

ISO 16890-3:2024-08 (E)

Air filters for general ventilation - Part 3: Determination of the gravimetric efficiency and the air flow resistance versus the mass of test dust captured

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
3.1	Air flow and resistance	2
3.2	Test device	2
3.3	Gravimetric efficiency	3
4	Symbols	4
5	General test device requirements	5
5.1	Test device requirements	5
5.2	Test device preparation	5
6	Loading dust	5
7	Test equipment	5
7.1	Test rig	5
7.2	Upstream mixing orifice	5
7.3	Liquid aerosol testing devices	6
7.4	Dust feeder	6
7.5	Final filter	10
8	Qualification of test rig and apparatus	11
8.1	Schedule of qualification testing requirements	11
8.2	Dust feeder air flow rate	11
8.3	Final filter efficiency qualification test	12
9	Test sequence dust-loading procedure	12
9.1	Test procedure for the filter	12
9.1.1	Preparation of the test device	12
9.1.2	Initial resistance to air flow	12
9.2	Dust loading	13
9.2.1	Dust loading procedure	13
9.2.2	Arrestance	13
9.2.3	Test dust capacity	14
10	Reporting results	14
10.1	General	14
10.2	Required reporting elements	14
10.2.1	Report values	14
10.2.2	Report summary	15
10.2.3	Report details	16
Annex A (informative)	Resistance to air flow calculation	20
Bibliography		22