

ISO 4407:2002-04 (E)

Hydraulic fluid power - Fluid contamination - Determination of particulate contamination by the counting method using an optical microscope

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Counting principle	4
5	Apparatus	4
6	Reagent and chemicals	6
6.1	Reagent and rinsing and cleaning chemicals	6
6.2	Liquids for transparentizing the membrane filter (transmitted-light method)	6
7	Glassware cleaning procedure	6
8	Calibration procedures	6
8.1	Microscope calibration	6
8.2	Determination of Effective Filtration Area (EFA)	7
9	Membrane filter preparation	7
9.1	Sample preparation	7
9.2	Blank analysis	8
9.3	Separation of contaminants by vacuum filtration	8
9.4	Evaluation of suitability for counting	9
9.5	Mounting of membrane filters for observation under transmitted light	10
10	Particle sizing and counting procedure	10
10.1	Particle sizing	10
10.2	Selection of nominal magnification	10
10.3	Statistical counting procedure	10
10.4	Calculation of total count	11
10.5	Verification of data	12
11	Expression of results	13
12	Identification statement (Reference to this International Standard)	13
Bibliography		14