

# Timken Test

The Timken test consists of a rotating ring-on-block geometry. The apparatus produces a relatively high sliding speed combined with high contact loads to severely stress the lubricant. As a result, the Timken test is ideally suited to eval-

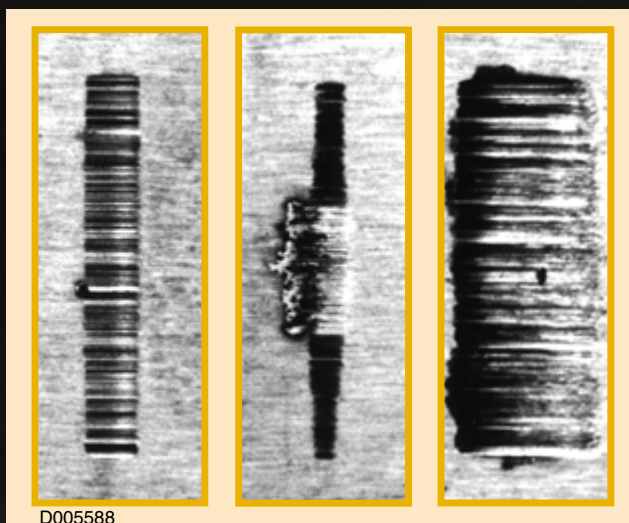
uation of lubricants and greases intended for use in harsh applications. Both lubricating fluids and greases can be evaluated to determine the applied load required for the onset of severe abrasive wear and scuffing.

## Typical Test Conditions:

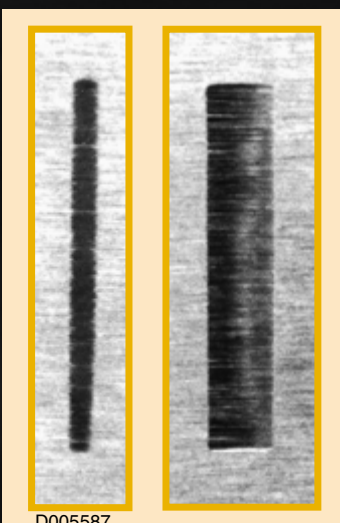
- ASTM D 2782 for Lubricating Fluids
- ASTM D 2509 for Greases
- Temperature  
37.8 +/- 2.8°C (100 +/- 5°F)  
24 +/- 6°C (75 +/- 10°F)
- Speed  
800 +/- 5 rpm  
800 +/- 5 rpm
- Duration  
10 minutes +/- 15 seconds  
10 minutes +/- 15 seconds
- Load  
3 - 100 lbs  
3 - 100 lbs



Improper Setup



Scoring



Typical OK No Scoring



**A** true, continuous-feed worm-drive grease feeder has been developed at SwRI. This grease feeder can be controlled to supply accurate continuously fed grease throughout entire test duration.