**CHANGES TO ASTM D3487**

Thursday, October 27, 2016

An update to ASTM’s D3487 has recently been released, updating the standards for transformer oil. Standards are updated as a result of the efforts of many dedicated industry professionals who contribute their technical and operational knowledge to maintenance of the standards. Anyone who depends on D3487 is encouraged to stay up to date. Hard copies and PDF versions of the updated standard are available for purchase and download from many trusted sources. Ergon’s refinery in Vicksburg, Mississippi, is the world’s largest producer of transformer oil feedstock and is marketed under the HyVolt brand.

**General**

• ASTM D3487 was converted to all SI units

— The statement was in the scope before, but the document wasn’t all SI

• The word “new” was changed to “unused”

**Section 2**

• Removed ASTM D88 as a viscosity test method

• Added ASTM D117

• ASTM D877 was removed as an unused oil specification, but remains a used oil test

• Added ASTM D2864 to cover definitions

• Added ASTM D4052 as a digital method for testing density

• Added ASTM D5949 as an automated method for testing Pour Point

• Added ASTM D5950 as an automated method for testing Pour Point

**Section 3**

• Statements related to D2864 and D117 were added

**Table 1**

• Updated with current ASTM recommended SI units

• Added automated method D4052 for density and methods D5949 and D5950 for Pour Point

— The manual methods D1298 for density and D97 for Pour Point are referenced as the referee methods in case of dispute

• Removed ASTM D88

• Removed ASTM D877

• Added requirement for Furanic Compounds by ASTM D5837

• Multiple footnotes were reworded

**Appendixes**

• X1.1 – Updated with SI units and values

• X2.2.1.1 – Descriptive information for D877 was removed

• X2.2.1.2 – Dielectric Breakdown VDE Electrodes changed to X2.2.1.1, Editorial change

• X2.2.2 – Dielectric Breakdown Voltage – Impulse, Editorial change

• X2.2.3 – Dissipation Factor (Power Factor), Editorial change

• X2.3.6 – Gassing Tendency changed to X2.2.4 and moved from Chemical Properties to Electrical Properties

• X2.3.6 – Added as Furanic Compounds

• X2.3.7 – PCB Content, Editorial changes

• X3 – Crude Oil changed to Petroleum Sources

• X3.1 – Crude Oil changed to Petroleum Sources and the definition was reworded

• X3.2 – Refining Processes Hydrogen Treatment changed to Hydrotreating and Hydrocracking

*Ergon’s Jimmy M. Rasco is a member of the American Society for Testing and Materials (ASTM), where he serves as Chairman of Subcommittee 27.01 for Mineral Oil — the committee responsible for the new D3487 standard. As Ergon Vice President – Global Base Oil Technology, Rasco is responsible for the development of quality naphthenic and paraffinic base oils. He has worked with Ergon for 22 years and has 42 years of experience in quality control and technical support of petroleum refined products. Jimmy has a B.S. degree in Chemistry from Alcorn State University. In addition to ASTM, Jimmy is a member of the American Chemical Society, CIGRE, IEEE, IEC, and ANSI TAG to IEC TC 10. He has served on numerous maintenance teams and working groups for international organizations governing transformer oil.*