Modern Linear guide roller products have been tested for quality by Napoleon Engineering Services in Olean, New York. Modern Linear guide rollers were tested and compared to the leading supplier of similar product.

The testing compared the following areas:

- **All boundary dimensions:**
  - Bore, O.D., V-angle, width, bore and O.D. corner radius.

- **Internal geometry:**
  - Radial clearance, raceway curvature, raceway depth.

- **Surface finish measurements:**
  - Bore, O.D., inner and outer raceway, ball.

- **Seal efficiency**
  - Starting torque,

- **Noise testing**

- **Surface hardness:**
  - Inner race, outer race, balls

- **Material chemistry**

- **Microstructure:** To ensure proper heat treating.

Excerpts from the report:

The ML product achieves a dynamic load rating of 1199 lbs. and the competitive product achieves a dynamic load rating of 1058 lbs…

Based on the samples provided, the overall dimensional quality of the ML product was comparable to the competitive product…

The ML product possesses superior vibration and noise output compared to the competitive product. This is due to the honed raceways on the ML product while the competitive product exhibits ground raceways. The ML product will achieve a greater life than the competitive product…

Chemistry, metallurgy and hardness analysis reveals that both products meet the requirements for AISI/SEA 52100 Alloy Steel and are acceptable.