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Hydraulic fluid power — Method for evaluating water separation performance of dehydrators

Déshydrateurs fluides hydrauliques — Méthode d'évaluation des performances de séparation de l'eau

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Foreword

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This document was prepared by Technical Committee ISO/TC 131, *Fluid power systems*, Subcommittee SC 6, *Contamination control*.

Introduction

In hydraulic fluid power systems, one of the functions of the hydraulic fluid is to separate and lubricate the moving parts of components. The presence of water contamination in the lubricant causes corrosion, loss of lubrication properties, increased oxidation rates, worse filterability, reduced filter service life and produces wear, resulting in loss of efficiency, reduced component and hydraulic fluid life and subsequent unreliability.

Hydraulic fluid dehydration equipment is used to remove the water contamination from these hydraulic fluids to well below the hydraulic fluid's water saturation level. Hydraulic fluid dehydrators are usually self-contained systems, designed to perform the function of water removal from a body of hydraulic fluid using different types of principles and methodologies. This document provides a procedure by which to evaluate the water removal performance of the various types of hydraulic fluid dehydrators in a well-defined, repeatable manner. This enables the purchaser of the hydraulic fluid dehydrator to compare the available products evaluated using the same test procedure.