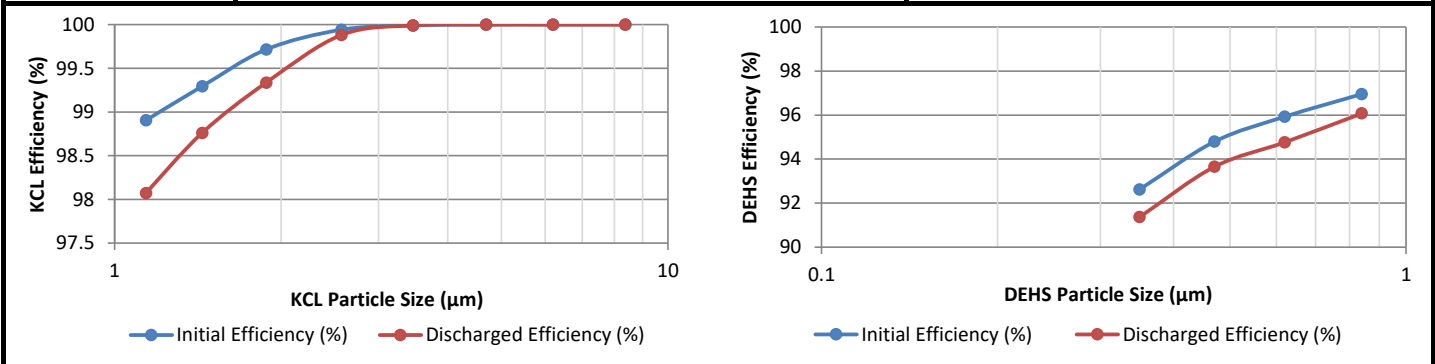


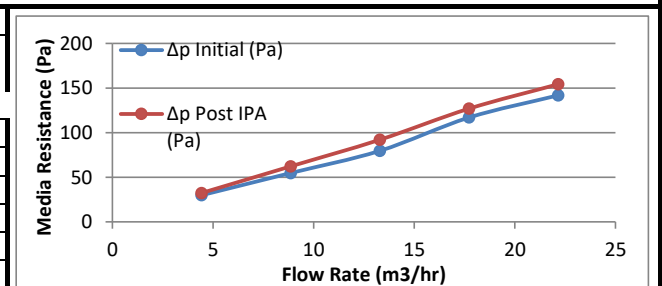
ISO 16890-2 /-4:2016 Air Filter Test Result Summary

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>JX135NANO</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	98	29218	23102
1.3-1.6	1.44	99	99	15658	13382
1.6-2.0	1.88	100	99	34272	31969
2.0-3.0	2.57	100	100	19142	20181
3.0-4.0	3.46	100	100	9537	10758
4.0-5.5	4.69	100	100	4586	6316
5.5-7.0	6.20	100	100	1014	1940
7.0-10.0	8.37	100	100	632	1571



%	m ³ /h	Δp Initial (Pa)	Δp Post IPA (Pa)
25	4.43	29.9	32.3
50	8.86	54.7	62.2
75	13.29	79.6	92.1
100	17.72	116.9	126.9
125	22.15	141.8	154.3

DEHS					
Range (µm)	Geo. Mean	Initial Efficiency (%)	Discharged Efficiency (%)	Upstream Number of Particles per Test	
				Pre	Post
0.3-0.4	0.35	93	91	230216	121039
0.4-0.55	0.47	95	94	214734	113557
0.55-0.7	0.62	96	95	138050	77241
0.7-1.0	0.84	97	96	193341	116853

Reporting Data			
	ePM ₁	ePM _{2,5}	ePM ₁₀
Minimum	94%	95%	99%
Average	94%	96%	99%
Reported	90%	95%	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 Saksbøbing, 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	94%	95%	--
0.30	0.40	0.35	0.29	92.6%	91.4%	92.0%	Average	94%	96%	99%
0.40	0.55	0.47	0.32	94.8%	93.6%	94.2%	Reported	90%	95%	95%
0.55	0.70	0.62	0.24	95.9%	94.8%	95.3%				
0.70	1.00	0.84	0.36	97.0%	96.1%	96.5%				
KCL										
1.00	1.30	1.14	0.26	98.9%	98.1%	98.5%				
1.30	1.60	1.44	0.21	99.3%	98.8%	99.0%				
1.60	2.20	1.88	0.32	99.7%	99.3%	99.5%				
2.20	3.00	2.57	0.31	99.9%	99.9%	99.9%				
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	92.0%	22.627%	0.065095	0.059474	0.059883	94%	94%
0.40	0.55	0.47	0.32	94.2%	19.891%	0.063343	0.059321	0.059682		
0.55	0.70	0.62	0.24	95.3%	15.837%	0.038193	0.036193	0.036415		
0.70	1.00	0.84	0.36	96.5%	11.522%	0.041097	0.039483	0.039664		
Sums:					0.207728	0.194471	0.195643			
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	92.0%	22.627%	0.065095	0.059474	0.059883	95%	96%
0.40	0.55	0.47	0.32	94.2%	19.891%	0.063343	0.059321	0.059682		
0.55	0.70	0.62	0.24	95.3%	15.837%	0.038193	0.036193	0.036415		
0.70	1.00	0.84	0.36	96.5%	11.522%	0.041097	0.039483	0.039664		
1.00	1.30	1.14	0.26	98.5%	8.503%	0.022309	0.021880	0.021973		
1.30	1.60	1.44	0.21	99.0%	7.618%	0.015817	0.015622	0.015664		
1.60	2.20	1.88	0.32	99.5%	8.022%	0.025546	0.025377	0.025425		
2.20	3.00	2.57	0.31	99.9%	9.984%	0.030966	0.030929	0.030938		
Sums:					0.302366	0.288277	0.289643			
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	92.0%	9.412%	0.027077	0.024739	0.024909	99%	99%
0.40	0.55	0.47	0.32	94.2%	8.395%	0.026733	0.025035	0.025188		
0.55	0.70	0.62	0.24	95.3%	7.432%	0.017924	0.016985	0.017089		
0.70	1.00	0.84	0.36	96.5%	7.014%	0.025016	0.024033	0.024144		
1.00	1.30	1.14	0.26	98.5%	7.628%	0.020013	0.019628	0.019711		
1.30	1.60	1.44	0.21	99.0%	8.833%	0.018340	0.018113	0.018162		
1.60	2.20	1.88	0.32	99.5%	10.804%	0.034406	0.034178	0.034244		
2.20	3.00	2.57	0.31	99.9%	13.726%	0.042573	0.042522	0.042535		
3.00	4.00	3.46	0.29	100.0%	16.708%	0.048067	0.048063	0.048063		
4.00	5.50	4.69	0.32	100.0%	19.542%	0.062233	0.062233	0.062233		
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	0.450336	0.451083			

