



## NONWOVEN TERMS

For the informed employee

### Bow Roller

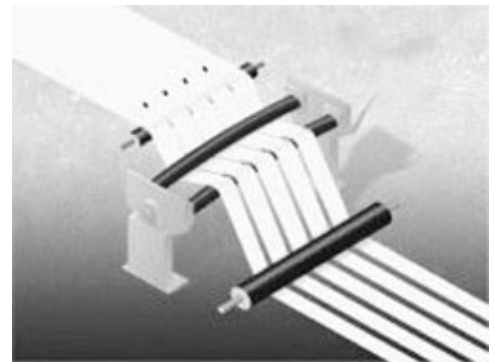
Handling nonwoven fabric as it moves through a nonwoven production line or through converting equipment can be a difficult task. It often involves many rolls, both driven and idler to convey the fabric. One special type of roll is the bow roll, sometimes called a spreader roll. The primary purpose of the bow roll is to remove machine direction wrinkles in the fabric. It can also be used to separate the individual cuts of a nonwoven web as it goes through the slitting process.

Bow rollers are usually constructed by placing a series of bearings along a curved, fixed shaft. The shaft can be hexagonal or round. A rubber sleeve is placed over the outer race of the bearings and end caps are attached to the sleeve. Bow rollers can function as idlers or they can be driven. Common methods of driving are with V belts or timing belts

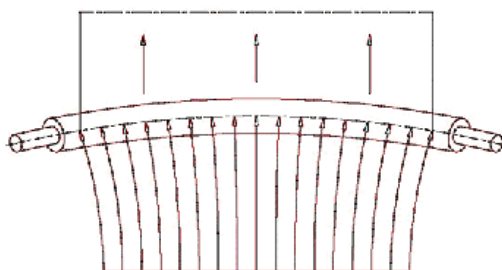
Bow rollers are often mounted in special pillow blocks that allow the fixed shaft to be rotated so that the fabric has the proper entry and exit angle to the roll. Individual bow rolls are often preceded and followed by straight rolls. Bow rolls can also be grouped together to make spreader assemblies.



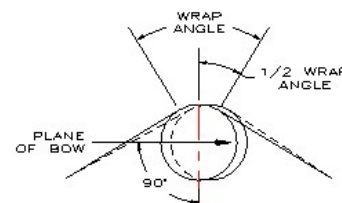
[www.xerium.com/mountHope/products/nonwovenIndustry.aspx](http://www.xerium.com/mountHope/products/nonwovenIndustry.aspx)



[www.bowroll.com/bowed\\_roll.html](http://www.bowroll.com/bowed_roll.html)



[www.webexinc.com/technical/spreaders.html#1](http://www.webexinc.com/technical/spreaders.html#1)



<http://www.appliedroller.com/Engineering/tabid/56/Default.aspx>

**“Seek first to understand, then to be understood.”**

**Stephen Covey**

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