

ISO 17536-1:2015-12 (E)

Road vehicles - Aerosol separator performance test for internal combustion engines - Part 1: General

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Terms, definitions, symbols and units	1
2.1	Terms and definitions	1
2.2	Symbols and units	4
3	Measurement equipment accuracy	4
4	Absolute filter, wall flow trap and leakage	5
4.1	Absolute filter	5
4.1.1	Absolute filter material	5
4.1.2	Absolute filter mass measurement method	5
4.1.3	Absolute media measurement process validation	5
4.2	Wall flow trap	5
4.2.1	Weight measurement	5
4.2.2	Validation of wall flow trap liquid oil efficiency	5
4.2.3	Validation of wall flow trap aerosol efficiency	6
4.3	Leakage	6
5	Principles for aerosol separator performance tests	6
5.1	General	6
5.2	Test equipment	6
5.2.1	Grounding	6
5.2.2	Upstream sample probe	7
5.2.3	Upstream particle counter	7
5.2.4	Particle counter calibration	7
5.2.5	Maximum particle concentration	7
5.2.6	Particle counter flow	8
5.3	Determination of gravimetric separation efficiency	8
5.3.1	General	8
5.3.2	Calculations	8
Annex A (normative)	Explanation of differential pressure and pressure loss of an aerosol separator	10
Annex B (normative)	Test equipment	11
Annex C (informative)	Aerodynamic diameter	13
Annex D (informative)	Isokinetic sampling probes and information	15
Annex E (informative)	Life reference	18
Annex F (normative)	Validation of the absolute filter media	19
Annex G (normative)	Leakage	20

Annex H (informative)Determinationofmaximumefficiencyaerosolconcentration	21
Annex I (informative)Testequipment--Wallflowtrapdesign	22
Bibliography	23