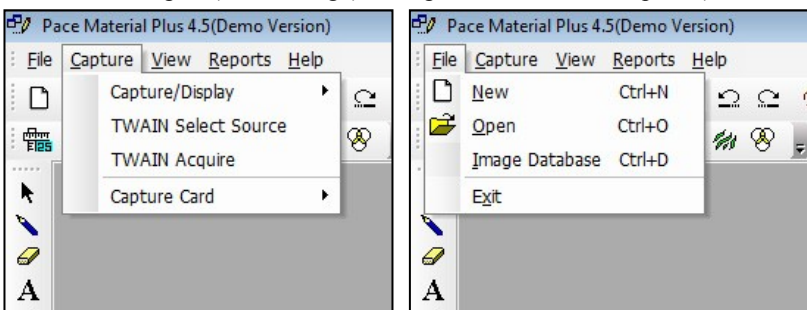**Pace TECHNOLOGIES**

Example: Nodularity

This module is designed to analyze spheroidal graphite (nodules) in cast iron. The nodules are separated from non-nodules on predefined spherodicity. Nodules acquire blue color and non-nodules a coded in red. Nodules form (designated by Roman numbers from I to VI) and size (designated by Arabic numbers 1 to 8) are reported along with the calculated nodules/sq mm.
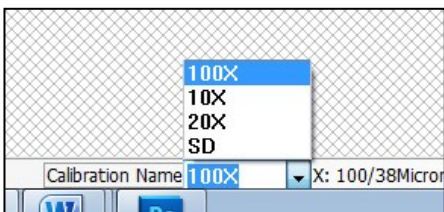
PROCEDURE:
1. Load the cast iron image for nodularity measurement.
2. Select the appropriate saved calibration scales from the drop down list at the bottom of the Window
3. Click on the Nodularity icon   either from the Toolbar or from the Menu-bar
4. Click on ANALYSIS and a new dialogue box for Roundness Limit is displayed. The present range for roundness highlights the nodules as blue and non-nodules with red. If the results are not satisfactory, move the lines until the nodules are separated from non-nodules. Click OK.
5. Click ADD to add additional data fields.
6. To display the measurements select NODULARIY, DIAMETER (1-8) or FORM (I-VI).
7. To show the range, click on RANGE (area, roundness, perimeter/area)
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. 10. Click on "TO EXCEL" to see the result in Excel.

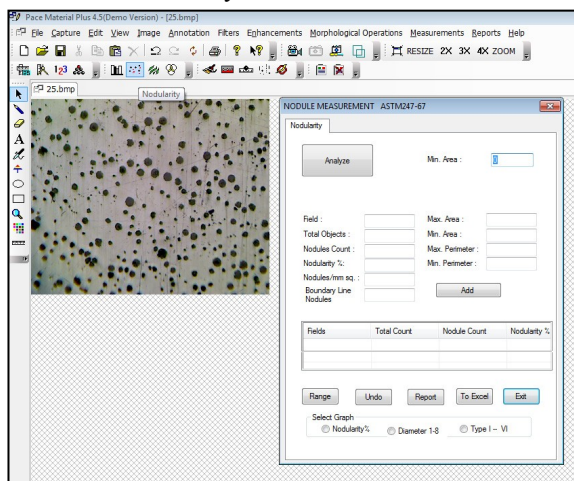EXAMPLE of Cast Iron Nodularity Measurement

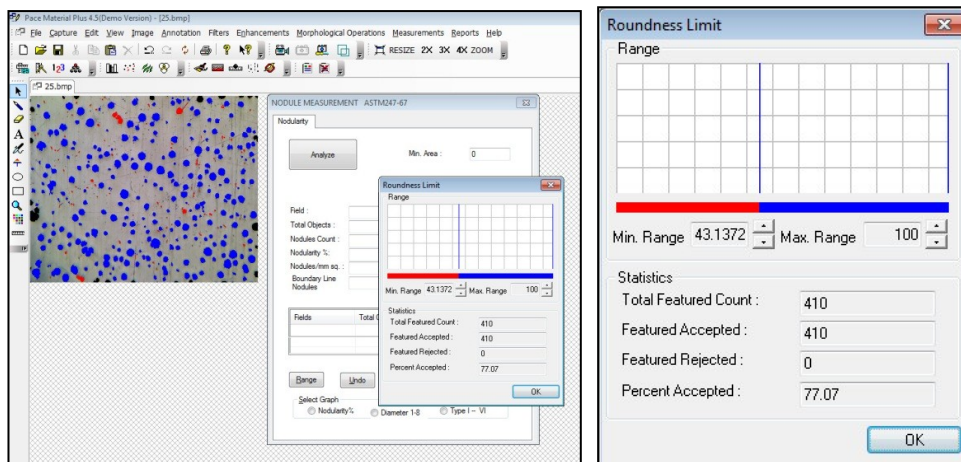1. File > Open (select image) or Capture > TWAIN Acquire (for live image)

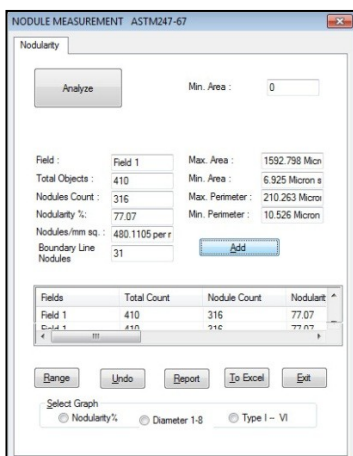2. Select Calibration scale at bottom of the Window

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

4. Click on ANALYSIS and a new dialogue box for Roundness Limit is displayed. The present range for roundness highlights the nodules as blue and non-nodules with red. If the results are not satisfactory, move the lines until the nodules are separated from non-nodules. Click OK.
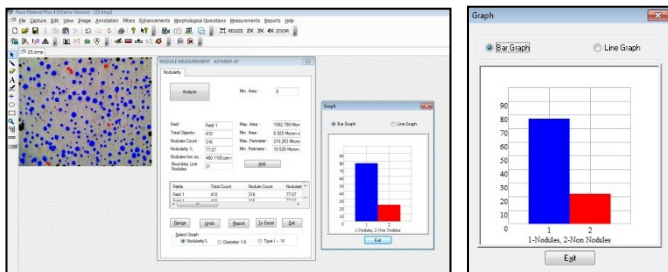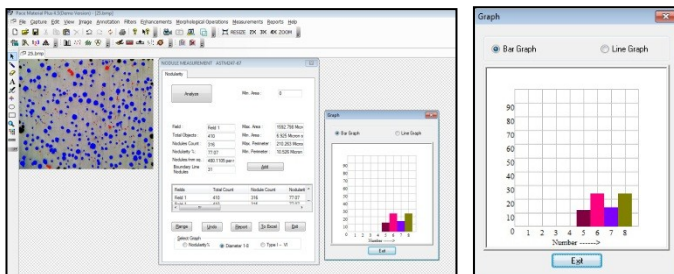

5. Click ADD to add additional data fields.

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6. To display the measurements select NODULARIY, DIAMETER (1-8) or FORM (I-VI).

Nodularity

Diameter (shape)

Type

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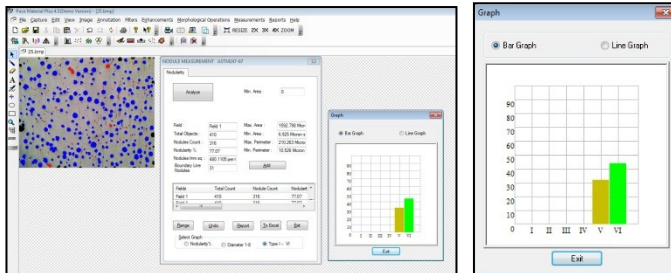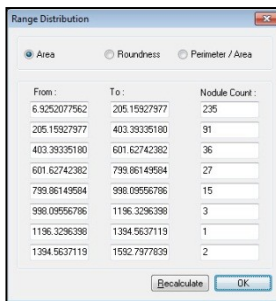
7. To show the range, click on RANGE (area, roundness, perimeter/area)

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.

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Nodularity

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