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JAN 24 1952

MR. L. W. SCHULZ - 1211

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Ref. Symbol: 1531 (123)
Project No. ET-468

the remainder of the bend specimens were cut perpendicular to the periphery of the can). Tensile tests were performed on the Baldwin-Southwark universal testing machine at ambient conditions, using the attached Templin stress-strain recorder. The bend tests were performed on a special jig at ambient conditions. The material was bent over a radius of 0.025 inch.

B. Equipment Used:

Baldwin-Southwark universal testing machine (5000 lbs)
Bending jig
Templin stress-strain recorder

Results

Figure 1 is a stress-strain curve for the three tensile specimens. The yield strength was 35,000 to 43,800 psi; the ultimate tensile strength was 52,100 to 60,100 psi; elongation was 22.2 to 37 per cent; and the Rockwell superficial hardness was 61.5 on the 30T scale, which is equivalent to 67 on the B scale. None of the eight bend specimens exhibited cracks after bending.

M. O. Jones

Test conducted by M. O. JONES - 1531

R. L. Wagar

Approved by R. L. WAGAR - 1531

MOJ:tr

Distribution:

1/8A - L. W. Schulz, 1211
2/8A - L. J. Paddison, 1500
3/8A - A. F. Cone, 1510
4/8A - G. H. Roth, 1520
5/8A - T. B. Morse, 1530
6/8A - G. C. McDonald, 1210
7/8A - W. Hall, 2125
8/8A - W. K. Cox, 2461

Microfilmed Reel NO 46

MAY 20 1952

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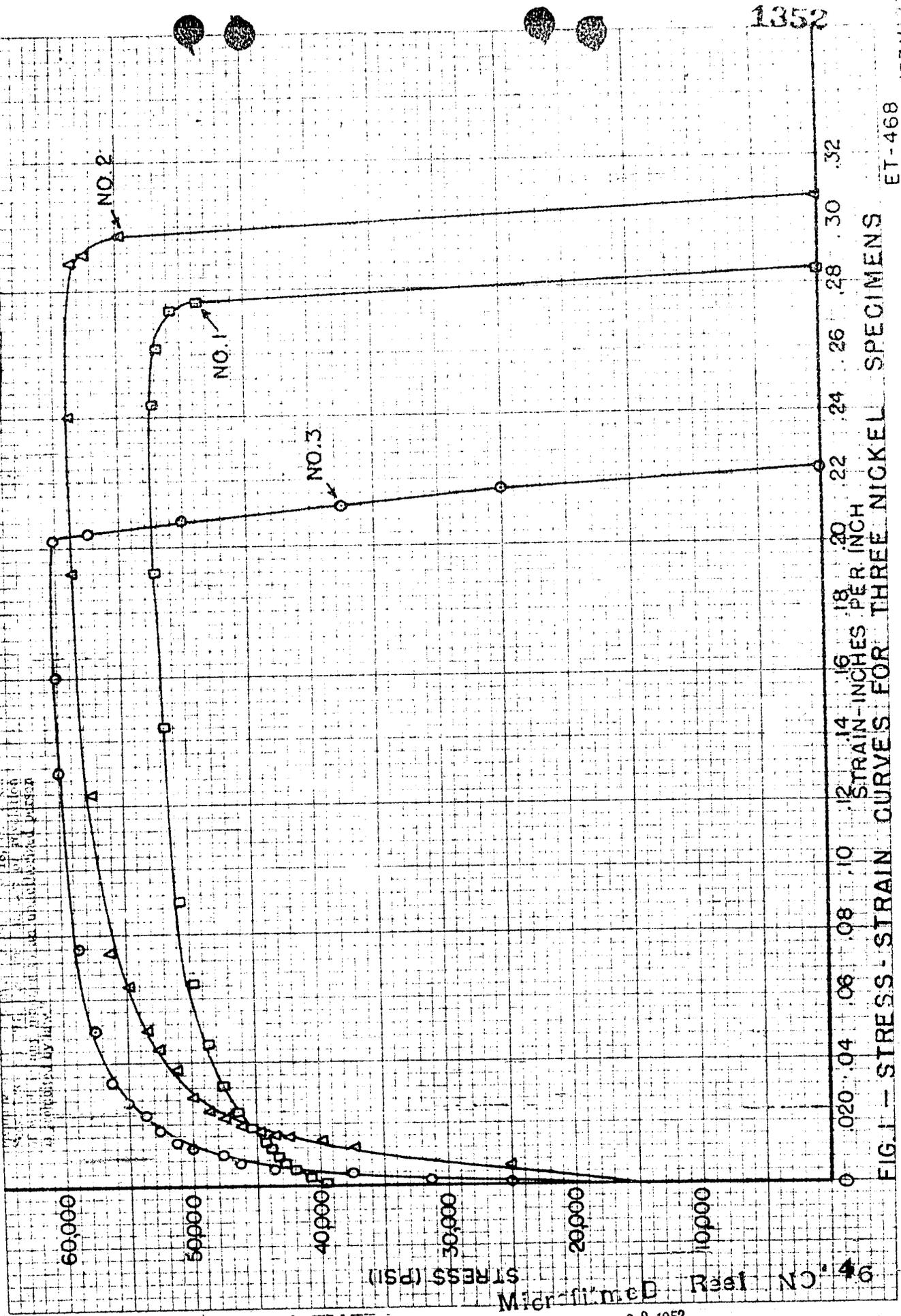


FIG. 1 - STRESS-STRAIN CURVES FOR THREE NICKEL SPECIMENS

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