CLEMEX

Image Analysis Report # 796

Bubble Size Measurement
for
Nova Chemicals

Samples submitted

2 images of bubbles in glycerin/mineral oil emulsion

General analysis request

Measure diameter of bubbles

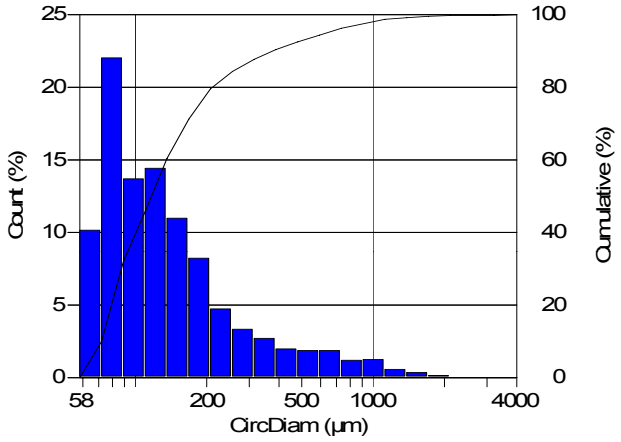
Analysis procedure

Steps

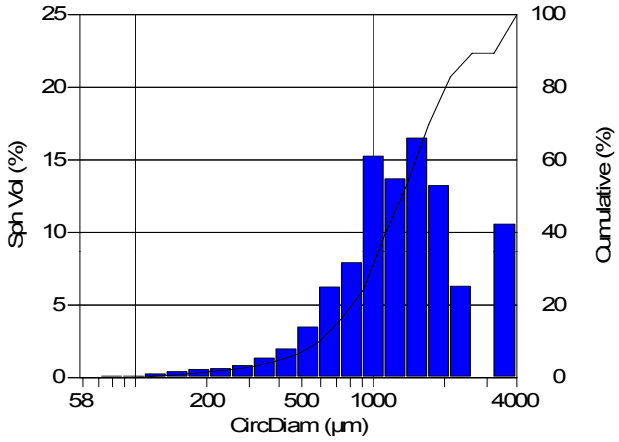
1. The bubbles are detected based on their contrast with the background.
2. Touching bubbles are separated based on changes in convexity along their surface.
3. Small objects, considered as noise, are removed (3 x 3 pixels)
4. bubbles intersected by the field of view are excluded from the analysis.
5. Diameter and volume are measured for all bubbles.
6. Images loaded in groups are analyzed together.
7. Charts and statistics are generated automatically.

Charts and statistics

By count



by volume



CLEMEX

by count		
Minimum:	58.4	µm
Maximum:	3333.1	µm
Mean:	189.2	µm
Std Dev.:	226	µm
Sum:	780736	µm
Count:	4126	
Under:	0	
Over:	0	
Accepted:	100	%
Field Count:	2	
Field Area:	4.74E+08	µm²
Total Area:	9.48E+08	µm²
D10:	68	µm
D50:	114.5	µm
D90:	369.7	µm

by volume		
Minimum:	58.4	µm
Maximum:	3333.1	µm
Mean:	1474.2	µm
Std Dev.:	822.2	µm
Sum:	2.70E+14	µm
Count:	4126	
Under:	0	
Over:	0	
Accepted:	100	%
Field Count:	2	
Field Area:	4.74E+08	µm²
Total Area:	9.48E+08	µm²
D10:	592.5	µm
D50:	1333.6	µm
D90:	2327.9	µm

Pictures of detections