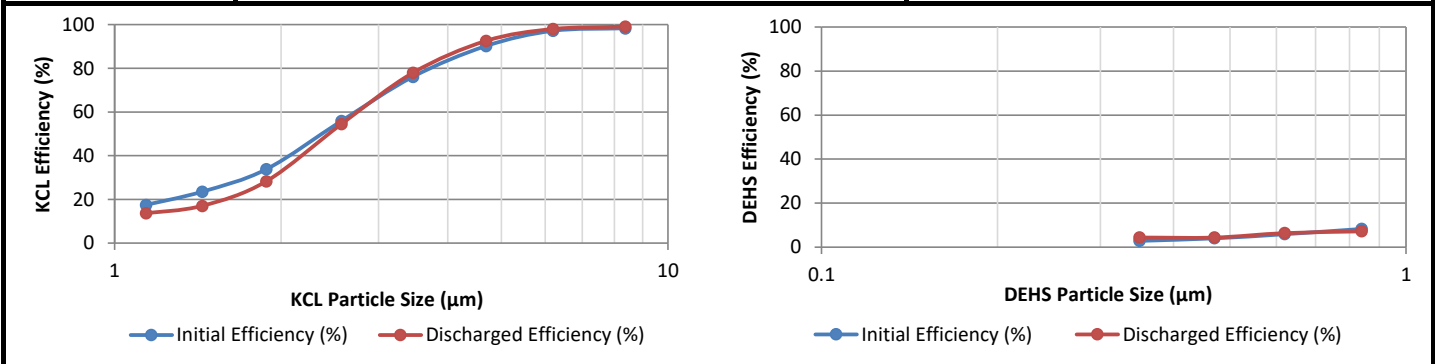


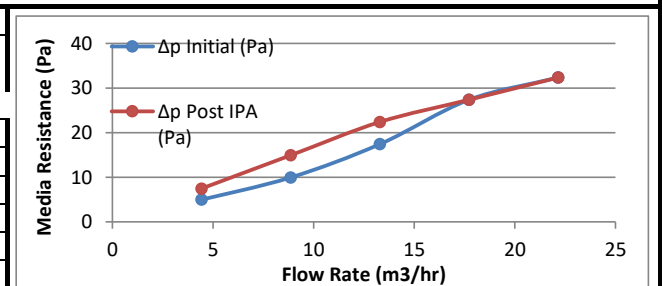
ISO 16890-2 /-4:2016 Air Filter Test Result Summary

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>JX140</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	18	14	21592	82063
1.3-1.6	1.44	24	17	12360	47440
1.6-2.0	1.88	34	28	28597	116134
2.0-3.0	2.57	56	54	16738	73903
3.0-4.0	3.46	76	78	8486	39630
4.0-5.5	4.69	90	93	4323	22363
5.5-7.0	6.20	97	98	936	5910
7.0-10.0	8.37	98	99	537	3977



%	m ³ /h	Δp Initial (Pa)	Δp Post IPA (Pa)
25	4.43	5.0	7.5
50	8.86	10.0	14.9
75	13.29	17.4	22.4
100	17.72	27.4	27.4
125	22.15	32.3	32.3

DEHS					
Range (µm)	Geo. Mean	Initial Efficiency (%)	Discharged Efficiency (%)	Upstream Number of Particles per Test	
				Pre	Post
0.3-0.4	0.35	3	4	208896	167549
0.4-0.55	0.47	4	4	194914	156718
0.55-0.7	0.62	6	6	123755	105554
0.7-1.0	0.84	8	7	174238	155230

Reporting Data			
	ePM ₁	ePM _{2,5}	ePM ₁₀
Minimum	5%	14%	60%
Average	5%	14%	60%
Reported	N/A*	N/A*	65%

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	5%	14%	--
0.30	0.40	0.35	0.29	2.9%	4.4%	3.6%	Average	5%	14%	60%
0.40	0.55	0.47	0.32	4.0%	4.4%	4.2%	Reported	N/A*	N/A*	65%
0.55	0.70	0.62	0.24	5.9%	6.4%	6.1%	* Any Reporting value of N/A shows the minimum efficiency is below 50% for that ePM value			
0.70	1.00	0.84	0.36	8.3%	7.2%	7.7%				
KCL										
1.00	1.30	1.14	0.26	17.5%	13.7%	15.6%				
1.30	1.60	1.44	0.21	23.5%	17.1%	20.3%				
1.60	2.20	1.88	0.32	33.8%	28.3%	31.0%				
2.20	3.00	2.57	0.31	55.9%	54.5%	55.2%				
3.00	4.00	3.46	0.29	76.1%	77.9%	77.0%				
4.00	5.50	4.69	0.32	90.2%	92.5%	91.4%				
5.50	7.00	6.20	0.24	97.2%	98.0%	97.6%				
7.00	10.00	8.37	0.36	98.3%	99.1%	98.7%				
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	3.6%	22.627%	0.065095	0.002855	0.002360	5%	5%
0.40	0.55	0.47	0.32	4.2%	19.891%	0.063343	0.002767	0.002651		
0.55	0.70	0.62	0.24	6.1%	15.837%	0.038193	0.002435	0.002342		
0.70	1.00	0.84	0.36	7.7%	11.522%	0.041097	0.002947	0.003173		
Sums:					0.207728	0.011003	0.010525			
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	3.6%	22.627%	0.065095	0.002855	0.002360	14%	14%
0.40	0.55	0.47	0.32	4.2%	19.891%	0.063343	0.002767	0.002651		
0.55	0.70	0.62	0.24	6.1%	15.837%	0.038193	0.002435	0.002342		
0.70	1.00	0.84	0.36	7.7%	11.522%	0.041097	0.002947	0.003173		
1.00	1.30	1.14	0.26	15.6%	8.503%	0.022309	0.003059	0.003484		
1.30	1.60	1.44	0.21	20.3%	7.618%	0.015817	0.002697	0.003210		
1.60	2.20	1.88	0.32	31.0%	8.022%	0.025546	0.007226	0.007931		
2.20	3.00	2.57	0.31	55.2%	9.984%	0.030966	0.016870	0.017092		
Sums:					0.302366	0.040855	0.042242			
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	3.6%	9.412%	0.027077	0.001188	0.000981	60%	60%
0.40	0.55	0.47	0.32	4.2%	8.395%	0.026733	0.001168	0.001119		
0.55	0.70	0.62	0.24	6.1%	7.432%	0.017924	0.001143	0.001099		
0.70	1.00	0.84	0.36	7.7%	7.014%	0.025016	0.001794	0.001931		
1.00	1.30	1.14	0.26	15.6%	7.628%	0.020013	0.002744	0.003126		
1.30	1.60	1.44	0.21	20.3%	8.833%	0.018340	0.003127	0.003722		
1.60	2.20	1.88	0.32	31.0%	10.804%	0.034406	0.009732	0.010682		
2.20	3.00	2.57	0.31	55.2%	13.726%	0.042573	0.023194	0.023498		
3.00	4.00	3.46	0.29	77.0%	16.708%	0.048067	0.037461	0.037028		
4.00	5.50	4.69	0.32	91.4%	19.542%	0.062233	0.057593	0.056864		
5.50	7.00	6.20	0.24	97.6%	21.671%	0.052261	0.051206	0.050993		
7.00	10.00	8.37	0.36	98.7%	23.143%	0.082545	0.081782	0.081468		
Sums:					0.457189	0.272130	0.272511			

