POSITIVE PRESSURE

## APPLICATION IN USE!

There is a demand for ductwork as it applies to positive pressure applications. One of our big dealers here at US Duct, Larry Clark of Clark Air, has talked about one in particular. Feldmeier Inc. of Syracuse, NY, is a big warehouse with a small room for welding. They needed the room's air filtered and circulated to eliminate contaminants. Larry and the boys at Clark could utilize US Tubing to feed the pressurized air into the room and then return the air into the system through carbon filters. The air is now 95% contaminant-free. This setup made the welding room safe as the air was continuously circulated and filtered.



## HOW TO THINK ABOUT IT?

Positive pressure systems can be thought of like a bounce house at a kid's birthday party. The mattress the kids bounce on is a positively pressurized space within the surrounding environment—in this case, the air outside. The fan continuously blows air into the mattress, keeping it inflated. If there is a leak in the mattress, the pressure is reduced, thus letting the bounce house deflate and the blown air escape into the surrounding environment.

**"THEY NEEDED A 'CLEAN SPACE TO DO ORBITAL WELDING. WE FED A SMALL ROOM WITH AIR WHICH WAS CARBON FILTERED THROUGH THE RETURN."  
-LARRY CLARK.**