

CASE STUDY: Release Agent Innovation Helps Customer Address Challenges

New Release Agent Eliminates VOCs, Improves Quality and Productivity

Situation:

A leading steering wheel manufacturer was producing both in-mold coated and leather-wrapped steering wheels using a solvent-based release agent. They were satisfied with productivity and part quality but had to move to a water-based product due to regulatory pressure to reduce VOC emissions from their facility.

A competitor's attempt to solve the problem with a water-based release agent solution failed as it increased scrap levels and resulted in inconsistent gloss readings.

Solution:

Chem-Trend put the power of its development laboratory to work in studying the problem to provide a solution. A newly designed chemistry was applied to a specifically engineered product that was created to meet the customer's operating parameters. The result was a product that performed well for both in-mold painted and leather wrapped steering wheels where specific low-gloss, release and post-molding operation adhesion characteristics are demanding.

Benefits:

The newly developed release agent not only addressed the part quality requirements but also provided additional productivity and economic benefits. Conversion to the product eliminated VOCs while reducing scrap rates by 3.5%. Additionally, the customer was able to double the amount of time between mold cleaning cycles and found mold build-up easier to clean. Cost benefit analysis revealed that the reduction in cleaning time, calculated over a one-year period, equates to an annual savings of \$90,000!



Release Innovation™

