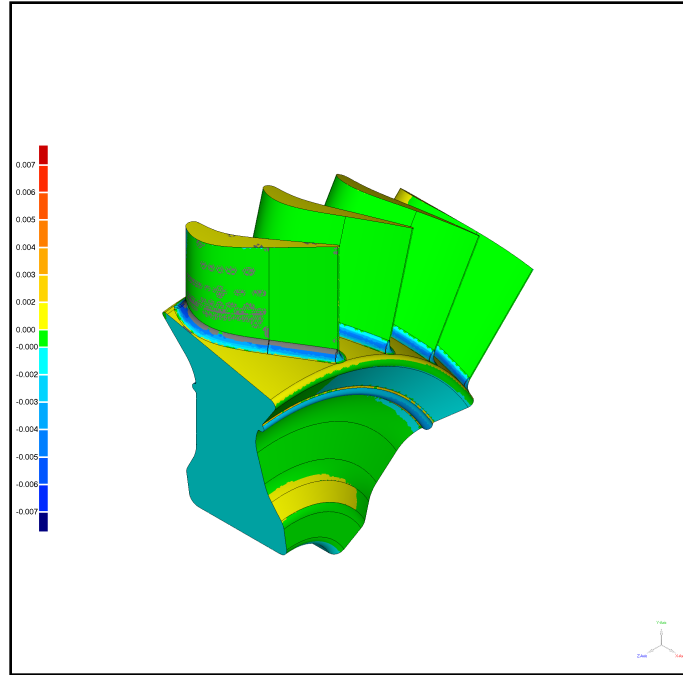


Qualify Report

Date Inspected: 4/23/2009
Date Generated: 4/23/2009, 10:02 am



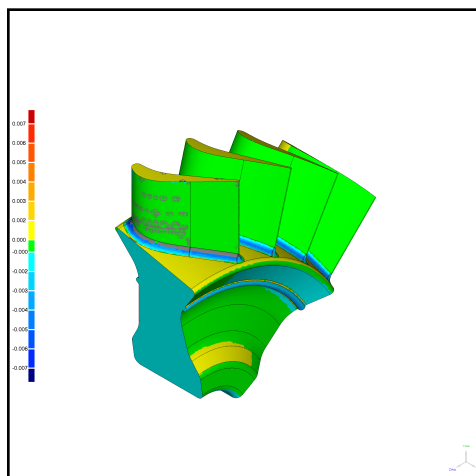
Part: ref_model
Test: Blade_Scan

3D Comparison Results

| | |
|--------------------|------------|
| Reference Model | ref_model |
| Test Model | Blade_Scan |
| No. of Data Points | 84152 |

| | |
|----------------|--------------|
| Tolerance Type | 3D Deviation |
| Units | in |
| Max. Critical | 0.007 |
| Max. Nominal | 0.000 |
| Min. Nominal | -0.000 |
| Min. Critical | -0.007 |

| | |
|--------------------|---------------|
| Deviation | in |
| Max. Upper Dev. | 0.007 |
| Max. Lower Dev. | -0.007 |
| Average Deviation | 0.000 /-0.001 |
| Standard Deviation | 0.001 |



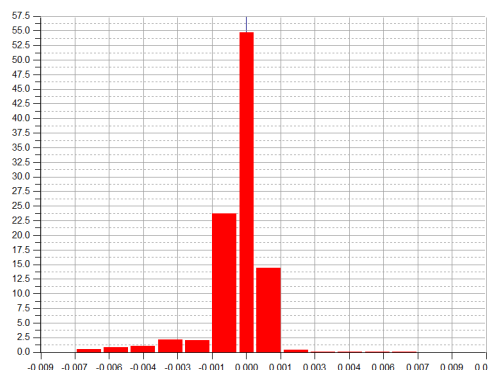
Percentage Deviations

| >=Min | <Max | # Points | % |
|--------|--------|----------|--------|
| -0.007 | -0.006 | 439 | 0.522 |
| -0.006 | -0.005 | 721 | 0.857 |
| -0.005 | -0.004 | 913 | 1.085 |
| -0.004 | -0.003 | 1838 | 2.184 |
| -0.003 | -0.002 | 1685 | 2.002 |
| -0.002 | -0.000 | 20000 | 23.767 |
| -0.000 | 0.000 | 46062 | 54.737 |
| 0.000 | 0.002 | 12142 | 14.429 |
| 0.002 | 0.003 | 284 | 0.337 |
| 0.003 | 0.004 | 45 | 0.053 |
| 0.004 | 0.005 | 1 | 0.001 |
| 0.005 | 0.006 | 16 | 0.019 |
| 0.006 | 0.007 | 5 | 0.006 |

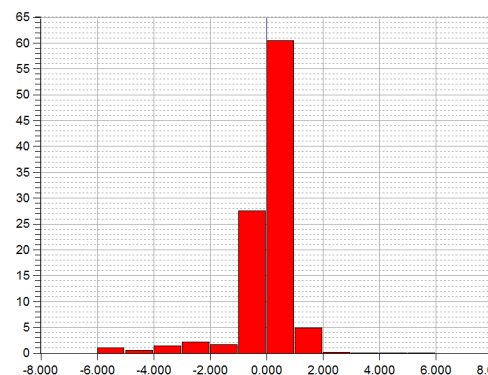
| | | |
|-----------------------|---|-------|
| Out of Upper Critical | 0 | 0.000 |
| Out of Lower Critical | 1 | 0.001 |

Standard Deviations

| Distribution (+/-) | # Points | % |
|--------------------|----------|--------|
| -6 * Std. Dev. | 853 | 1.014 |
| -5 * Std. Dev. | 502 | 0.597 |
| -4 * Std. Dev. | 1170 | 1.390 |
| -3 * Std. Dev. | 1836 | 2.182 |
| -2 * Std. Dev. | 1452 | 1.725 |
| -1 * Std. Dev. | 23164 | 27.526 |
| 1 * Std. Dev. | 50892 | 60.476 |
| 2 * Std. Dev. | 4074 | 4.841 |
| 3 * Std. Dev. | 145 | 0.172 |
| 4 * Std. Dev. | 42 | 0.050 |
| 5 * Std. Dev. | 1 | 0.001 |
| 6 * Std. Dev. | 21 | 0.025 |



Deviation Distribution



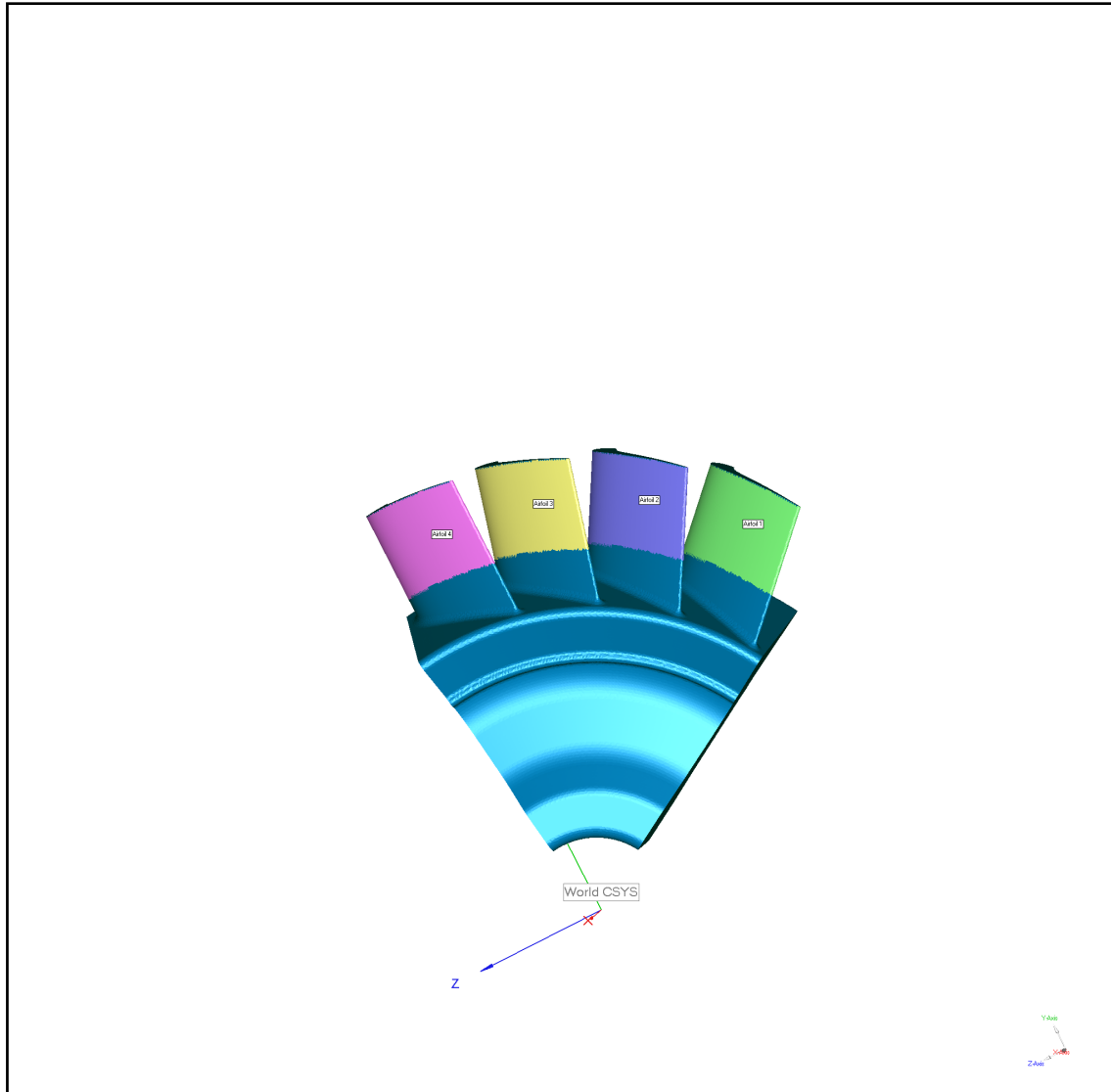
Standard Deviations

Locations: Upper and Lower Deviations

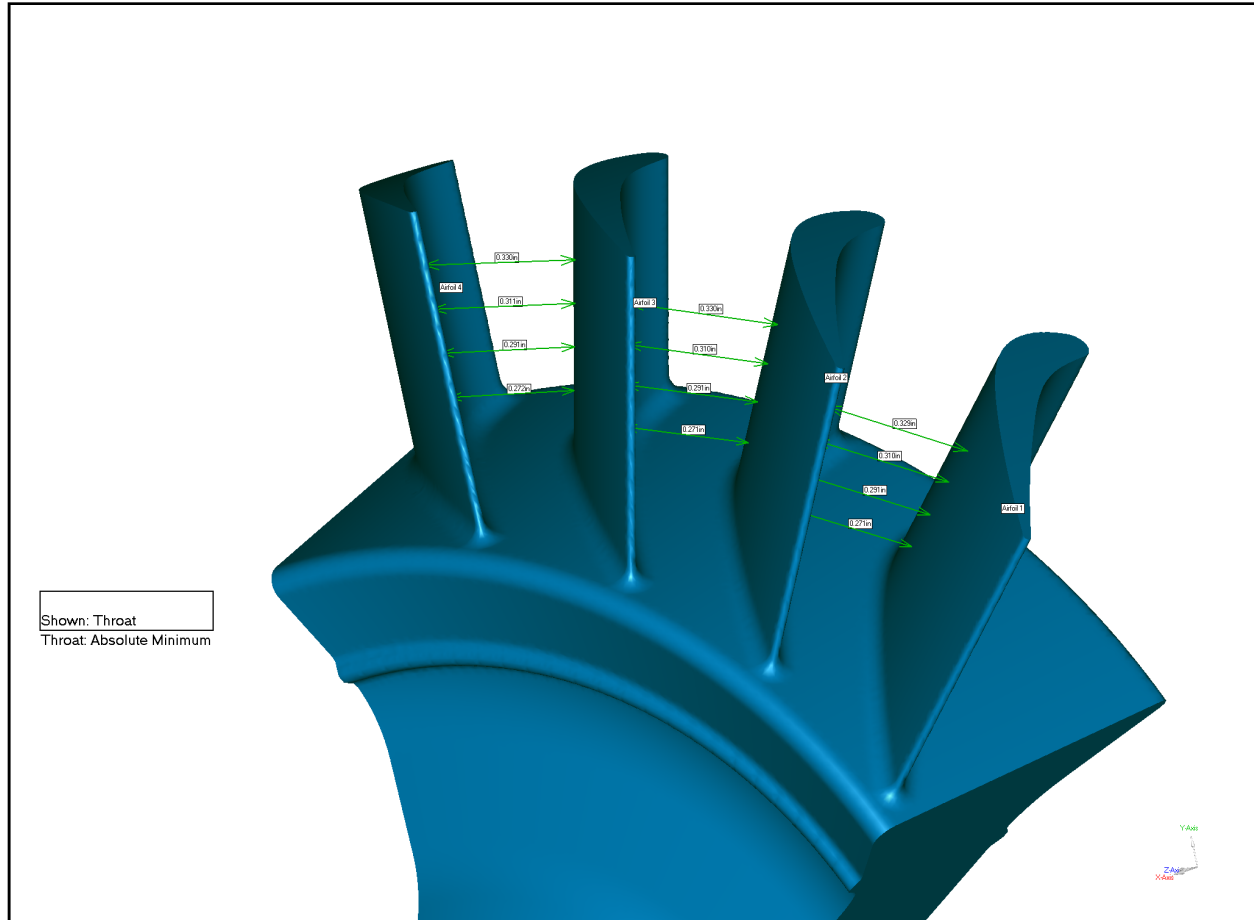
Units:in

| Name | Dev | Status | Upper Tol | Lower Tol | Ref X | Ref Y | Ref Z | Radius | Dev X | Dev Y | Dev Z | Measured X | Measured Y | Measured Z |
|------------|--------|--------|-----------|-----------|--------|-------|--------|--------|--------|--------|--------|------------|------------|------------|
| Lower Dev. | -0.007 | | | | -0.384 | 1.535 | -0.819 | n/a | 0.002 | -0.004 | 0.006 | -0.382 | 1.532 | -0.813 |
| Upper Dev. | 0.007 | | | | -0.090 | 1.672 | -0.007 | n/a | -0.004 | 0.000 | -0.006 | -0.094 | 1.672 | -0.012 |

Multiple Airfoil Views: Multiple Airfoil Full View



Multiple Airfoil Views: Throat & Pitch Analysis 1

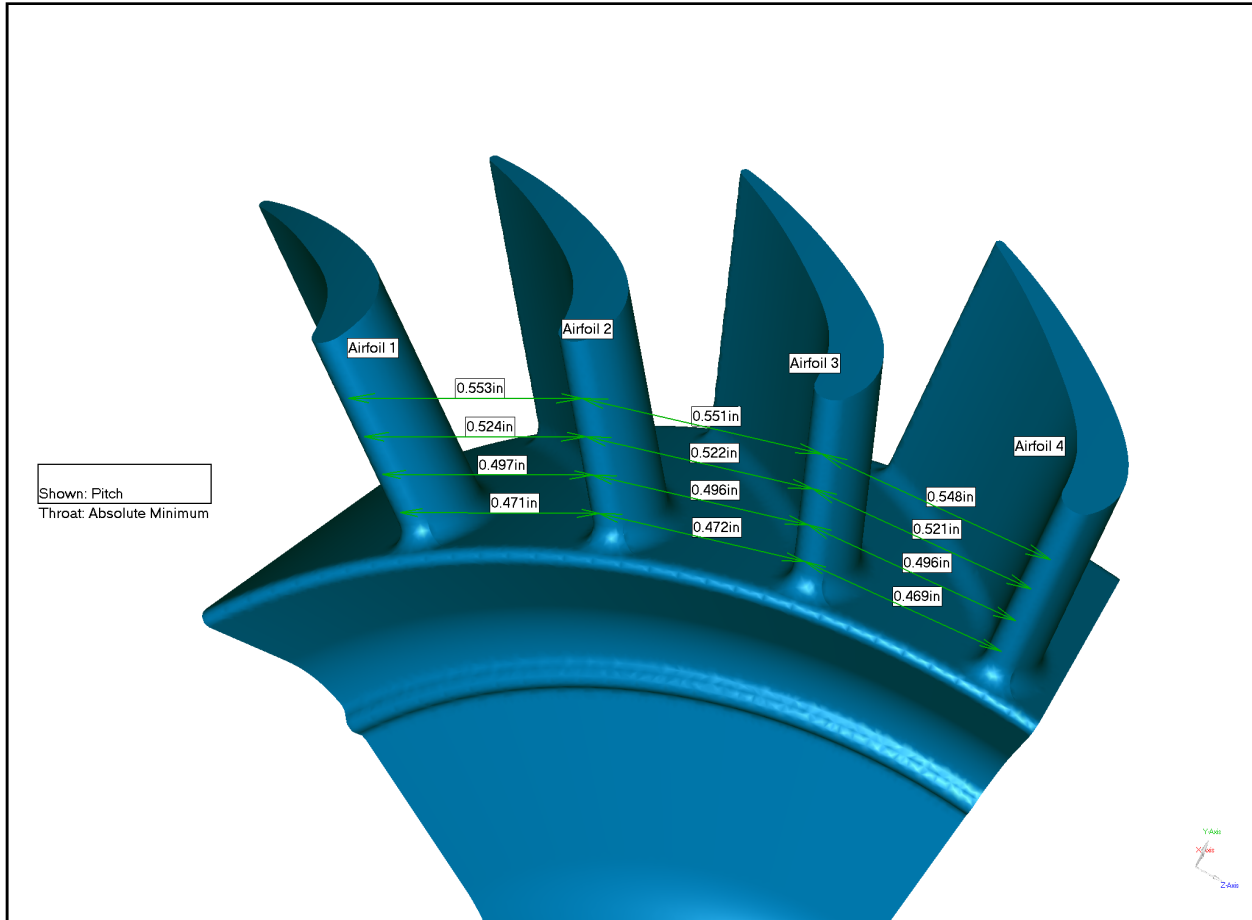


Units:in

CSYS: World CSYS

| Airfoils | Status | Height | PNom | PMeas | PUpperTol | PLowerTol | PDev | TNom | TMeas | TUpperTol | TLowerTol | TDev |
|-----------------------|--------|----------|----------|----------|-----------|-----------|-----------|----------|----------|-----------|-----------|-----------|
| Airfoil 1 - Airfoil 2 | PASS | 1.800 in | 0.471 in | 0.471 in | 0.010 in | -0.010 in | -0.001 in | 0.272 in | 0.272 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 2 - Airfoil 3 | PASS | 1.800 in | 0.471 in | 0.472 in | 0.010 in | -0.010 in | 0.001 in | 0.272 in | 0.271 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 3 - Airfoil 4 | PASS | 1.800 in | 0.471 in | 0.469 in | 0.010 in | -0.010 in | -0.002 in | 0.271 in | 0.271 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 1 - Airfoil 2 | PASS | 1.900 in | 0.497 in | 0.497 in | 0.010 in | -0.010 in | -0.001 in | 0.292 in | 0.291 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 2 - Airfoil 3 | PASS | 1.900 in | 0.497 in | 0.496 in | 0.010 in | -0.010 in | -0.001 in | 0.291 in | 0.291 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 3 - Airfoil 4 | PASS | 1.900 in | 0.497 in | 0.496 in | 0.010 in | -0.010 in | -0.001 in | 0.291 in | 0.291 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 1 - Airfoil 2 | PASS | 2.000 in | 0.523 in | 0.524 in | 0.010 in | -0.010 in | 0.001 in | 0.311 in | 0.311 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 2 - Airfoil 3 | PASS | 2.000 in | 0.523 in | 0.522 in | 0.010 in | -0.010 in | -0.001 in | 0.311 in | 0.310 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 3 - Airfoil 4 | PASS | 2.000 in | 0.523 in | 0.521 in | 0.010 in | -0.010 in | -0.001 in | 0.310 in | 0.310 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 1 - Airfoil 2 | PASS | 2.100 in | 0.550 in | 0.553 in | 0.010 in | -0.010 in | 0.003 in | 0.330 in | 0.330 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 2 - Airfoil 3 | PASS | 2.100 in | 0.549 in | 0.551 in | 0.010 in | -0.010 in | 0.002 in | 0.330 in | 0.330 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 3 - Airfoil 4 | PASS | 2.100 in | 0.549 in | 0.548 in | 0.010 in | -0.010 in | -0.001 in | 0.329 in | 0.329 in | 0.010 in | -0.010 in | -0.000 in |

Multiple Airfoil Views: Throat & Pitch Analysis 2



Units:in

CSYS: World CSYS

| Airfoils | Status | Height | PNom | PMeas | PUpperTol | PLowerTol | PDev | TNom | TMeas | TUpperTol | TLowerTol | TDev |
|-----------------------|--------|----------|----------|----------|-----------|-----------|-----------|----------|----------|-----------|-----------|-----------|
| Airfoil 1 - Airfoil 2 | PASS | 1.800 in | 0.471 in | 0.471 in | 0.010 in | -0.010 in | -0.001 in | 0.272 in | 0.272 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 2 - Airfoil 3 | PASS | 1.800 in | 0.471 in | 0.472 in | 0.010 in | -0.010 in | 0.001 in | 0.272 in | 0.271 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 3 - Airfoil 4 | PASS | 1.800 in | 0.471 in | 0.469 in | 0.010 in | -0.010 in | -0.002 in | 0.271 in | 0.271 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 1 - Airfoil 2 | PASS | 1.900 in | 0.497 in | 0.497 in | 0.010 in | -0.010 in | -0.001 in | 0.292 in | 0.291 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 2 - Airfoil 3 | PASS | 1.900 in | 0.497 in | 0.496 in | 0.010 in | -0.010 in | -0.001 in | 0.291 in | 0.291 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 3 - Airfoil 4 | PASS | 1.900 in | 0.497 in | 0.496 in | 0.010 in | -0.010 in | -0.001 in | 0.291 in | 0.291 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 1 - Airfoil 2 | PASS | 2.000 in | 0.523 in | 0.524 in | 0.010 in | -0.010 in | 0.001 in | 0.311 in | 0.311 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 2 - Airfoil 3 | PASS | 2.000 in | 0.523 in | 0.522 in | 0.010 in | -0.010 in | -0.001 in | 0.311 in | 0.310 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 3 - Airfoil 4 | PASS | 2.000 in | 0.523 in | 0.521 in | 0.010 in | -0.010 in | -0.001 in | 0.310 in | 0.310 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 1 - Airfoil 2 | PASS | 2.100 in | 0.550 in | 0.553 in | 0.010 in | -0.010 in | 0.003 in | 0.330 in | 0.330 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 2 - Airfoil 3 | PASS | 2.100 in | 0.549 in | 0.551 in | 0.010 in | -0.010 in | 0.002 in | 0.330 in | 0.330 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 3 - Airfoil 4 | PASS | 2.100 in | 0.549 in | 0.548 in | 0.010 in | -0.010 in | -0.001 in | 0.329 in | 0.329 in | 0.010 in | -0.010 in | -0.000 in |

Multiple Airfoil Views: All

Units:in

| Airfoils | Status | Height | PNom | PMeas | PUpperTol | PLowerTol | PDev | TNom | TMeas | TUpperTol | TLowerTol | TDev |
|-----------------------|--------|----------|----------|----------|-----------|-----------|-----------|----------|----------|-----------|-----------|-----------|
| Airfoil 1 - Airfoil 2 | PASS | 1.800 in | 0.471 in | 0.471 in | 0.010 in | -0.010 in | -0.001 in | 0.272 in | 0.272 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 1 - Airfoil 2 | PASS | 2.000 in | 0.523 in | 0.524 in | 0.010 in | -0.010 in | 0.001 in | 0.311 in | 0.311 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 1 - Airfoil 2 | PASS | 2.100 in | 0.550 in | 0.553 in | 0.010 in | -0.010 in | 0.003 in | 0.330 in | 0.330 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 1 - Airfoil 2 | PASS | 2.000 in | 0.523 in | 0.524 in | 0.010 in | -0.010 in | 0.001 in | 0.311 in | 0.311 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 1 - Airfoil 2 | PASS | 2.100 in | 0.550 in | 0.553 in | 0.010 in | -0.010 in | 0.003 in | 0.330 in | 0.330 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 1 - Airfoil 2 | PASS | 1.800 in | 0.471 in | 0.471 in | 0.010 in | -0.010 in | -0.001 in | 0.272 in | 0.272 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 1 - Airfoil 2 | PASS | 1.900 in | 0.497 in | 0.497 in | 0.010 in | -0.010 in | -0.001 in | 0.292 in | 0.291 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 2 - Airfoil 3 | PASS | 1.800 in | 0.471 in | 0.472 in | 0.010 in | -0.010 in | 0.001 in | 0.272 in | 0.271 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 2 - Airfoil 3 | PASS | 2.000 in | 0.523 in | 0.522 in | 0.010 in | -0.010 in | -0.001 in | 0.311 in | 0.310 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 2 - Airfoil 3 | PASS | 1.800 in | 0.471 in | 0.472 in | 0.010 in | -0.010 in | 0.001 in | 0.272 in | 0.271 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 2 - Airfoil 3 | PASS | 1.900 in | 0.497 in | 0.496 in | 0.010 in | -0.010 in | -0.001 in | 0.291 in | 0.291 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 2 - Airfoil 3 | PASS | 2.100 in | 0.549 in | 0.551 in | 0.010 in | -0.010 in | 0.002 in | 0.330 in | 0.330 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 2 - Airfoil 3 | PASS | 2.000 in | 0.523 in | 0.522 in | 0.010 in | -0.010 in | -0.001 in | 0.311 in | 0.310 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 2 - Airfoil 3 | PASS | 1.900 in | 0.497 in | 0.496 in | 0.010 in | -0.010 in | -0.001 in | 0.291 in | 0.291 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 2 - Airfoil 3 | PASS | 2.100 in | 0.549 in | 0.551 in | 0.010 in | -0.010 in | 0.002 in | 0.330 in | 0.330 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 3 - Airfoil 4 | PASS | 2.000 in | 0.523 in | 0.521 in | 0.010 in | -0.010 in | -0.001 in | 0.310 in | 0.310 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 3 - Airfoil 4 | PASS | 2.100 in | 0.549 in | 0.548 in | 0.010 in | -0.010 in | -0.001 in | 0.329 in | 0.329 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 3 - Airfoil 4 | PASS | 1.900 in | 0.497 in | 0.496 in | 0.010 in | -0.010 in | -0.001 in | 0.291 in | 0.291 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 3 - Airfoil 4 | PASS | 1.800 in | 0.471 in | 0.469 in | 0.010 in | -0.010 in | -0.002 in | 0.271 in | 0.271 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 3 - Airfoil 4 | PASS | 2.000 in | 0.523 in | 0.521 in | 0.010 in | -0.010 in | -0.001 in | 0.310 in | 0.310 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 3 - Airfoil 4 | PASS | 1.800 in | 0.471 in | 0.469 in | 0.010 in | -0.010 in | -0.002 in | 0.271 in | 0.271 in | 0.010 in | -0.010 in | -0.000 in |
| Airfoil 3 - Airfoil 4 | PASS | 2.100 in | 0.549 in | 0.548 in | 0.010 in | -0.010 in | -0.001 in | 0.329 in | 0.329 in | 0.010 in | -0.010 in | -0.000 in |