



# Put Tungsten Carbide on the Calender



*Tungsten carbide coating lasts 3 times longer than chrome plating on calender rolls*

## Tungsten carbide outperforms chrome plating on calender rolls

### BACKGROUND AND CHALLENGES

Manufacturers of rigid PVC sheets and polyester films were suffering from shortcomings of their chrome-plated calender rolls: normal cleaning and periodic film removal left scratches on the chrome plating, which in turn marked the sheets. Even with the utmost attentiveness to avoid scratching the chrome during cleaning, such care was a time-consuming and costly process.

Continuous problems with scratches meant that manufacturers were getting less than a year of service life from the chrome plating, which led to more downtime losses for refinishing or rechroming.

### PRAXAIR SOLUTION

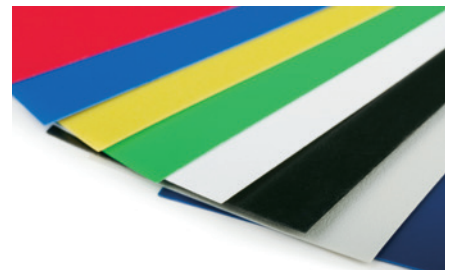
Calender rolls were recoated with Praxair 70+ HRC tungsten carbide, a much harder and more scratch-resistant material than chrome plating. The risk of scratching the rolls during routine cleaning or film removal virtually disappeared, allowing manufacturers to clean rolls more aggressively while maintaining the high quality of the product. And these improvements showed staying power: since switching to our tungsten carbide coating, these rolls have been scratch-free for more than three years.

Find out how Praxair can help your company improve efficiency and save money at [praxairsurfacetechologies.com](http://praxairsurfacetechologies.com), or call us at **1-317-240-2500**.



#### Economic effects

- Maintains high-quality product, reducing cost of manufacturing waste
- Reduces downtime spent on routine cleaning and film removal



#### Operational effects

- Improves scratch resistance over chrome plating for quicker cleaning
- More than triples roll service life, reducing downtime lost to refinishing or rechroming

