



NONWOVEN TERMS

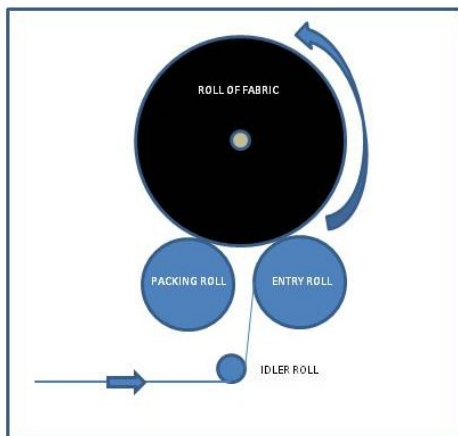
For the informed employee

Packing Ratio

Nonwoven fabrics range from soft and thick to hard and thin. The production of large mill rolls on a winder is a science in itself. One aspect of this process that a production employee needs to know is the packing ratio. Many of the winders used in nonwovens are the two drum surface winders like the one in the picture. The fabric enters between the two drums (rolls). The fabric comes in to contact with the first drum, is wound onto the fabric roll, and then comes into contact with the second drum. The second drum is often referred to as the packing drum. It usually revolves at a speed faster than the entry drum. The difference in speed between the two drums is called the packing ratio. The higher the packing ratio, the faster the packing drum goes with respect to the entry drum. Most winders made today have individual motors for each drum to allow for instantaneous and infinitely variable packing ratio adjustments.

There are several things to watch for.

1. A packing ratio too high on soft materials will cause loss of loft and possible tearing of the fabric.
2. Usually the drums are covered with rubber or some type of lagging. If this surface is not kept clean and in good repair, the fabric can slip on the packing drum and the wind of the fabric roll will not be as tight as desired.
3. It is possible to have a ratio too high on slick materials and the fabric will slip on the packing roll.
4. If the winder has a top riding roll, the wind of the fabric roll is a combination of the packing ratio and the top roll pressure.



“Watch, listen, and learn. You can’t know it all by yourself. Anyone who thinks they do is destined for mediocrity.”

Donald Trump

Training tools by Nonwoven Tools LLC
Visit us at nonwoventools.com
Copyright Nonwoven Tools LLC 2010