

Appendix 1

ISO 16890-1:2016 - Air Filter Test Results					Testing Organization:	
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<b>GENERAL</b>						
Report no.: 6P08396B-rev3		Date of tests: 2016-11-14 - 2016-11-17		Date of report: 2018-11-15		
Supervisor: TER				Device obtained (when and how obtained):		
Test(s) requested by: Scandcenter AB				The device was sent and obtained on 2016-11-08		
<b>DEVICE TESTED</b>						
Model: 592x592x635 M6/10 T-G		Manufacturer: Scandcenter AB		Construction: Pocket filter, 10 Pockets		
Article number: 6106001TG	Type of medium: Glass	Net effective filtering area: 7.9 m <sup>2</sup>		Filter dimensions (width x height x depth) 592x592x635 mm		
<b>TEST DATA AND ATTACHED TEST REPORTS</b>						
Test air flow rate: 0.944 m <sup>3</sup> /s	Test aerosole: KCl (1-10 µm) DEHS (0.3-1 µm)	Test report to ISO 16890-2		Report no. 6P08396B-rev3 Appendix 2		
		Test report to ISO 16890-3 (optional)		Report no. 6P08396B-rev3 Appendix 3		
		Test report to ISO 16890-4		Report no. 6P08396B-rev3 Appendix 4		
<b>RESULTS</b>						
Initial pressure differential: 58 Pa		Initial grav. arrestance: 92 %		ePM <sub>1, min</sub> 28 %	ePM <sub>2.5, min</sub> 41 %	ISO rating
Final test pressure differential: 300 Pa		Test dust capacity: 1829 g		ePM <sub>1</sub> 27 %	ePM <sub>2.5</sub> 41 %	ePM <sub>10</sub> 77 %
						ISO ePM <sub>10</sub> 75 %
<b>Remarks:</b>						
<p>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 increasing trend with particle size, starting around 20% at 0.3 µm and reaching nearly 100% at 10 µm.</p> <p>The bottom graph has two y-axes: Pressure differential, 1.2 kg/m<sup>3</sup> (Pa) on the left (0 to 400) and Arrestance (%) on the right (0 to 100). The x-axis is Air flow rate (m<sup>3</sup>/s) from 0.0 to 1.4. It shows three 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 linearly from ~20 Pa at 0.4 m<sup>3</sup>/s to ~80 Pa at 1.2 m<sup>3</sup>/s. The dust-captured pressure differential increases from ~60 Pa at 0.4 m<sup>3</sup>/s to ~320 Pa at 1.0 m<sup>3</sup>/s. Grav. arrestance remains constant at ~92% 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.						