

Appendix 1

ISO 16890-1:2016 - Air Filter Test Results				Testing Organization:	
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<b>GENERAL</b>					
Report no.: 6P08396E-rev2		Date of tests: 2017-01-13 - 2017-01-19		Date of report: 2018-11-15	
Supervisor: UH/IS			Device obtained (when and how obtained):		
Test(s) requested by: Scandcenter AB			The device was sent and obtained on 2017-01-10		
<b>DEVICE TESTED</b>					
Model: 592x592x635 F7/10 T-G		Manufacturer: Scandcenter AB		Construction: Pocket filter, 10 Pockets	
Article number: 7106001TG		Type of medium: Glass		Net effective filtering area: 8.0 m <sup>2</sup>	
				Filter dimensions (width x height x depth) 592 x 592 x 635 mm	
<b>TEST DATA AND ATTACHED TEST REPORTS</b>					
Test air flow rate: 0.944 m <sup>3</sup> /s		Test aerosol: KCl (1-10 µm) DEHS (0.3-1 µm)		Test report to ISO 16890-2 Report no. 6P08396E-rev2 Appendix 2	
				Test report to ISO 16890-3 (optional) Report no. 6P08396E-rev2 Appendix 3	
				Test report to ISO 16890-4 Report no. 6P08396E-rev2 Appendix 4	
<b>RESULTS</b>					
Initial pressure differential: 85 Pa		Initial grav. arrestance: 97 %		ePM <sub>1, min</sub> 70 %	ePM <sub>2.5, min</sub> 78 %
Final test pressure differential: 300 Pa		Test dust capacity: 1677 g		ePM <sub>1</sub> 70 %	ePM <sub>2.5</sub> 78 %
				ePM <sub>10</sub> 93 %	ISO rating <b>ISO ePM<sub>1</sub> 70 %</b>
<b>Remarks:</b>					
<p>The figure contains two graphs. The top graph plots Fractional efficiency (%) on the y-axis (0.0 to 100.0) against Particle size (µm) on the x-axis (0.1 to 10.0). It shows three data series: Initial fractional efficiency E<sub>i</sub> (ISO 16890-2) as a blue line with diamonds, Conditioned fractional efficiency E<sub>D,i</sub> (ISO 16890-4) as a red line with squares, and Average fractional efficiency E<sub>A, i</sub> (ISO 16890-1) as a green line with triangles. All series show an increase in efficiency with particle size, reaching approximately 90-95% at 10 µm. The bottom graph plots Pressure differential (Pa) on the left y-axis (0 to 400) and Arrestance (%) on the right y-axis (0 to 100) against Air flow rate (m<sup>3</sup>/s) on the x-axis (0.0 to 1.4). It shows three data series: Pressure differential as a function of air flow rate (clean filter) (ISO 16890-2) as a blue line with diamonds, Pressure differential as a function of test dust captured (ISO 16890-3) as a red line with squares, and Grav. arrestance as a function of test dust captured (ISO 16890-3) as a green line with triangles. The clean filter pressure differential increases from ~85 Pa at 0.3 m<sup>3</sup>/s to ~300 Pa at 1.2 m<sup>3</sup>/s. The dust-captured pressure differential increases from ~85 Pa at 0.3 m<sup>3</sup>/s to ~300 Pa at 1.2 m<sup>3</sup>/s. Grav. arrestance remains constant at ~97% across the flow rate range.</p>					
NOTE: 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 filtration performance in all "real life" environments.					