

Fig. 7—Residual-stress distribution.
 (a) Disk made from as-rolled material.
 (b) Disk made from tempered material.
 I-mark: acoustoelasticity measurement.
 Circles: destructive strain-gage measurement. Hollow circle in (a) indicates data from the gage attached on the reverse side of the disk

orientation effects.

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ERRATA:

Experimentally Determined Stress-intensity Factors for Single-edge-crack Round Bars Loaded in Bending

by Arthur J. Bush

On pages 249-257 of the July 1976 issue of *EXPERIMENTAL MECHANICS*, there appeared the paper "Experimentally Determined Stress-intensity Factors for Single-edge-crack Round Bars Loaded in Bending" by Arthur J. Bush.

Due to the unfortunate "splicing" of the wrong negatives by the printer, immediately before going to press (that is, after the correctly prepared page proofs had been approved and released for printing by the editors), the data given in Table 4 were repeated in Table 2, and the information intended for Table 2 was never used.

The correct Table 2 is reproduced at right.

The error was brought to our attention by the author in August 1977. He is in no way responsible for the long, although unavoidable, delay in the publication of this correction.

The Editors

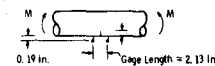
TABLE 2—COMPLIANCE AND CRACK-OPENING-DISPLACEMENT DATA FOR 3-in. (76-mm) HOLLOW SEC-RBB SPECIMENS 3-3 AND 3-6

| Crack Length ⁽¹⁾ | a/D | Compliance ⁽²⁾⁽⁵⁾ | COD ⁽³⁾ |
|-----------------------------|-------|------------------------------|----------------------------|
| (in.) | | (10 ⁻⁶ in./lb.) | (10 ⁻⁶ in./lb.) |
| Specimen 3-3 ⁽⁴⁾ | | | |
| 0.0 | 0.0 | 4.195 | 0.438 |
| 0.100 | 0.033 | 4.316 | 0.449 |
| 0.202 | 0.067 | 4.440 | 0.472 |
| 0.400 | 0.133 | 4.535 | 0.551 |
| 0.653 | 0.218 | 5.679 | 0.742 |
| 0.851 | 0.284 | 6.096 | 0.999 |
| 0.949 | 0.316 | 6.342 | 1.193 |
| 1.001 | 0.334 | 6.769 | 1.325 |
| 1.045 | 0.348 | 1.905 | 1.466 |
| 1.198 | 0.399 | 7.897 | 1.962 |
| 1.397 | 0.466 | 9.485 | 2.807 |
| 1.594 | 0.531 | 12.537 | 4.277 |
| Specimen 3-6 ⁽⁴⁾ | | | |
| 0.403 | 0.134 | 4.993 | 0.523 |
| 0.523 | 0.174 | 5.257 | 0.586 |
| 0.653 | 0.217 | 5.358 | 0.748 |
| 0.752 | 0.251 | 5.696 | 0.882 |
| 0.901 | 0.300 | 6.289 | 1.128 |

(1) Crack length is depth of machined notch.

(2) Compliance "c" is the inverse slope of the load-displacement curve, or v/P .

(3) COD is the crack-opening-displacement as measured in routine fracture toughness tests. COD was measured 0.19 in. from the front face of the specimen as shown:



(4) Specimen 3-3 outer diameter was 3.006 in. and 3-6 was 3.001 in.; for both bars the inner diameter was 1.00 in.

(5) The min-max regression computer-fitted equation for $c = f(a/D)$ with $n \geq 2.5$ is:

$$c = b_0 + b_1 (a/D)^{2.5}$$

where $b_0 = 4.453971$ and $b_1 = 37.88840$

SI Conversion: mm = in. x 25.4 and kN = lb. x 0.00445.