



## NONWOVEN TERMS

For the informed employee

### Fiber Blend

To achieve the desired characteristics such as softness, strength, thickness, color, etc. in a non-woven fabric made with staple fibers, it is quite often necessary to blend several types of fibers. For example, it may require that rayon be blended with polyester, or two or three different colors of polypropylene be blended together. The result of combining these fibers together, whatever they may be, is called a fiber blend.

To achieve a consistent fiber blend requires that the fibers be carefully measured before being mixed together. It is almost like measuring flour and sugar to make a cake. The most common machines used to measure the fibers are weigh-pan hoppers. Fiber falls into a weigh-pan attached to load cells on the hopper. The weigh-pan fills until a preset weight is reached. When all the weigh-pans in the system reach their desired weight, they open and dump the fiber onto a conveyor and the process starts over again. The fibers are conveyed to other machines that will further open and mix the fibers .

A newer type of system uses small conveyors attached to the hoppers instead of weigh pans. These conveyors are mounted on load cells and can continuously weigh the fiber on them. Since they operate continuously instead of start-stop, they can process more fiber in a given amount of time.

These systems are controlled by computers that monitor the operation and insure that the amount of each fiber in the blend remains consistent. The computers also generate reports such as pounds per hour , total number of drops, and coefficient of variation.

**Weigh-Pan Hoppers**



**Continuous Feed Hoppers**



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**“Confidence is contagious. So is lack of confidence.”**

**Vince Lomardi**

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