

Instron Bluehill

 **INSTRON®**

1

Balance Load





Extension [mm]

.00122

Load [N]

1.7967

Transducer Settings

Load

Gain

Limits

Checks

Specimen Protect

Service

Transducer configuration:

Load

Calibrate

Balance

Full scale:

10.0000

N

Calibration type:

Automatic

Current state

Calibrated

(Restored) Fri Feb 02 11:12:24 2018

Done

Bluehill 3



Test



Method



Analysis



Admin



User



Help



Exit

Security off | Live machine | No test type | Sample: Closed | Method: Closed | Report: Closed



Load [N]
1.7967

 Test

Create Method

 Continue Sample

- Choose a recently used method or click **Browse...**
- Verify the information in the Preview window.
- Click **Next** to name the sample.

R:\CATTECH\Charac\MOR\METHOD FILES

Method name	Test type	Modified date
Cylinder, 0.5 in per min, 5mm span.im. flex	Flexure method	7/18/2017 12:54:34 PM
Quadrolobe, 0.5 in per min, 5mm span.im. flex	Flexure method	7/18/2017 12:56:30 PM
Quadrolobe, 0.5 in per min, 3mm span.im. flex	Flexure method	7/18/2017 12:57:53 PM
Cylinder, 0.5 in per min, 3mm span.im. flex	Flexure method	7/18/2017 12:56:55 PM

Report Template: MOR pdf report.i_rt

17-76040.is_flex* - Instron Bluehill

1Balance Load

2Zero extension

3Pause test

4Exclude specimen

Load [lbf]
.00000

Modulus of Rupture [psi]
- - - -

Modulus (Young's) [psi]
- - - -

Bluehill

Test

Method

Report

Admin

?

General

Sample

Specimen

Measurements

Calculations

Test Control

Start Test

Strain

Pre-Test

Test

End of Test

Data

Console

Workspace

Exports

Prompted Test

Set the control parameters for the test

The control mode and rate determine the frame movement. Data is captured during all ramps.

☒ Ramp 1

Control mode 1:
Flexure extension

Anvil speed:
0.50000

in/min

☐ Ramp 2

If a measurement is not available, go to [Measurements](#) to add it to the method. If the yield calculation is not available, go to [Calculations](#) to add it and enable "Perform calculation during test". To edit specimen information, go to [Specimen Properties](#).

<<

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Save As

Print

Security off | Live machine | Flexure | Sample: 17-76040* | Method: Cylinder, 0.5 in per min, 5mm ... | Report: MOR pdf report

3:55 PM
2/14/2018

17-76040.is_flex* - Instron Bluehill

1Balance Load

2Zero extension

3Pause test

4Exclude specimen

Load [lbf]

Modulus of Rupture [psi]

Modulus (Young's) [psi]

-0.00002

Bluehill

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General

Sample

Specimen

Properties

Notes

Number Inputs

Text Inputs

Choice Inputs

Measurements

Calculations

Test Control

Console

Workspace

Exports

Prompted Test

Set the specimen properties and the default values

Dimensions are used to calculate stress and strain. Specimen label is an option in the legend settings for a graph.

Specimen properties

Specimen label:

Geometry and default dimensions

Geometry:

Circular

Extrudate diameter:

0.68

mm

Final diameter:

1.27

mm

Fixture type

Fixture type:

3-point

Support span:

5.00000

mm

Specimen properties are available for [operator inputs](#), [results table 1](#), [defaults table](#), [prompted test](#), [exported results](#), [exported raw data](#).

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Save As

Print

Security off

Live machine

Flexure

Sample: 17-76040*

Method: Cylinder, 0.5 in per min, 5mm ...

Report: MOR.pdf report

3:55 PM
2/14/2018

Modulus (Young's) [psi]

The system uses the specified criteria to end the test and performs the specified end of test actions. All criteria operate independently and the first one that is satisfied stops the test.

40.00000

 End of test 4

Return

- ☐ Enable specimen protect
- ☐ Release pneumatic grips
- ☒ Play a wave file

💡 If a measurement is not available, go to [Measurements](#) to add it to the method. Set the threshold value for [specimen protect](#).

Cylinder, 0.5 in per min, 5mm ... - Instron Bluehill

 **INSTRON®**

1 Balance Load

2 Zero extension

3 Pause test

4 Exclude specimen



Load [lbf]
- - - -

Modulus of Rupture [psi]
- - - -

Modulus (Young's) [psi]
- - - -

Bluehill

Test

New Sample

Name the new sample

Step 2 of 2 - Edit the sample settings

a. Enter a name in the Sample name field.
b. To change where a sample is stored, click **Browse...**
c. Click **Next** to proceed with testing.

Sample name:

17-76040

Do not use these invalid characters \ / : * ? " < > |

Location:

C:\Users\cat_char\Desktop\Instron Data

To choose a different sample location, click **Browse...**

Flexure method:

Cylinder, 0.5 in per min, 5mm span.im_flex

To choose a different test method or method template, click **Back** to return to Step 1.

Next

Browse...

Back

17-76040.is_flex* - Instron Bluehill

1Balance Load

2Zero extension

3Pause test

4Exclude specimen

Load [lbf]

Modulus of Rupture [psi]

Modulus (Young's) [psi]

Bluehill

Test

Method

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Admin

Back

Next

Before Start

Specimen 2 of 25

Enter the following values before the start of the sample.

Midas number:
17-76040

Sample description:
Eurecat EM-7644

Run #:
xxx

G-test number:
G812

Extrudate Shape:
Cylinder

Extrudate diameter:
0.68 mm

Load Cell:
10N

Start

Stop

Return

Zero

Finish

Save

Save As

Print

Security off

Live machine

Flexure

Sample: 17-76040*

Method: Cylinder, 0.5 in per min, 5mm ...

Report: MOR pdf report

3:49 PM
2/14/2018

17-76040.is_flex* - Instron Bluehill

1Balance Load

2Zero extension

3Pause test

4Exclude specimen

Load [lbf]
-.40392

Modulus of Rupture [psi]
- - - -

Modulus (Young's) [psi]
- - - -

Bluehill

Test

Method

Report

Admin

?

Back

Next

Before Test

Specimen 1 of 25

Make sure the specimen is properly installed in the test machine.
Keep clear of the machine.
Press the Start button to start the test.

Start

Stop

Return

Zero

Finish

Save

Save As

Print

Security off | Live machine | Flexure | Sample: 17-76040* | Method: Cylinder, 0.5 in per min, 5mm ... | Report: MOR pdf report

3:51 PM

2/14/2018



1

Balance Load

2

Zero extension

3

Pause test

4

Exclude specimen

Load [lbf]
-0.00001Modulus of Rupture [psi]
4911.6Modulus (Young's) [psi]
1.1E+006

Bluehill



Test



Method



Report



Admin



Back

Next



Start



Stop



Return



Zero



Finish



Save



Save As

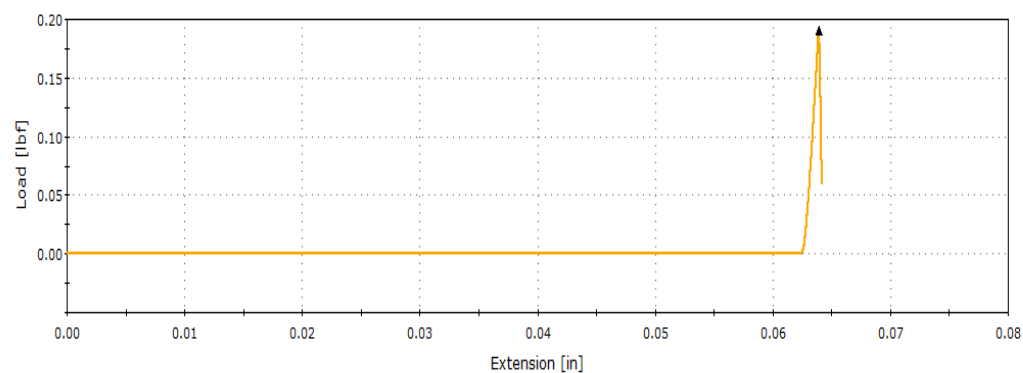


Print

1
2

Graph 1

Load vs Extension



Results 1

	Maximum Load [lbf]	Modulus of Rupture [psi]	Modulus (Young's) [psi]
1	0.19083	4910	1070000
Mean	0.19083	4910	1070000
Standard ...	-----	-----	-----

Operator inputs

2 - Untested

Extrudate diameter: 0.68 mm



1 Balance Load

2 Zero extension

3 Pause test

4 Exclude specimen

Load [lbf]
-.00000Modulus of Rupture [psi]
6711.3Modulus (Young's) [psi]
1.1E+006

Bluehill

Test

Method

Report

Admin



Back

Next

Start

Stop

Return

Zero

Finish

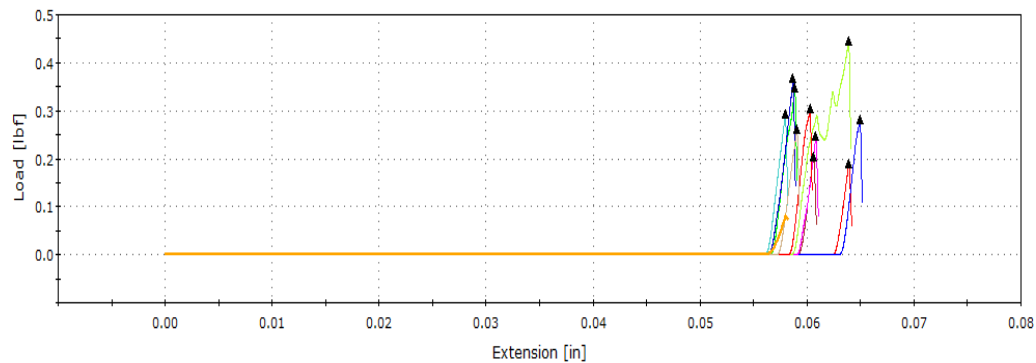
Save

Save As

Print

Graph 1

Load vs Extension



Specimen #

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

Operator inputs

11 - Untested

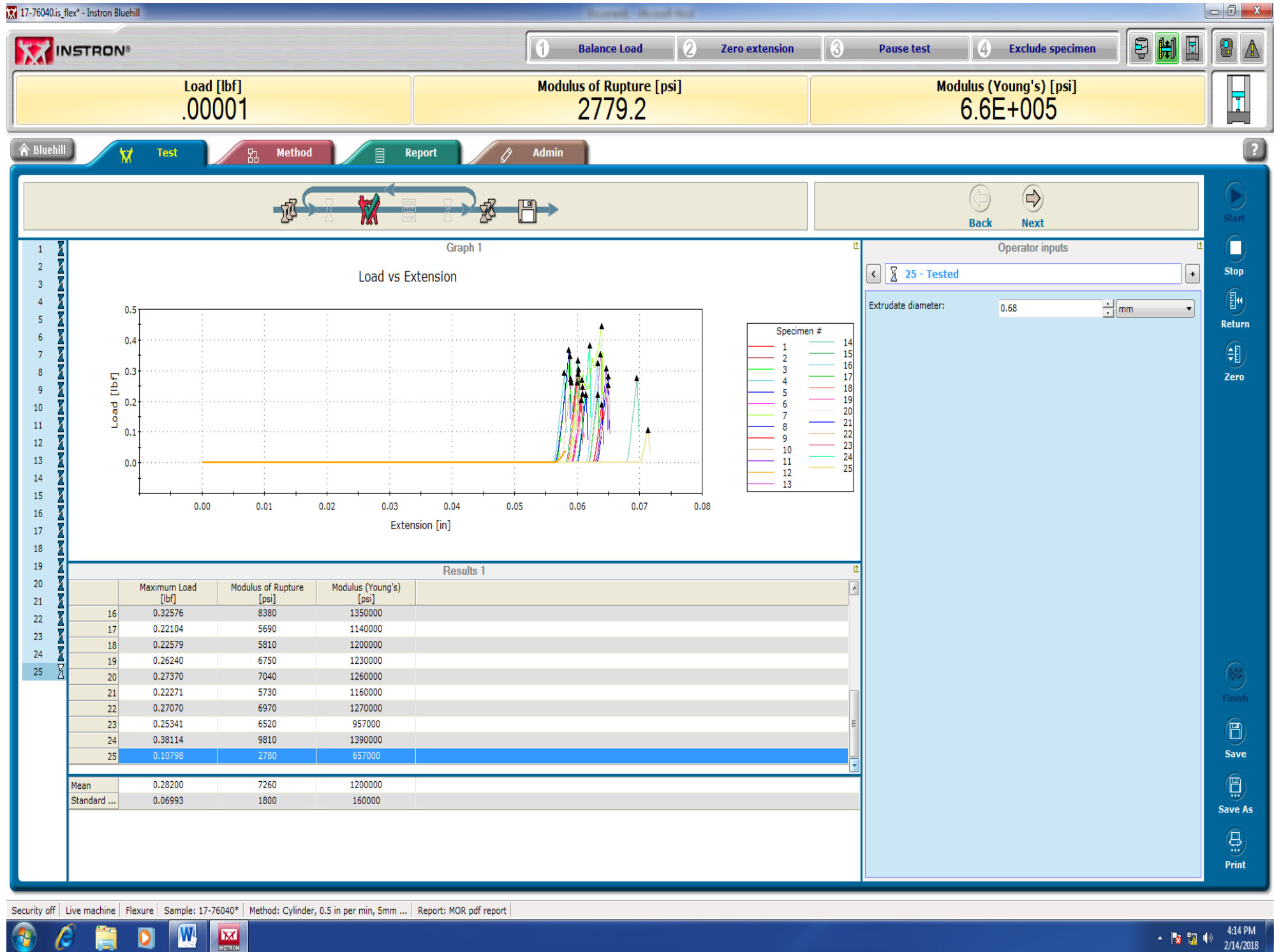
Extrudate diameter:

0.68

mm

Results 1

	Maximum Load [lbf]	Modulus of Rupture [psi]	Modulus (Young's) [psi]
1	0.19083	4910	1070000
2	0.20421	5260	1190000
3	0.34918	8990	1210000
4	0.29403	7570	1200000
5	0.28258	7270	1270000
6	0.24615	6340	1180000
7	0.44525	11500	1050000
8	0.36712	9450	1300000
9	0.30364	7820	1330000
10	0.26075	6710	1110000
Mean	0.29437	7580	1190000
Standard ...	0.07717	1990	94500



18-9863_1.is_flex* - Instron Bluehill



1Balance Load

2Zero extension

3Pause test

4Exclude specimen



Load [lbf]
.00000

Modulus of Rupture [psi]
12.518

Modulus (Young's) [psi]
46107



Bluehill

Test

Method

Report

Admin

?



Back

Next

At Finish

Specimen 2 of 25

Are you really leaving me? Click "next" to finish sample and save report. Click "back" to continue testing.

Start

Stop

Return

Zero

Finish

Save

Save As

Print

Security off

Live machine

Flexure

Sample: 18-9863_1*

Method: Cylinder, 0.5 in per min, 5mm ...

Report: MOR pdf report



2:39 PM

2/12/2018



1 Balance Load

2 Zero extension

3 Pause test

4 Exclude specimen

Load [lbf]
.00000Modulus of Rupture [psi]
- - - -Modulus (Young's) [psi]
- - - -

Bluehill



Test



Method



Report



Admin



Back

Next

Finishing

Specimen 25 of 25

You can now finish this sample.

Click this button to finish the sample and save the sample file.

If you want to continue testing more specimens, click this button .

Start another new sample?



Do you want to start another new sample using the same set of test parameters?

Yes

No

Help

Start

Stop

Return

Zero

Finish

Save

Save As

Print

