



MATERIALS PLUS

Porosity Method

Example: Porosity

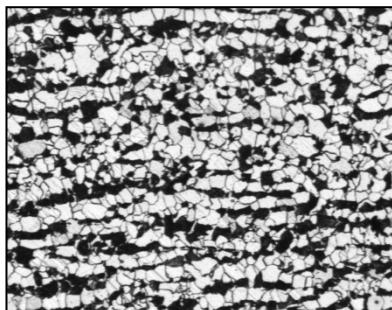
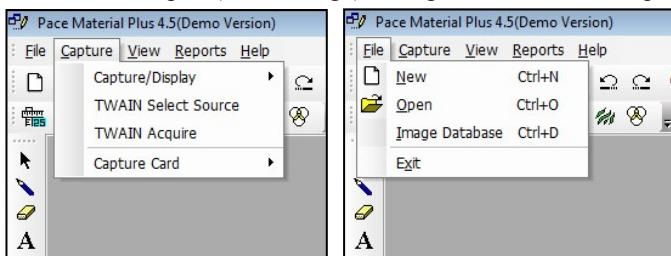
The porosity module recognizes and measures the porosity of a material according to ASTM B276. The number of pores is counted along with their percentage and min/max perimeter and area for each pore.

PROCEDURE:

1. Load the porous sample image for analysis.
2. Select the appropriate saved calibration scales from the drop down list at the bottom of the Window
3. Click on the Porosity icon  either from the Toolbar or from the Menu-bar
4. Click AUTOMATIC to have the software determine the pores. Click SET THRESHOLD to set the intensity range manually. Adjust the lines in the pop up window until all of the pores have been properly detected with the pseudo color. Press OK.
5. To display the porosity results, click on DISPLAY RESULT.
6. Click on ADD to place data into grid.
7. To see a graphically representation of the data, click on GRAPH.
8. To save the report, click on REPORT.
9. A sample information window will appear. Fill the required information. Click on “Save Data For Report Tool”
10. Click on “TO EXCEL” to see the result in Excel.

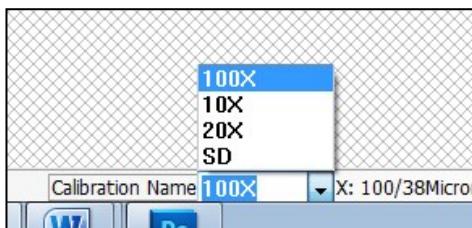
EXAMPLE of Porosity Analysis

1. File > Open (select image) or Capture > TWAIN Acquire (for live image)

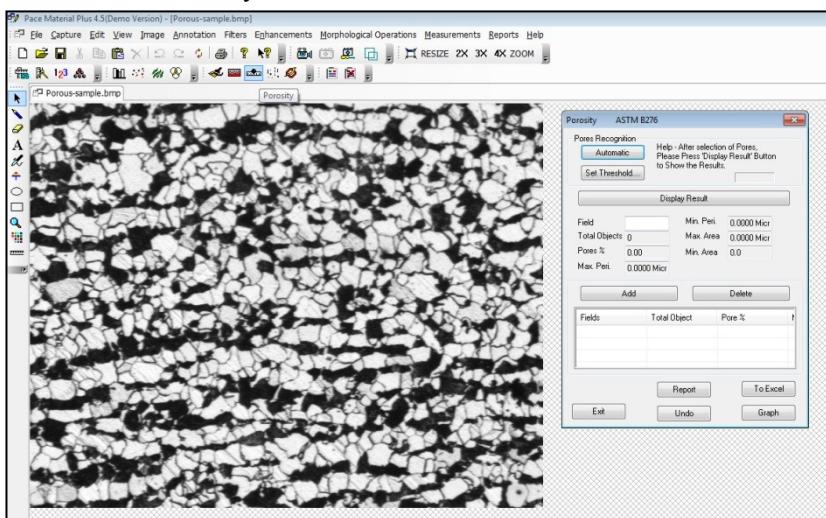


Porous sample Image

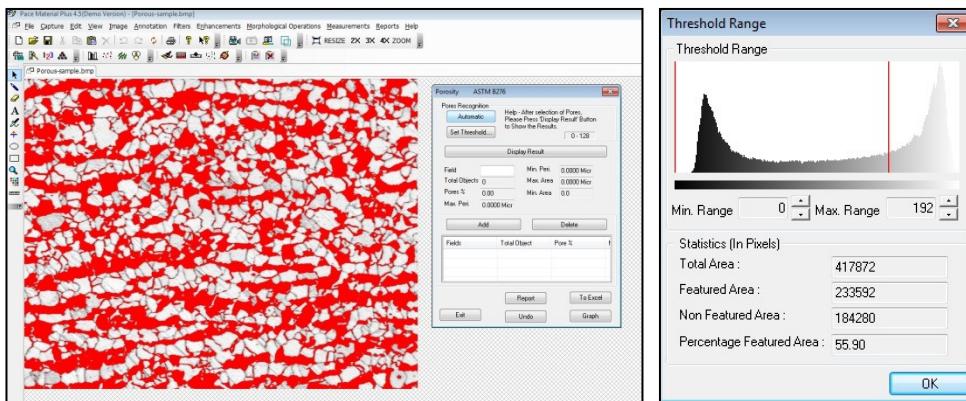
2. Select Calibration scale at bottom of the Window



3. Click on the Porosity icon either from the Toolbar or from the Menu-bar.



4. Click AUTOMATIC to have the software determine the pores. Click SET THRESHOLD to set the intensity range manually. Adjust the lines in the pop up window until all of the pores have been properly detected with the pseudo color. Press OK.



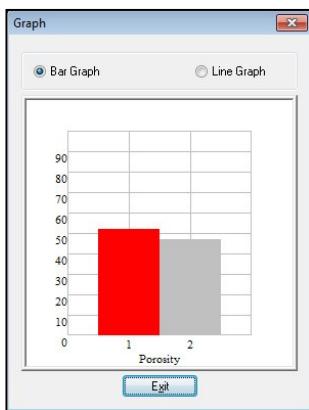
5. To display the porosity results, click on DISPLAY RESULT.

Display Result			
Field	Field 1	Min. Peri.	10.5263 Mic
Total Objects	354	Max. Area	610831.024
Pores %	52.52	Min. Area	6.9252 Micr
Max. Peri.	36007.0390		

6. Click on ADD to place data into grid.

Add	Delete
<input type="button" value="Fields"/>	
Field 1	354

7. To see a graphically representation of the data, click on GRAPH.



8. To save the report, click on REPORT.
9. A sample information window will appear. Fill the required information. Click on “Save Data For Report Tool”
10. Click on “TO EXCEL” to see the result in Excel.

