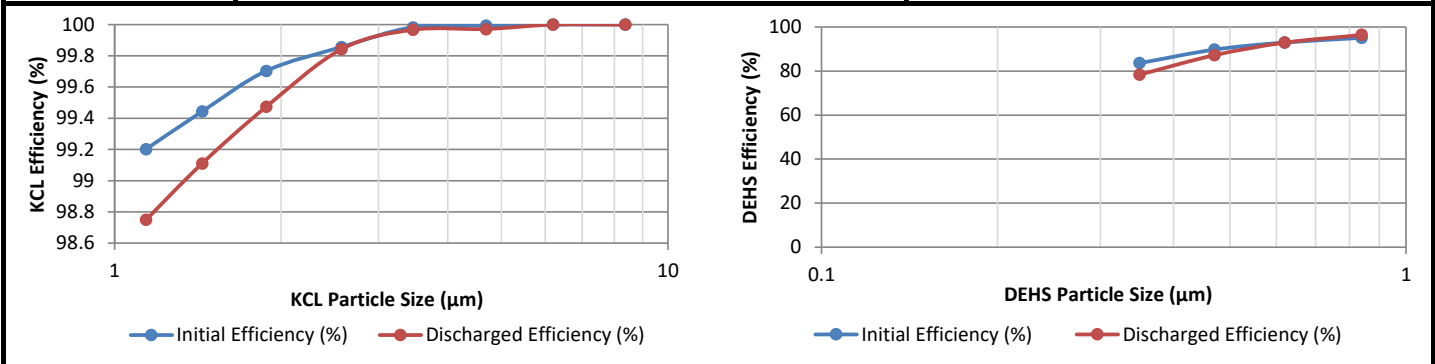


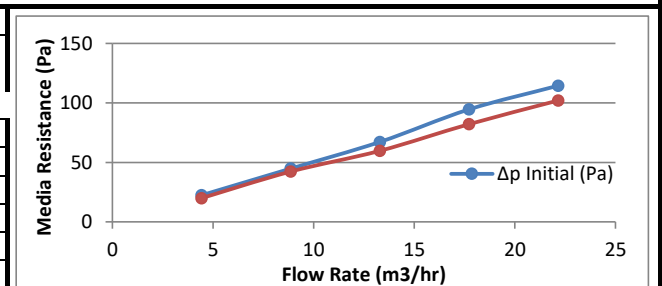
ISO 16890-2 /-4:2016 Air Filter Test Result Summary

Counter Information	Manufacturer <u>TSI, Inc.</u>	Test Conditions	Test Flow Rate <u>10.5 CFM / 17.84 m3/h</u>
	Model No. <u>3330</u>		Test Aerosol <u>Aerosolized KCl & DEHS</u>
Serial No. <u>3330174305</u>	Temperature <u>73.0 Deg F / 22.8 Deg C</u>		
IPA Discharge Method <input checked="" type="checkbox"/> Vapor Treated <input type="checkbox"/> IPA Dip Method	Relative Humidity <u>36.0 %</u>		
			Barometer <u>29.58 in Hg / 100.17 kPa</u>

Device Tested	Manufacturer <u>JP Air Tech</u>
	Model <u>JX130-B-Nano-9</u>
	Dimensions <u>16" x 16"</u>
	Type of Media <u>Flat Sheet Media</u>
	Media Area <u>1.0 ft^2</u>
	Construction <u>N/A</u>
	Filter/Media Electrostatic Charge <u>N/A</u>
	Media Color <u>White</u>
	Media Adhesive <u>N/A</u>
	Sample Procurement <u>JP Air Tech</u>



KCL					
Range (µm)	Geo. Mean	Initial Efficiency (%)	Discharged Efficiency (%)	Upstream Number of Particles per Test	
				Pre	Post
1.0-1.3	1.14	99	99	65385	11675
1.3-1.6	1.44	99	99	38029	6854
1.6-2.0	1.88	100	99	90323	16259
2.0-3.0	2.57	100	100	55061	10378
3.0-4.0	3.46	100	100	27530	5350
4.0-5.5	4.69	100	100	12731	3148
5.5-7.0	6.20	100	100	2453	884
7.0-10.0	8.37	100	100	1192	598



%	m ³ /h	Δp Initial (Pa)	Δp Post IPA (Pa)
25	4.43	22.4	19.9
50	8.86	44.8	42.3
75	13.29	67.2	59.7
100	17.72	94.5	82.1
125	22.15	114.4	102.0

DEHS					
Range (µm)	Geo. Mean	Initial Efficiency (%)	Discharged Efficiency (%)	Upstream Number of Particles per Test	
				Pre	Post
0.3-0.4	0.35	84	78	229358	447855
0.4-0.55	0.47	90	87	213930	434426
0.55-0.7	0.62	93	93	135736	288214
0.7-1.0	0.84	95	96	192006	426353

Reporting Data			
	ePM ₁	ePM _{2,5}	ePM ₁₀
Minimum	87%	91%	97%
Average	88%	92%	98%
Reported	85%	90%	95%

Requestor Information	Test Requestor <u>Cagri Tekman</u>	Phone: <u>+90 532 686 9259</u>
	Company Name <u>JP Air Tech</u>	Email: <u>ct@jpairtech.com</u>
	Company Address <u>Skifervej 2, 4990 Sakskobing, Denmark</u>	Requested Date: _____

ISO 16890-1										
Data Entry Table							Reporting Data			
DEHS								ePM ₁	ePM _{2,5}	ePM ₁₀
d_i	d_{i+1}	d_m	$\Delta \ln d_i$	E_i	$E_{D,i}$	$E_{A,i}$	Minimum	87%	91%	--
0.30	0.40	0.35	0.29	83.6%	78.3%	81.0%	Average	88%	92%	98%
0.40	0.55	0.47	0.32	89.7%	87.2%	88.5%	Reported	85%	90%	95%
0.55	0.70	0.62	0.24	92.9%	92.9%	92.9%				
0.70	1.00	0.84	0.36	95.1%	96.4%	95.7%				
KCL										
1.00	1.30	1.14	0.26	99.2%	98.7%	99.0%				
1.30	1.60	1.44	0.21	99.4%	99.1%	99.3%				
1.60	2.20	1.88	0.32	99.7%	99.5%	99.6%				
2.20	3.00	2.57	0.31	99.9%	99.8%	99.8%				
3.00	4.00	3.46	0.29	100.0%	100.0%	100.0%				
4.00	5.50	4.69	0.32	100.0%	100.0%	100.0%				
5.50	7.00	6.20	0.24	100.0%	100.0%	100.0%				
7.00	10.00	8.37	0.36	100.0%	100.0%	100.0%				
ePM ₁ Calculations										
d_i	d_{i+1}	d_m	$\Delta \ln d_i$	$E_{A,i}$	$q_{3\sigma}$	$q_{3\sigma} * \Delta \ln d_i$	$E_{D,i} * q_{3\sigma} * \Delta \ln d_i$	$E_{A,i} * q_{3\sigma} * \Delta \ln d_i$	E _{min} (PM ₁)	E(PM ₁)
0.30	0.40	0.35	0.29	81.0%	22.627%	0.065095	0.050995	0.052699	87%	88%
0.40	0.55	0.47	0.32	88.5%	19.891%	0.063343	0.055229	0.056034		
0.55	0.70	0.62	0.24	92.9%	15.837%	0.038193	0.035479	0.035490		
0.70	1.00	0.84	0.36	95.7%	11.522%	0.041097	0.039616	0.039343		
Sums:					0.207728	0.181319	0.183565			
ePM _{2,5} Calculations										
d_i	d_{i+1}	d_m	$\Delta \ln d_i$	$E_{A,i}$	$q_{3\sigma}$	$q_{3\sigma} * \Delta \ln d_i$	$E_{D,i} * q_{3\sigma} * \Delta \ln d_i$	$E_{A,i} * q_{3\sigma} * \Delta \ln d_i$	E _{min} (PM _{2,5})	E(PM _{2,5})
0.30	0.40	0.35	0.29	81.0%	22.627%	0.065095	0.050995	0.052699	91%	92%
0.40	0.55	0.47	0.32	88.5%	19.891%	0.063343	0.055229	0.056034		
0.55	0.70	0.62	0.24	92.9%	15.837%	0.038193	0.035479	0.035490		
0.70	1.00	0.84	0.36	95.7%	11.522%	0.041097	0.039616	0.039343		
1.00	1.30	1.14	0.26	99.0%	8.503%	0.022309	0.022030	0.022081		
1.30	1.60	1.44	0.21	99.3%	7.618%	0.015817	0.015677	0.015703		
1.60	2.20	1.88	0.32	99.6%	8.022%	0.025546	0.025411	0.025441		
2.20	3.00	2.57	0.31	99.8%	9.984%	0.030966	0.030917	0.030919		
Sums:					0.302366	0.275355	0.277709			
ePM ₁₀ Calculations										
d_i	d_{i+1}	d_m	$\Delta \ln d_i$	$E_{A,i}$	$q_{3\sigma}$	$q_{3\sigma} * \Delta \ln d_i$	$E_{D,i} * q_{3\sigma} * \Delta \ln d_i$	$E_{A,i} * q_{3\sigma} * \Delta \ln d_i$	E _{min} (PM ₁₀)	E(PM ₁₀)
0.30	0.40	0.35	0.29	81.0%	9.412%	0.027077	0.021212	0.021921	97%	98%
0.40	0.55	0.47	0.32	88.5%	8.395%	0.026733	0.023309	0.023648		
0.55	0.70	0.62	0.24	92.9%	7.432%	0.017924	0.016650	0.016655		
0.70	1.00	0.84	0.36	95.7%	7.014%	0.025016	0.024114	0.023948		
1.00	1.30	1.14	0.26	99.0%	7.628%	0.020013	0.019763	0.019808		
1.30	1.60	1.44	0.21	99.3%	8.833%	0.018340	0.018177	0.018207		
1.60	2.20	1.88	0.32	99.6%	10.804%	0.034406	0.034225	0.034265		
2.20	3.00	2.57	0.31	99.8%	13.726%	0.042573	0.042505	0.042508		
3.00	4.00	3.46	0.29	100.0%	16.708%	0.048067	0.048051	0.048055		
4.00	5.50	4.69	0.32	100.0%	19.542%	0.062233	0.062216	0.062223		
5.50	7.00	6.20	0.24	100.0%	21.671%	0.052261	0.052261	0.052261		
7.00	10.00	8.37	0.36	100.0%	23.143%	0.082545	0.082545	0.082545		
Sums:					0.457189	0.445029	0.446045			

