Challenge  
A lightweight coated paper machine in the Northeast U.S. ran Fiberflex™ doctor blades on the 4th press felt guide roll. The roll is 0-1 P&J hardness rubber and the machine runs at 3,600 fpm. A DST-E holder is used in this position. The roll has very little lubrication and mill personnel would often smell a burning odor and see rapid roll surface wear. The mill determined the friction was high on the Fiberflex doctor blade causing it to melt.

Solution  
A PlusTek C doctor blade was recommended because the carbon fibers in the blade would provide some lubrication in this application. With the PlusTek C doctor blade, the blade life was two months with only 3/8” of blade wear.

Results  
The carbon fibers in the PlusTek C doctor blade allowed the blade to self-lubricate and maintain the roll condition without fear of roll surface damage.

Highlights
- Carbon fibers can aid in lubrication
- Extended blade life
- Reduced downtime
- Improved wear rate