



# Verification Example 2

## Defect Distributions

### Problem Definition

- Verify Darwin™ results for different defect distributions
  - Uniform
  - Lognormal
- Semi-infinite block with initial defect area = 314.59 mils<sup>2</sup> (0.2029 mm<sup>2</sup>)
- Deterministic applied stress = 95.42 ksi (657.9 MPa)

### Comparison Standard

- Analytical Solution

### Result

- The analytical solution falls within the 95% confidence bounds predicted by Darwin™ for both distributions.

