

Tire Production Run Exceeds 5,000 Cycles With DuPont™ Krytox® TM7 and Krytox® TM7S

CHALLENGE: Increase production and reduce equipment maintenance cost for the tire manufacturing industry.

In a very competitive tire market, cost-effective maintenance of press molds is crucial. Tire manufacturers look for a lubricant that is easy to apply, is white in color for visible coverage, and lasts at least 90 days. Most certainly, it should offer consistent quality.

Today, DuPont can meet this challenge by offering a grease that will effectively lubricate segmented tire molds for a complete tire production run.

SOLUTION: Introduce DuPont™ Krytox® TM7 and TM7S as cost-effective tire mold lubricants for segmented tire molds that vulcanize rubber tires.

Testing Krytox® TM7, one tire manufacturer found a cost-effective long-term lubricant for their tire molds. At the end of a 70-day passenger tire production run, an excess of 5,000 cycles (on average, curing times of 12-15 min), Krytox® demonstrated continued excellent performance.



Lubrication is applied to top, bottom, and sides of mold.

Krytox® TM7 allowed the operators to significantly increase production by extending relubrication intervals and preventing tire defects due to cross contamination that typically occur with the more conventional lubricants. The lubricant's superior performance met the tire industry's need to reduce equipment maintenance costs.

PERFORMANCE: Top Performer as an Effective Long-term Lubricant

Krytox® TM7 and extreme pressure TM7S can be used on all types of segmented molds (steam heated and electrically heated) and sliding metal surfaces. Its color is white and very distinguishable, leading to efficient and complete coverage of metal surfaces and easily preventing inadvertent and unnoticed contamination of tires. Krytox® TM7 and TM7S are extremely efficient. The lubricants are chemically inert and unaffected by steam and hot water. They withstand temperatures up to 500°F (260°C) and do not carbonize or fume. Krytox® TM7 and TM7S are easy to apply with a stiff brush and offer strong adhesion to clean metal surfaces. Primarily, they allow longer intervals between relubrication and, in many cases, go the full production run.

DuPont manufactures Krytox® TM7 and TM7S at its Chambers Works location in Deepwater, New Jersey. Krytox® TM7 and TM7S are packaged in 1 kg screw cap jars and are competitively priced. Prices in Europe and Asia Pacific follow standard practice vs. U.S. pricing. MSDSs are available under the product development names KDP4429 and KDP4473, respectively.