Refine CT Data

Remove unnecessary part and noise.

Change to "Surface Rendering" and open "Voxel Process" dialog from "Main Control".

Show All Units Hide All Units										
Disp	Name	Туре	Rendering Color							
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name SurfaceR color of all units										
rendering type A v color Back Save Load										
	unit									
Preference New Delete										
1	Measurement	Nonius	Solid Measurement							
	/oxel Process	Voxel Division	Voxel Filter							
Polygon Reduction Polygon Clipping										
Section Analysis Particle / Cavity Analysis Fiber Analysis										
5	Voxel Rotational Trim Voxel Trim									
Voxe	el Rotational Trim									
Voxe	el Rotational Trim	e								

Select "selected".

Voxel Process								
start point of process: x = 289, y = 296, z = 78, value = 20								
🔘 screen								
designate center by click								
target dipping plane								
shape: sphere voxel								
fluctuate voxel value behavior: decrease by value								
smoothing								
🔘 contrast								
level off (assuming removal of void or inner particle)								
√ variation is gradually reduced from center to edge,								
elect / deselect continuous object by dick Select All Deselect All								
operation								
Delete Delete Non-selected								
Export by Images Copy Polygon								
© al								
Invert Voxel and Border Values Fill Cavity								
Back								
Save Temporary Load the Temporary Data								

Select continuous object to remain by click.



Selected.



Press "Delete Non-selected" button.

Voxel Process						
start point of process: x = 289, y = 296, z = 78, value = 20						
🔘 screen						
designate center by click						
target dipping plane						
shape: sphere v of 20 voxel						
fluctuate voxel value behavior: decrease by value						
Smoothing						
🔘 contrast						
level off (assuming removal of void or inner particle)						
$\boxed{\mathbb{V}}$ variation is gradually reduced from center to edge, finally 0						
selected select / deselect continuous object by dick						
Select All Deselect All						
operation						
Delete Delete Non-selected						
Export by Images Copy Polygon						
() al						
Invert Voxel and Border Values Fill Cavity						
Back						
Save Temporary Load the Temporary Data						

Non-selected object is deleted and noise relieved.



Select "screen" and designate "shape", "size of shape", "action", "behavior", "variation" and "variation is gradually reduced from center to edge, finally 0".

Voxel Process									
start point of process: k = 221, y = 302, z = 90, value = 46									
() screen									
designate center by click									
target dipping plane									
shape: sphere of 4 voxel									
Iuctuate voxel value behavior: decrease by value ▼									
Smoothing variation: 20									
○ contrast									
level off (assuming removal of void or inner particle)									
variation is gradually reduced from center to edge,									
© selected									
select / deselect continuous object by dick									
Select All Deselect All									
operation									
Delete Delete Non-selected									
Export by Images Copy Polygon									
© all									
Invert Voxel and Border Values Fill Cavity									
Back									
Save Temporary Load the Temporary Data									

Click joint between unremoved noise and object to remain (red arrow) to separate them.



Reselect "selected", click object to remain and press "Delete Non-selected" button.

Voxel Process							
start point of process: x = 289, y = 296, z = 78, value = 20							
🔘 screen							
designate center by click							
target dipping plane							
shape: sphere v of 20 voxel							
fluctuate voxel value behavior: decrease by value							
◯ smoothing							
🔘 contrast							
level off (assuming removal of void or inner particle)							
√ variation is gradually reduced from center to edge,							
selected select / deselect continuous object by click Select All operation							
Delete Delete Non-selected							
Export by Images Copy Polygon							
all Invert Voxel and Border Values Fill Cavity							
Back							
Save Temporary Load the Temporary Data							

Separated noise is removed (red arrow). After the process is completed, close the "Voxel Process" dialog.



Select "File (F)" > "Save molcer file (S) " in menu bar to save processed CT data.

XY.mol - MolcerPlus							
File(F) Pre	eference(P)	Tool(T)	Help(H)			
	Open(0)		Ctrl+O			
	Open Sequential Images(F)						
	Add STL(A)						
	Close(C)						
	Save molcer file(S)						
	Overwrite molcer file(W)						
	File Information(I) 1 XY.mol						
Exit(X)							