NewLab 800
Low-temperature Torque

ASTM D1478
ASTM D4693
ASTM D4950

Subject
ASTM D1478: Low-temperature Torque of Ball Bearing Grease.
This test method covers the determination of the extent to which a grease retards the rotation of a slow-speed ball bearing by measuring starting and running torques at low temperatures, below -20°C (0°F).

ASTM D4693: Low-temperature Torque of Grease Lubricated Wheel Bearings.
This test method determines the extent to which a test grease retards the rotation of a specially-manufactured, spring-loaded, automotive-type wheel bearing assembly when subjected to low temperatures. Torque values, calculated from restraining-force determinations, are a measure of the viscous resistance of the grease. This test method was developed with greases giving torques of less than 35 N·m at 40°C.

This specification covers lubricating greases suitable for the periodic relubrication of chassis systems and wheel bearings of passenger cars, trucks, and other vehicles.

- Steel structure painted with epoxy material
- Test cabin able to grant a working temperature of -75 °C
- Geared motor and Ball-cage rotating at 1 rpm
- Inspection door made in stainless steel with high insulation material
- Internal double cabin made in stainless steel with high diffusion and homogeneity cooling system
- Double stage refrigerating unit without CFC gases located in the bottom part of the structure
- Digital dynamometer
- Set for analysis available in accessories list
- Managed by a touch screen panel pc using LabLink operating software running on Windows basis with following characteristic:
  - TFT/LCD 12"
  - 40 Gb HD
  - 1024 x 768 resolution and 16 M colors
  - 2 x USB ports
  - Able to store more than 60’000 analysis
- Power cable and user manual
- Power supply available 220 Vac 50/60 Hz or 115 Vac 50/60 Hz to be specified in case of PO

Accessories
- LAB-214500/4693: mechanical mounting kit for performing analyzes according to ASTM D4693 standard including bearings for running tests
- LAB-214500/1478: mechanical mounting kit for performing analyzes according to ASTM D1478 standard including bearings for running tests

Consumables
- LAB-102-140/1478: ASTM D1478 tapered bearings, pack of 2 pieces
- LAB-102-140/4693: ASTM D4693 tapered bearings, pack of 2 pieces

Spare Parts
- LAB-140-001: PT100 stainless steel
- LAB-102-145: torque sensor
- LAB-102-146: toothed belt
- LAB-102-147: heating elements, pack of 2 pieces
- LAB-102-144: torque wire

Dimensions
- width 70 cm
- depth 65 cm
- height 150 cm

Weight
- 240 kg