General data

Description: Test 2 - Curatech SP 7000 neutral cleaner
Project number: P00049
Done by: ANMASI A/S Date: 11/15/2019

Customer data

Company: [redacted]
Contact:
Adress:
ZIP: **City:**

Component data

Component no.: [redacted]
Component name:
Comment: Test results are succesful. The part meets cleanliness requirments after cleaning in a Rotoline system with Curatech SP 7000 waterbased neutral cleaner. Please be aware we have only tested 2 parts with a area of 317....
No of comp./Area: 2 317.27 **cm2**
Test method: Type Of Extraction : Ultrasonic cleaning
Rinsing parameters: Effect: 10 watts/liter Frequency: 40 kHz
Extraction volume: Rinsing fluid: Shellsol T Solvent 400 ml
Filter type Membrane Filter Type : Durapore PVDF, 5 micron

Gravimetry

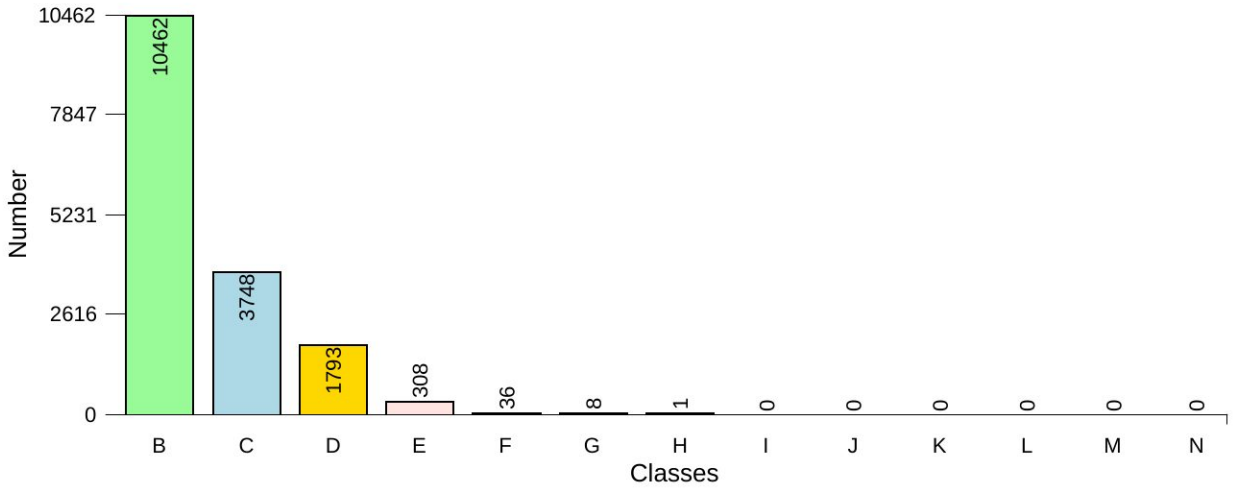
Membrane filter weight		**Results**		
Before filtration:	mg	Blank value:	G =	mg
After filtration:	mg	Cleanliness value:	G =	mg
Residue weight:	mg			

System data

Microscope: AxioZoom
Objective: 1.5
Pixel scaling: 0.91 µm/Pixel
Camera: Axiocam 305 color
Resolution: 2464 **x** 2056 Pixel

Evaluation of all particles

Class distribution (by count)

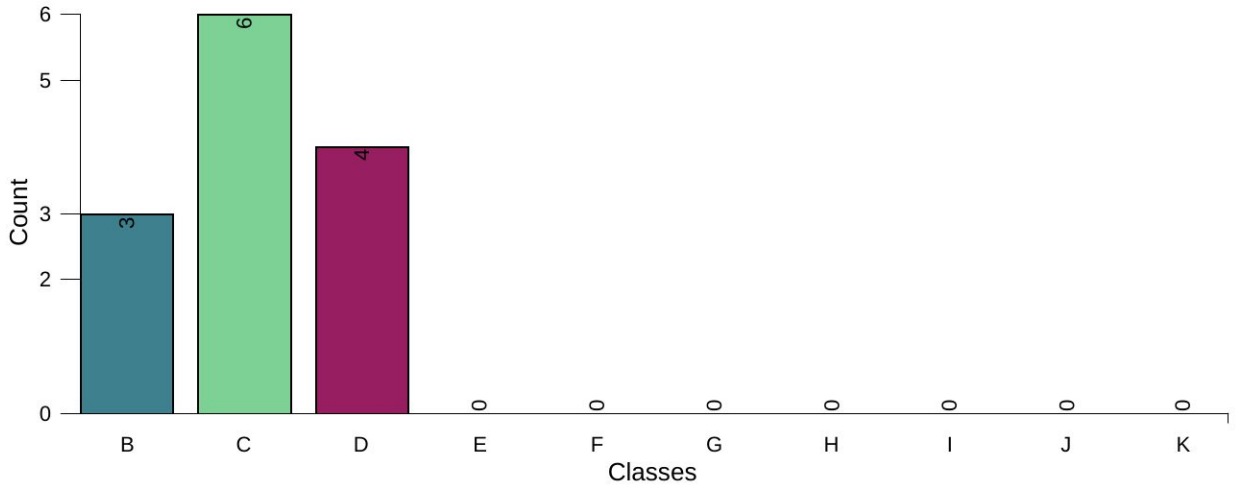


Particle size distribution

Class	>=	<	Absolute number of particles	Normalized particle count per N	Normalized particle count per A
B	5	15	10462	5231.00	32975.07
C	15	25	3748	1874.00	11813.28
D	25	50	1793	896.50	5651.34
E	50	100	308	154.00	970.78
F	100	150	36	18.00	113.47
G	150	200	8	4.00	25.22
H	200	400	1	0.50	3.15
I	400	600	0	0.00	0.00
J	600	1000	0	0.00	0.00
K	1000	1500	0	0.00	0.00
L	1500	2000	0	0.00	0.00
M	2000	3000	0	0.00	0.00
N	3000		0	0.00	0.00

Evaluation of reflective particles

Class distribution (by count)

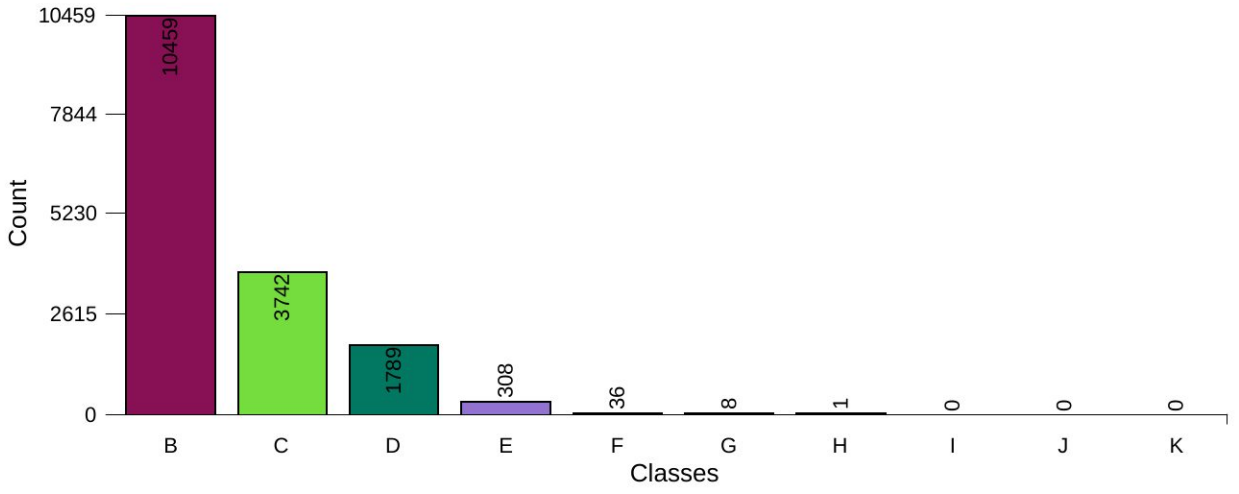


Non-reflective particle size distribution

Class	>=	<	Absolute number of particles	Normalized particle count per N	Normalized particle count per A
B	5	15	3	1.50	9.46
C	15	25	6	3.00	18.91
D	25	50	4	2.00	12.61
E	50	100	0	0.00	0.00
F	100	150	0	0.00	0.00
G	150	200	0	0.00	0.00
H	200	400	0	0.00	0.00
I	400	600	0	0.00	0.00
J	600	1000	0	0.00	0.00
K	1000		0	0.00	0.00

Evaluation of non-reflective particles

Class distribution (by count)

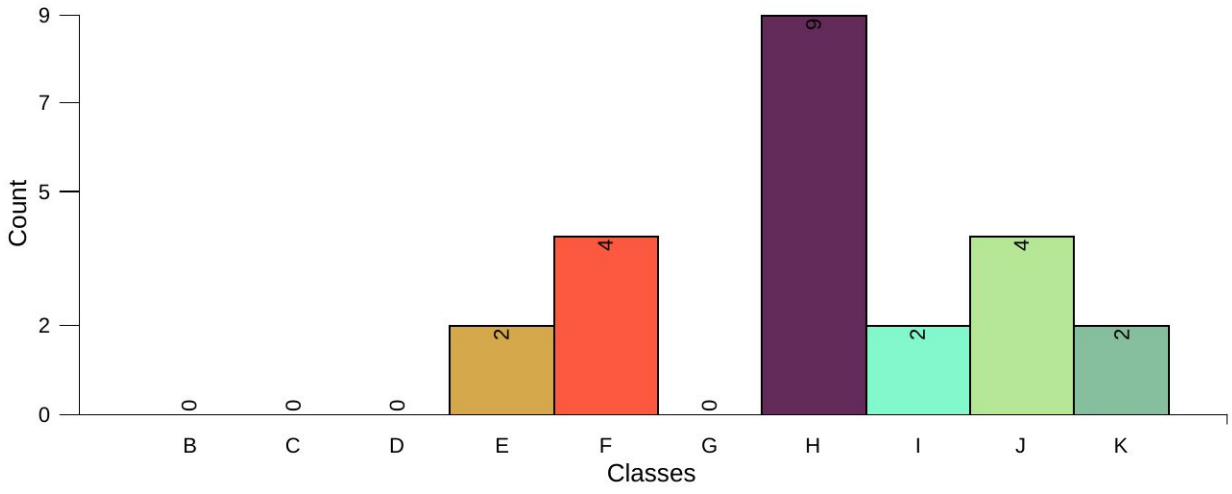


Non-reflective particle size distribution

Class	>=	<	Absolute number of particles	Normalized particle count per N	Normalized particle count per A
B	5	15	10459	5229.50	32965.61
C	15	25	3742	1871.00	11794.37
D	25	50	1789	894.50	5638.73
E	50	100	308	154.00	970.78
F	100	150	36	18.00	113.47
G	150	200	8	4.00	25.22
H	200	400	1	0.50	3.15
I	400	600	0	0.00	0.00
J	600	1000	0	0.00	0.00
K	1000		0	0.00	0.00

Evaluation of fibrous particles

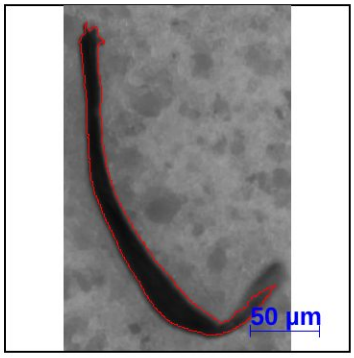
Class distribution (by count)



Fibrous particle size distribution

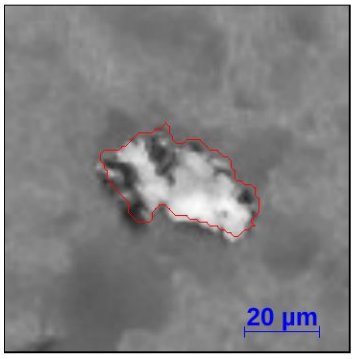
Class	>=	<	Absolute number of particles	Normalized particle count per N	Normalized particle count per A
B	5	15	0	0.00	0.00
C	15	25	0	0.00	0.00
D	25	50	0	0.00	0.00
E	50	100	2	1.00	6.30
F	100	150	4	2.00	12.61
G	150	200	0	0.00	0.00
H	200	400	9	4.50	28.37
I	400	600	2	1.00	6.30
J	600	1000	4	2.00	12.61
K	1000		2	1.00	6.30

Largest particle



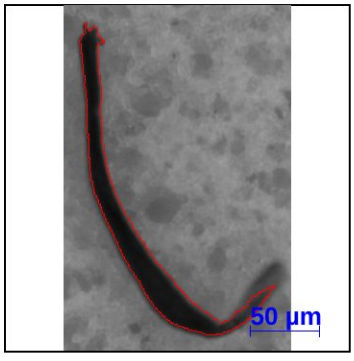
Particle ID: 6253
Length [µm]: 244.71
Particle type: Non-metallic

Largest reflective particle



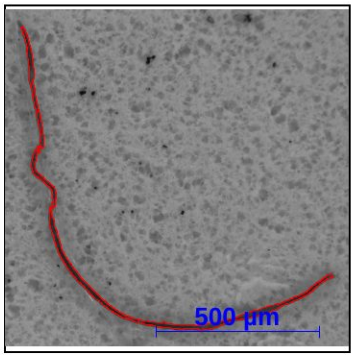
Particle ID: 12378
Length [µm]: 46.55

Largest non-reflective particle



Particle ID: 6253
Length [µm]: 244.71

Largest fibrous particle



Particle ID: 8605
Length [µm]: 1220.67

Cleanliness level:

Particle Type	ISOCode_A
All particles	CCC(A) = B16/C14/D13/E10/F7/G5/H2/I00/J00/K00/L00/M00/N00
Metallic	CCC(A) = B4/C5/D4/E00/F00/G00/H00/I00/J00/K00
Non-metallic	CCC(A) = B16/C14/D13/E10/F7/G5/H2/I00/J00/K00
Fiber	CCC(A) = B00/C00/D00/E3/F4/G00/H5/I3/J4/K3

Conclusion: Test results are succesful. The part meets cleanliness requirments after cleaning in a Rotoline system with Curatech SP 7000 waterbased neutral cleaner. Please be aware we have only tested 2 parts with a area of 317.27 cm2 pr. part.

Membrane filter

