



Date: 11/15/2004

Revision: 03/07/2006

Technical Service Bulletin

Product Description: **AMSOIL SG Series Synthetic EP Gear Oils**

Subject: **AGMA 9005-E02, New DIN 51517 Part 3, (CLP) Specification Update**

OBJECTIVE:

To define the new changes made to American Gear Manufactures (AGMA) 9005-E02, DIN 51517 industrial gear oil standard, and provide the best suited AMSOIL Synthetic Gear Lubes that meet it.

ISSUES:

The AGMA provides standards for the end user, original equipment builder, gear manufacturer and lubricant supplier. They have guidelines for minimum performance characteristics regarding lubricants suitable for use with enclosed and open gearing which is installed in general industrial, and power transmission applications. In 2004 the AGMA updated their DIN 51517 standard for industrial gear lubes, which provides recommendations for selecting lubricants based on current theory and practice in the industry, and attempts to upgrade and align with current International Organization for standardization (ISO)

DESCRIPTION:

DIN 51517 standard for industrial gear oils describes three types of industrial gear oils depending on application and severity Part 1 "C", Part 2 "CL", and Part 3 "CLP"

Part 1 "C" Recommended mainly for constant circulation and immersion lubrication of places requiring only modest lubrication (additive-free lube oil raffinate).

Part 2 "CL" gear oil with age-resistant and

anti-corrosion properties enhanced by Rust and Oxidation additives, mainly for constant-circulation lubrication.

Part 3 "CLP" gear oil is the one most commonly used in enclosed industrial gear boxes. Recommended for constant-circulation and immersion lubrication. Besides its anti-corrosion and counter-oxidant properties, it also has excellent anti-wear characteristics.

DIN 51517 industrial gear oil changes are restricted to Part 3 "CLP" There are 3 test additions or changes:

1. The addition of the FE8 bearing test, which tests for reduced friction and wear along with measuring the thickness of the gear lube film.
2. A change in oxidation procedure to the ASTM D2893. This test is the same as the U.S. Steel 224 S-200 oxidation test. This test runs for 312 hours at 121°C, (250°F), and is a very severe oxidation test.
3. The inclusion of specified limits for the elastomer compatibility test. This tests NBR rubber seal compatibility.

RECOMMENDATIONS:

AMSOIL SG series industrial gear lubes pass all three new DIN 51517 part 3 severe tests with ease. AMSOIL recommends the proper ISO grade SG series oil for DIN 51517 part 3, CLP specifications.

Submitted By: KD

Reviewed By:

Approved By:

Approval Date:

Distribution: Internal All

Page 1 of 1