PAN AMERICAN LUBRICANTS

Grease Penetration

"Penetration" refers to the depth to which a cone penetrates a cup of the subject grease in a penetrometer during a specified period of time. Cone penetration tests provide one measure of the consistency of a grease.

ASTM D217 describes the methods for testing the consistency of lubricating greases in several states:

- unworked penetration
- worked penetration
- prolonged worked penetration
- block penetration

The data most commonly reported on product data sheets is worked penetration. In this test, the sample of grease is subjected to 60 double strokes in a grease worker before being brought to a temperature of 25°C (77°F) and allowing the test cone to drop freely in the sample cup for 5 seconds. The depth to which the cone penetrates is recoded in millimeters.