



NONWOVEN TERMS

For the informed employee

Magnehelic, Photohelic

In a nonwovens plant, staple fiber such as rayon, polyester, polypropylene and natural fiber such as cotton is often either blown or sucked through ductwork. The pressure or vacuum in the ductwork must be maintained at a certain value for the system to operate properly. Two very common devices for measuring and maintaining pressure and vacuum are the magnehelic and photohelic. These devices come with two ports to connect them to ductwork using a piece of plastic tubing. One port measures vacuum and the other pressure. They can be obtained in a wide variety of pressure/vacuum ranges and with various units of measure such as inches of water, Pascals, pounds per square inch, and inches of mercury.

The magnehelic is simply an indicator of pressure or vacuum. It is useful for monitoring what is happening in the fiber system.

The photohelic is not only an indicator but is also a switch with adjustable high and low limits. The red hands on the photohelic are adjustable and can be set anywhere on the dial. When the black indicator hand is between the two red hands, nothing happens. When it falls below the left red hand a switch closes. When it goes above the right red hand a different switch closes. A typical use for the photohelic is to sense the fiber level in a fiber reserve. When the fiber level is low, air will escape from the reserve and the black hand of the photohelic will drop below the left red hand. This will signal the system to feed more fiber. As the reserve fills, the backpressure will build and the black hand will go above the right red hand. This will stop the flow of fiber.



“Determine the thing that can and shall be done, and then we shall find the way..”

Abraham Lincoln

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