Station Yard Industrial Estate, Hatton, Derbyshire, DE65 5DU, UK
Tel.: +44 (0)1283 520365

Test Report
ISO 16890:2016-3

Job Number 22945
Date of Report 16-Mar-22

Filter Description

PTL Sample ID
36647
NA

Manufacturer	Not specified
Filter Model	Not specified
Part Number	Not specified
Filter Type	Flat sheet media
Dimensions (hxwxd), mm	550 x 415
Effective Filter Area, m^2	0.17
Media Type	Synthetic
Media Colour	White
Media Additives	Not specified
Electrostatic Charge	Not specified
Sample Obtained	Direct from client

Test Requester Information

Test Requester	Julian Martin
Date Requested	14/03/2022
Company Name	Martin Industries Ltd
Company Address	Unit 8 Milton Business Centre, Wick Drive, New Milton, BH25 6RH
Date Sample(s) Received	09/03/2022
Date of Test Commencement	14/03/2022

Test Equipment Information

Optical Particle Counter	Palas, Welas 3000H with 2300 Sensor (only used for fractional efficiency measurements)
Air Flow Meter	Orifice plate with Foxboro Multivariable Transmitter and RTD

Statement

The results of this test relate only to the test device in the condition stated herein. The performance results cannot by themselves be quantitatively applied to predict filter performance in all "real life" environments.

Test Conditions

Dust Type	ISO 12103-1:2016 A2 Fine		
Liquid Aerosol	NA		
Solid Aerosol	NA		
Test Air Flow Rate (nominal), m^3/hr	918		
Barometric Pressure, mbar	1014.4	1016.7	MIN-MAX
Test Air Temperature, ^oC	18.6	19.5	MIN-MAX
Relative Humidity, %	36.4	39.4	MIN-MAX

Manufacturer's Data

Initial Resistance to Airflow, Pa	Not specified
Rated Final Resistance, Pa	Not specified
Initial Efficiency, %	Not specified

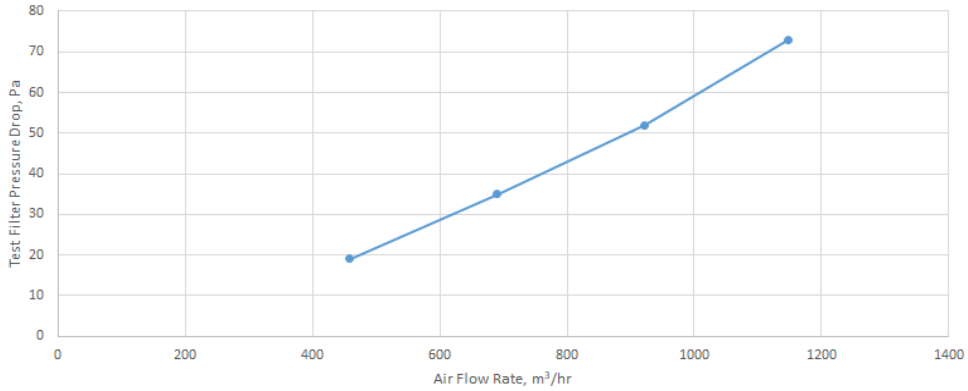
Test Remarks

Filter tested in new condition, as per ISO 16890 part 3.
Filter had not been previously tested as per ISO 16890 parts 2 and 4 for initial and discharged efficiency.

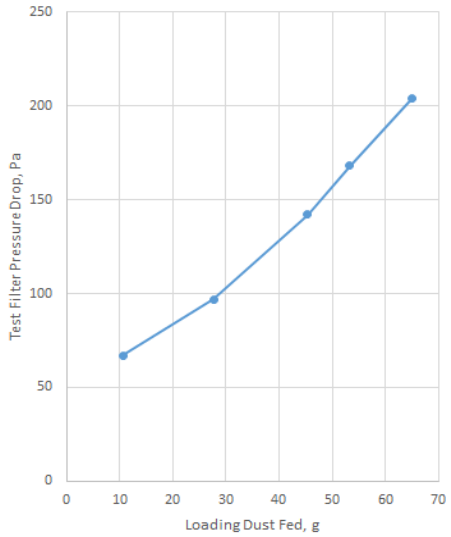
Test Performed By L. Grimes

Test Data

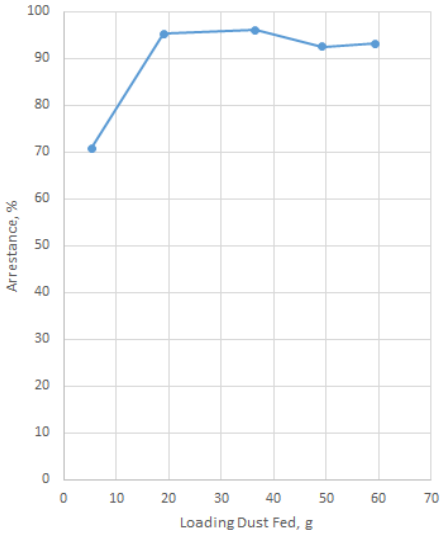
Initial Resistance to Airflow (Clean Filter, ISO 16890 part 2)



Resistance to Airflow (Loaded Filter, ISO 16890 part 3)



Arrestance (Loaded Filter, ISO 16890 part 3)



Initial Resistance to Airflow Table
(Clean Filter, ISO 16890 part 2)

Air Flow, m^3/hr	Pressure Drop, Pa
459	19
690	35
922	52
1148	73

Loading Dust Fed, Pressure Drop & Arrestance Table
(Loaded Filter, ISO 16890 part 3)

Dust Fed, g	Pressure Drop, Pa	Arrestance, %
11	67	71
28	97	95
45	142	96
53	168	93
65	204	93

Initial Arrestance, %	71
Average Arrestance, %	91
Test Dust Capacity, g	54

Report Issue	History	Approval	Date
1	First issue to customer	Dr Mike Stillwell CEng	16/03/2022