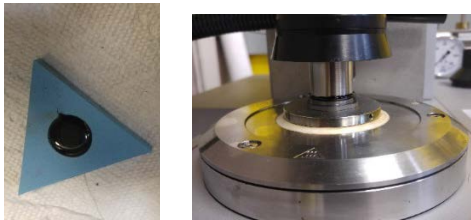


Benefits of Asphalt Coated with DP-200 Polymer

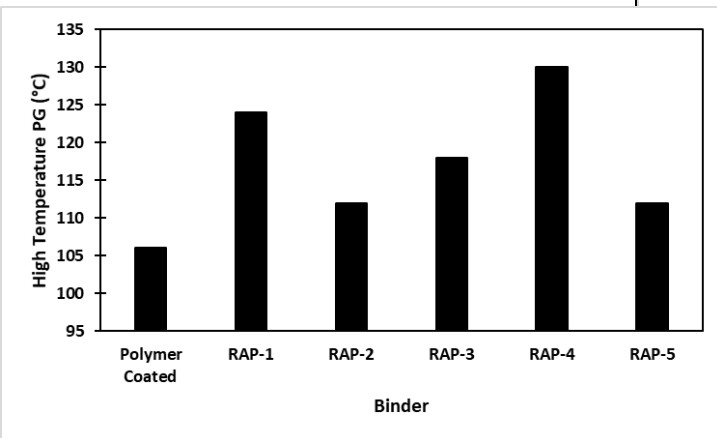
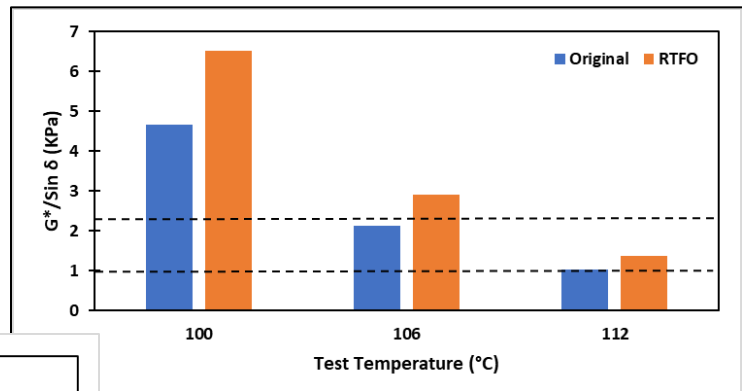
A laboratory experiment was done to compare the aging level of an asphalt binder recovered from a DP-200 Polymer-Coated pavement to that of conventional Reclaimed Asphalt Pavement (RAP) typically found in asphalt plants production. The high temperature Performance-Grade (PG) was used as an indicator to compare the asphalt binder aging level. Binder from the DP-200 polymer-coated mixture was extracted using the centrifuge method and recovered using the Rotary Evaporator. The Dynamic Shear Rheometer (DSR) was used to determine the high temperature parameter ($G^*/\sin \delta$) for the recovered binder under the original condition (as extracted) and the Rolling Thin Film Oven (RTFO) aged condition. The results indicated that the DP-200 Polymer-Coated binder had the lowest degree of aging (20% less) when compared to other binders extracted from various RAP binders of similar pavement age.

Binder Extraction, Recovery and Testing

ASTM D2172 “Quantitative Extraction of Asphalt Binder from Hot Mix Asphalt” and ASTM D5404 standard “Standard Practice for Recovery of Asphalt from Solution Using the Rotary Evaporator”.



Dynamic Shear Rheometer (DSR) Testing



High Temperature PG Comparison

High Temperature PG Analysis - AASHTO M 320