Cognex Designer Advanced – Section 6
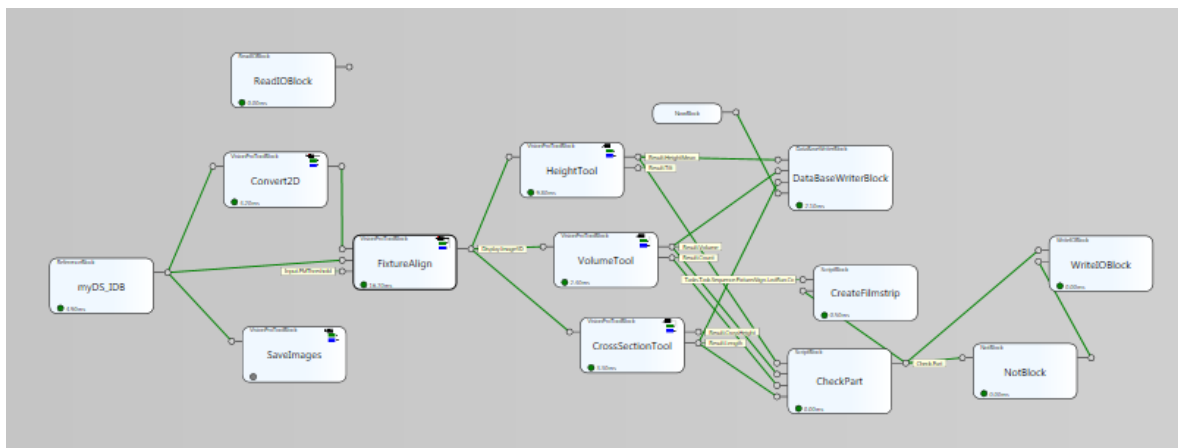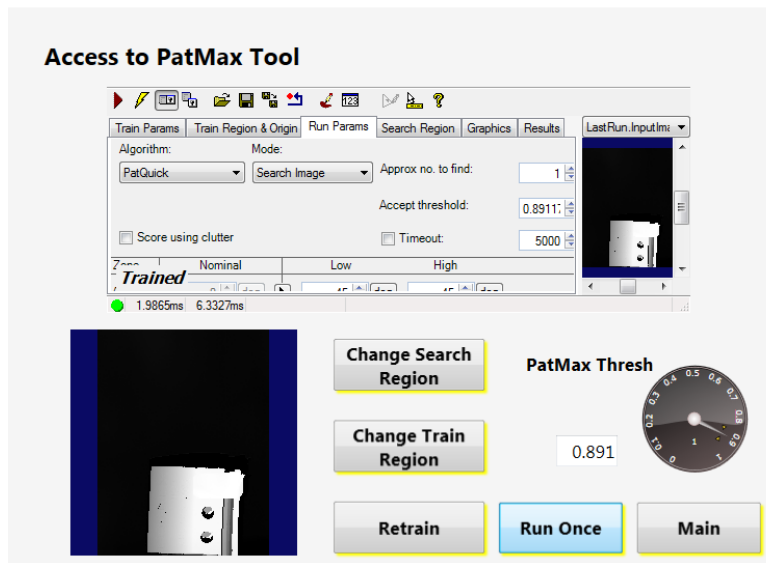**Plugins Lab**
Approximate Duration: 15 minutes

EXPECTED OUTCOMES:

- Learn about expandability of Cognex Designer
- Implement third party HMI to application

EXPECTED VISUAL RESULT:

OUTLINE OF LAB:

1. **Add third party HMI control to Application**
   a. **Add .DLLs to Cognex Designer root directory**
2. **Control Acceptance Threshold to PatMax**

Challenge: Think of other abilities that you would like to see in this product and let the instructor or your local sales person know.

Steps for the Lab:

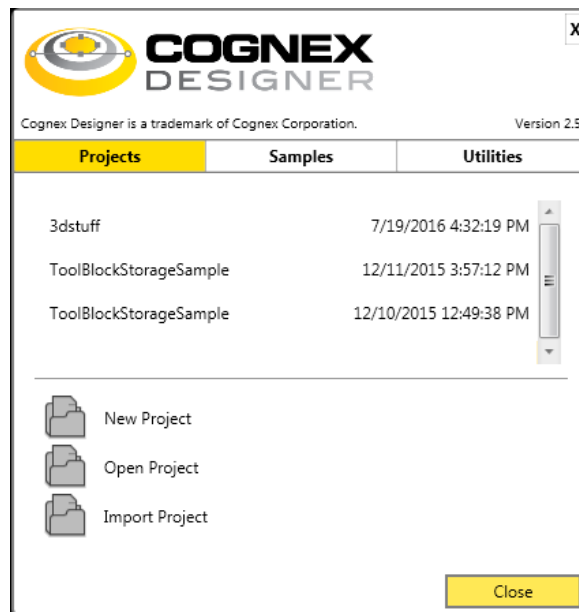1. **Add third party HMI control to Application**
   a. **Add .DLLs to Cognex Designer root directory**
      i. From the Student folder on the desktop, find the .DLLs for the Copeplex.Dashboarding.dll and the DIAL Test.dll and **copy** them from that folder to the root folder of Cognex Designer

Name	Date modified	Type	Size
Codeplex.Dashboarding.dll	7/11/2009 10:26 PM	Application extens...	279 KB
DIALTest.dll	6/17/2014 11:35 AM	Application extens...	10 KB

Default Path: C:\Program Files\Cognex\Designer\1.0\

      ii. Save your application, then restart Cognex Designer and open your application.

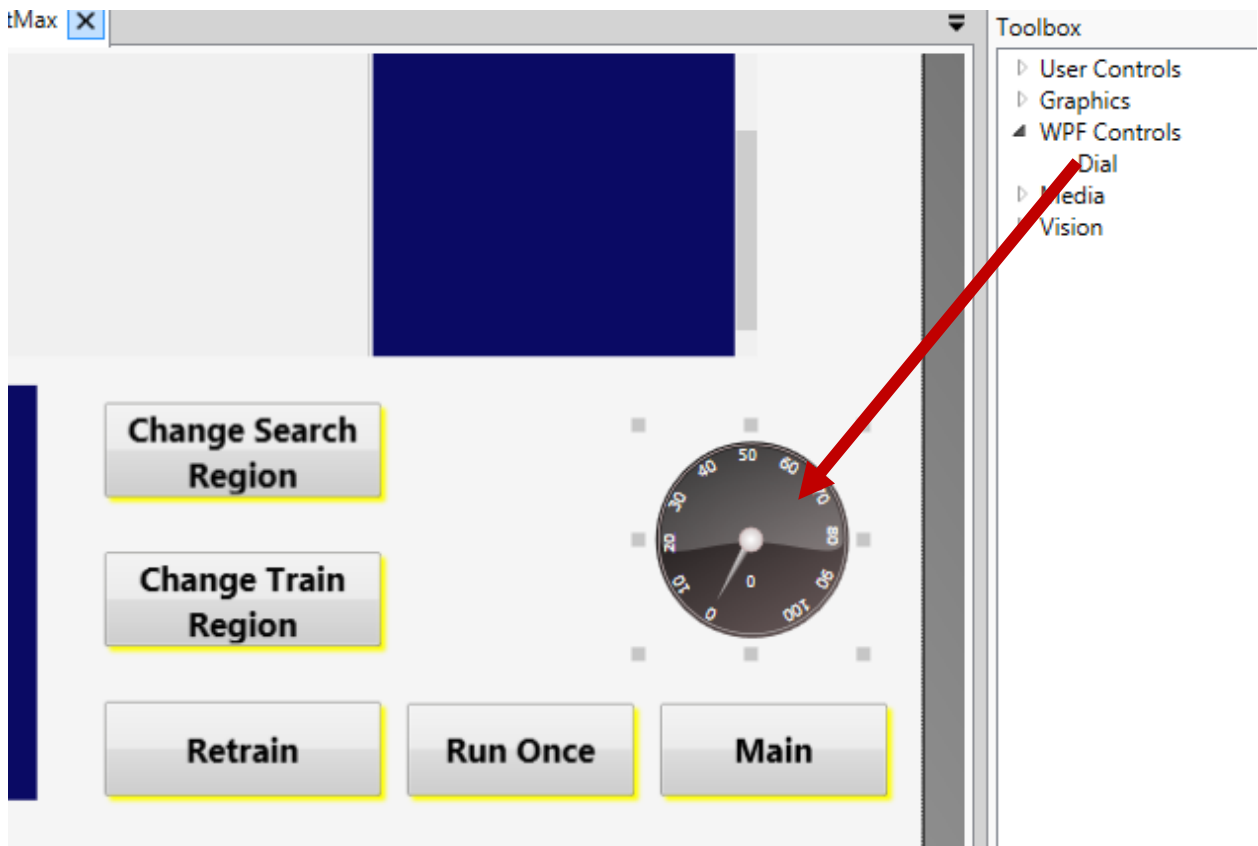   iii. Note that the toolbox for the HMI Pages now have a new directory called "WPF Controls"

iv. In the Tag Manager, create a new tag called "Input.PMThreshold" of type Double and set the Default Value to .5.
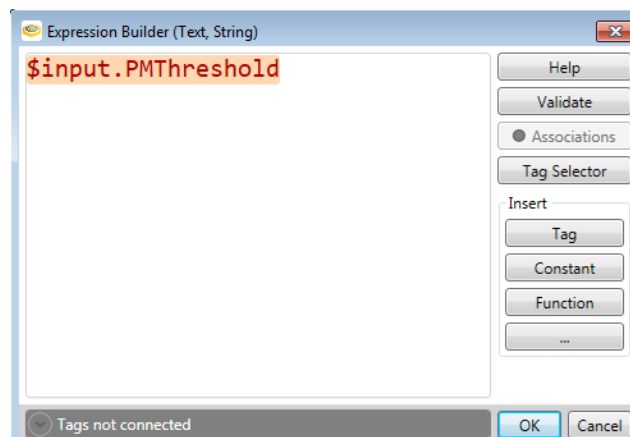
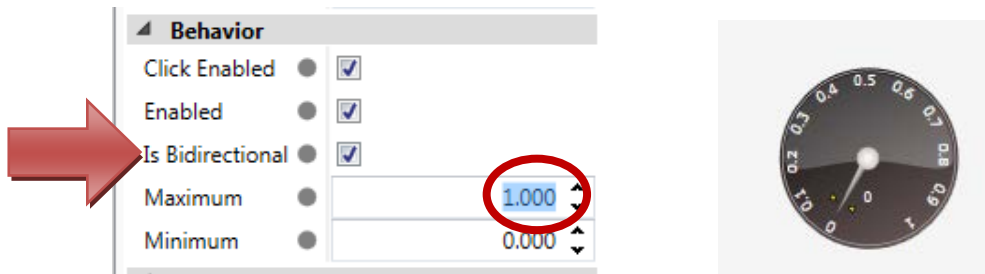| Input.PMThreshold			Double	0.5

v. Go to the PatMax Page and add the new dial to your page. You may have to move objects around a little to make room.
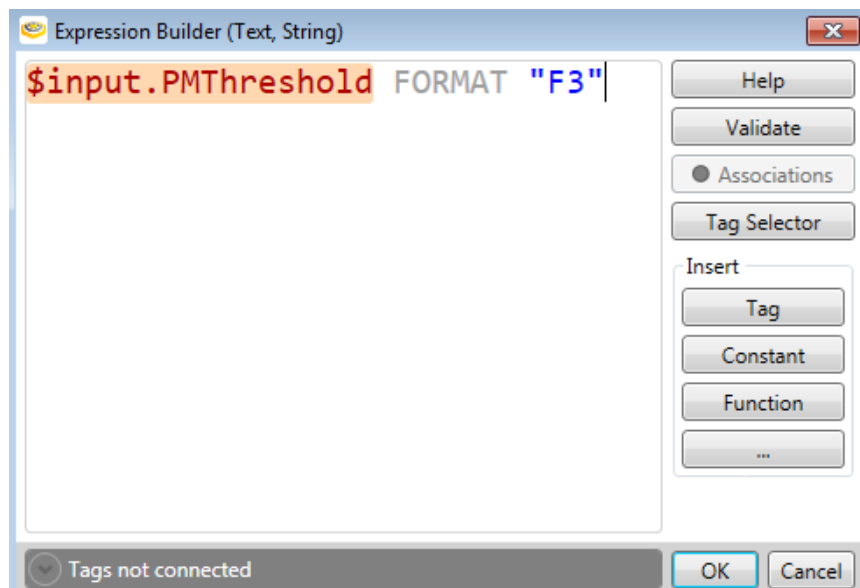

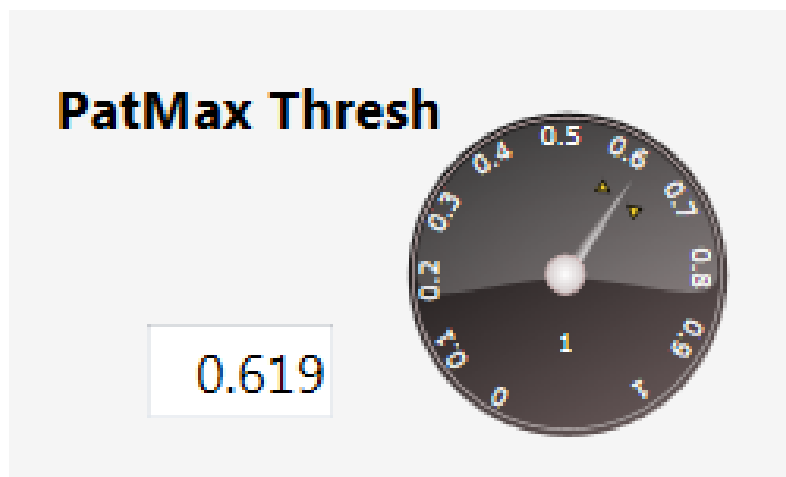**vi.** Attach $Input.PMThreshold to the Value of the dial in the Properties.

vii. Check the "isBiDirectional box" and set Maximum to 1

viii. Add Numeric Entry object to the PatMax Page and attach it's Value Property to $Input.PMThreshold.
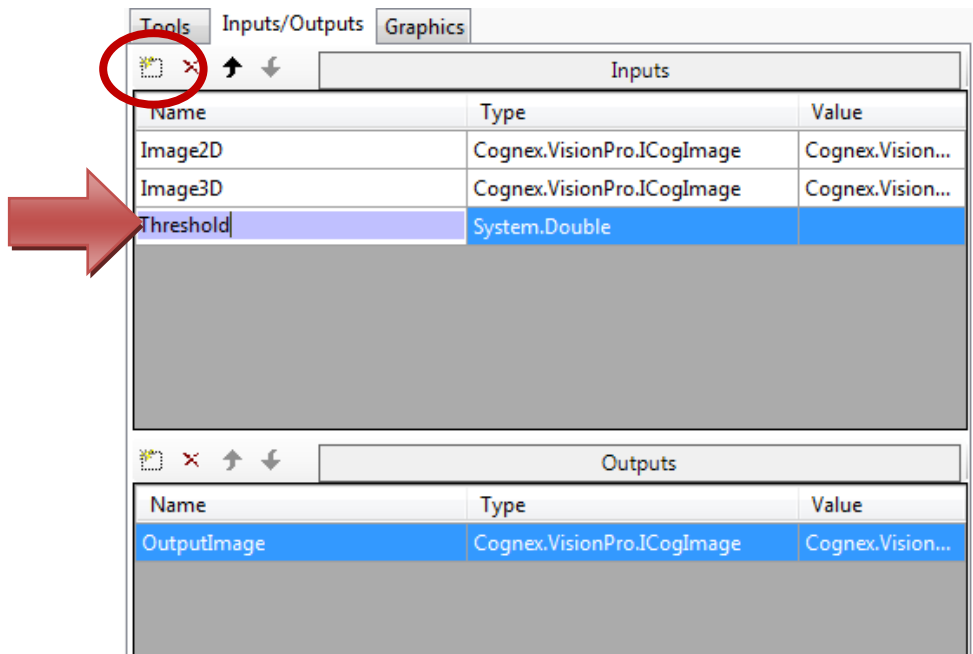

ix. Go into test mode and try to turn the knob and set numbers. Note that you can change the number by turning the dial or entering in numbers to the Numeric Entry Box.
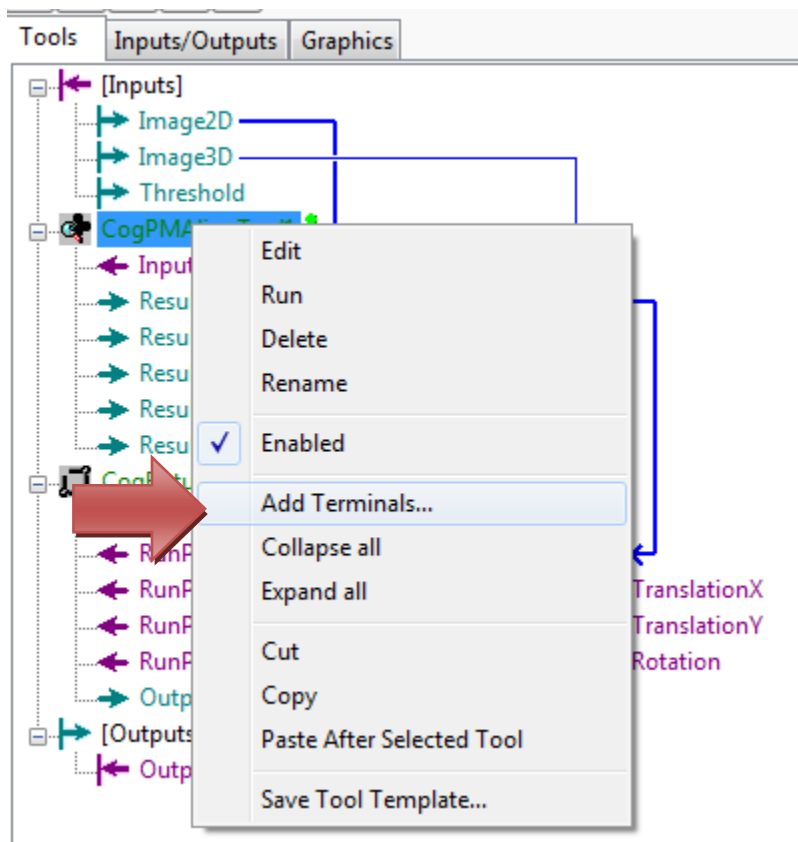
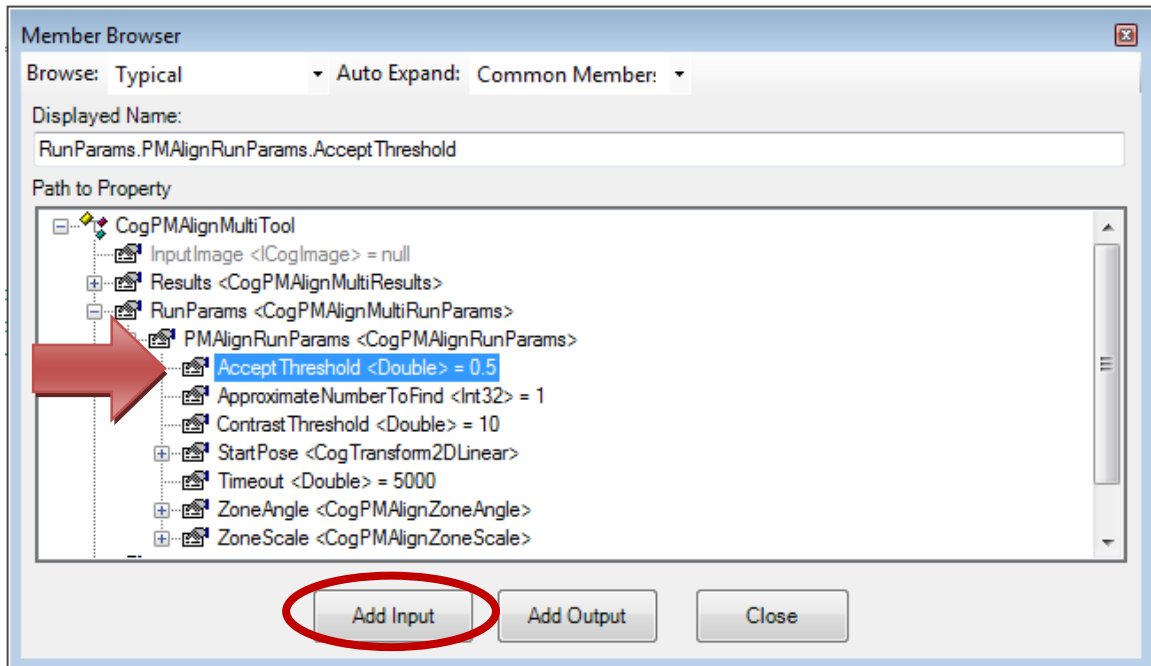## 2. Control Acceptance Threshold to PatMax

- Open the FixtureAlign ToolBlock in the Sequence and add an Input name "Threshold" of type Double
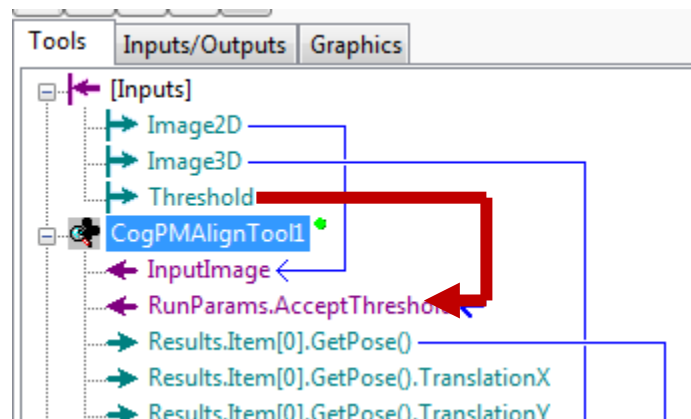

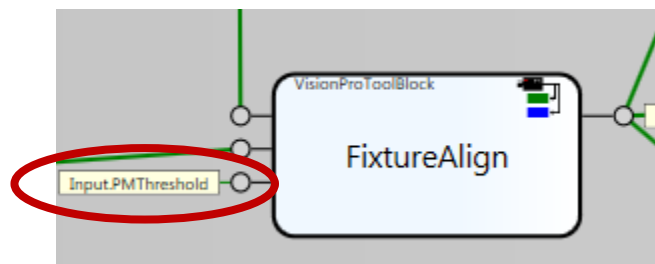- Go to the Tools Tab and right-Click on the PatMax tool to Add Terminals

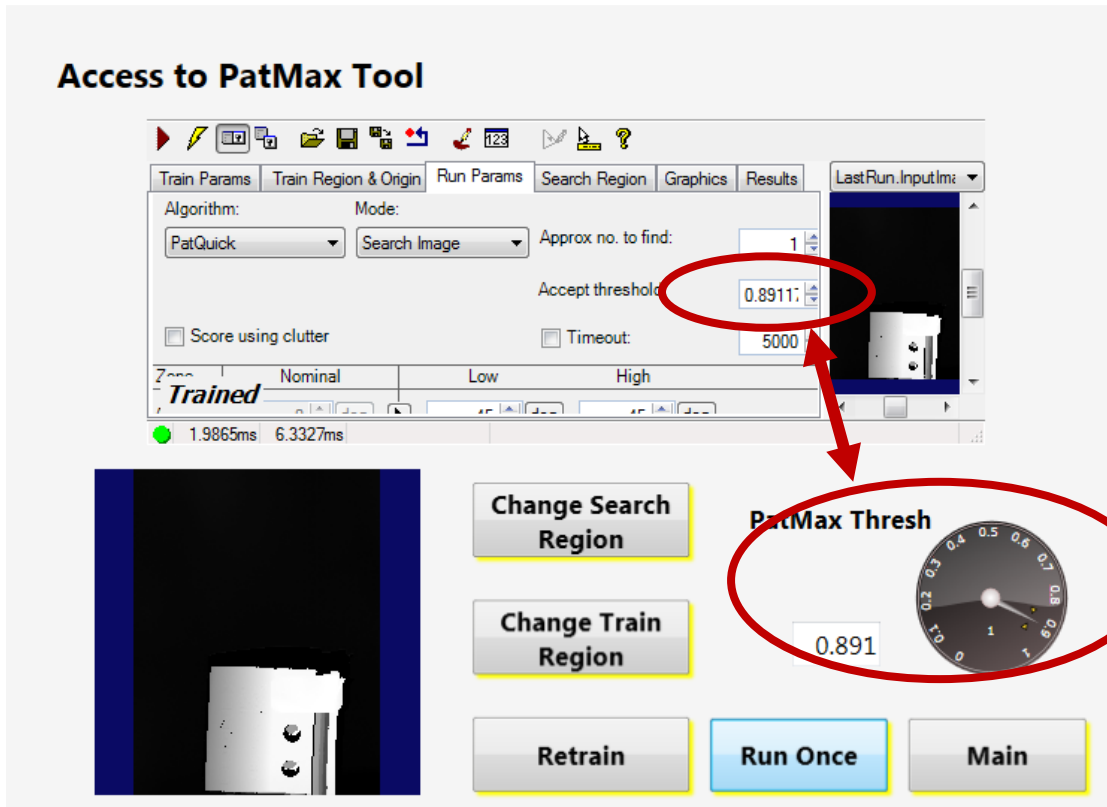- Drill down to the Threshold value and select Add Input

- Attach the newly created Threshold input terminal to the Threshold input pin of the ToolBlock.

- Close the ToolBlock and assign $Input.PMThreshold to the Threshold input pin on the ToolBlock

- Go into Test Mode and test out the functionality.

Access to PatMax Tool

Challenge: Think of other abilities that you would like to see in this product and let the instructor or your local sales person know.