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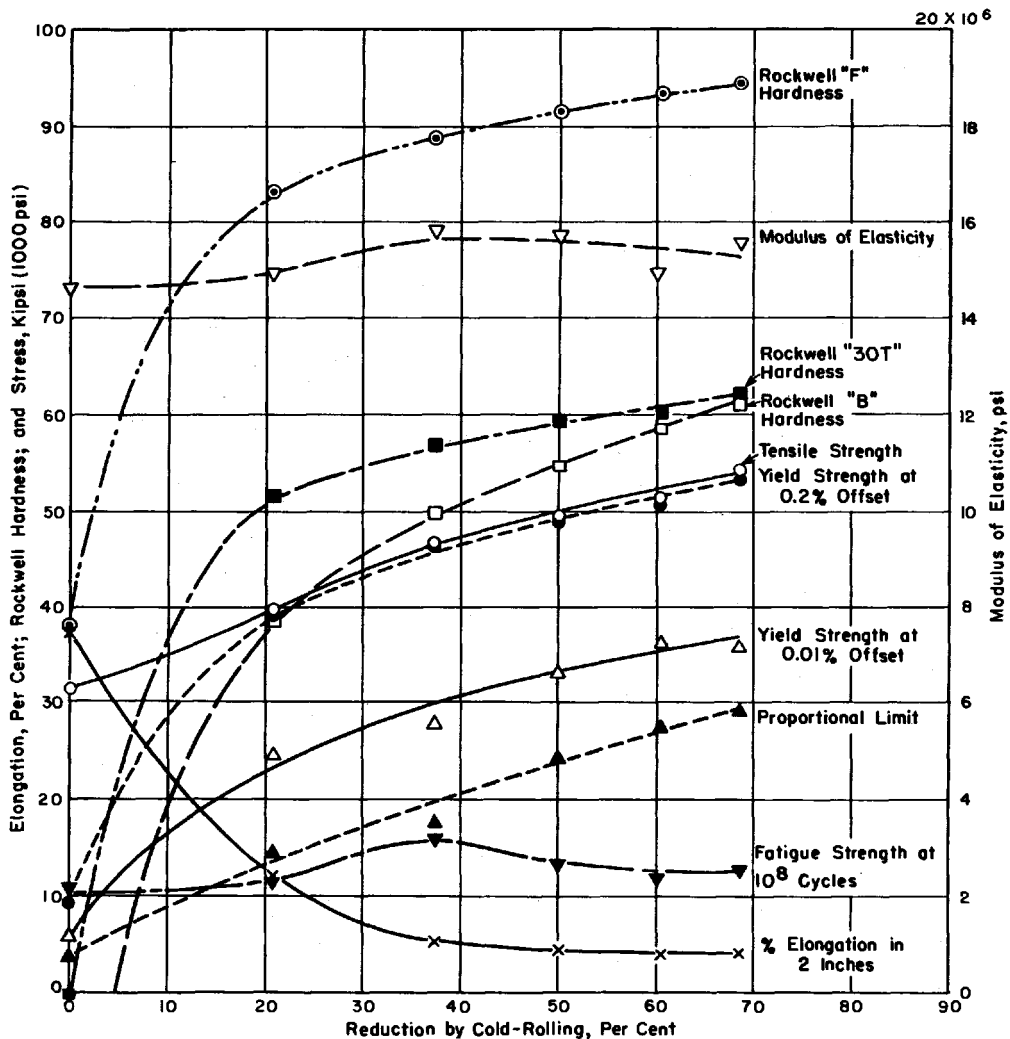


FIG. 1.—Mechanical Properties of Electrolytic Tough Pitch Copper Strip.

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.

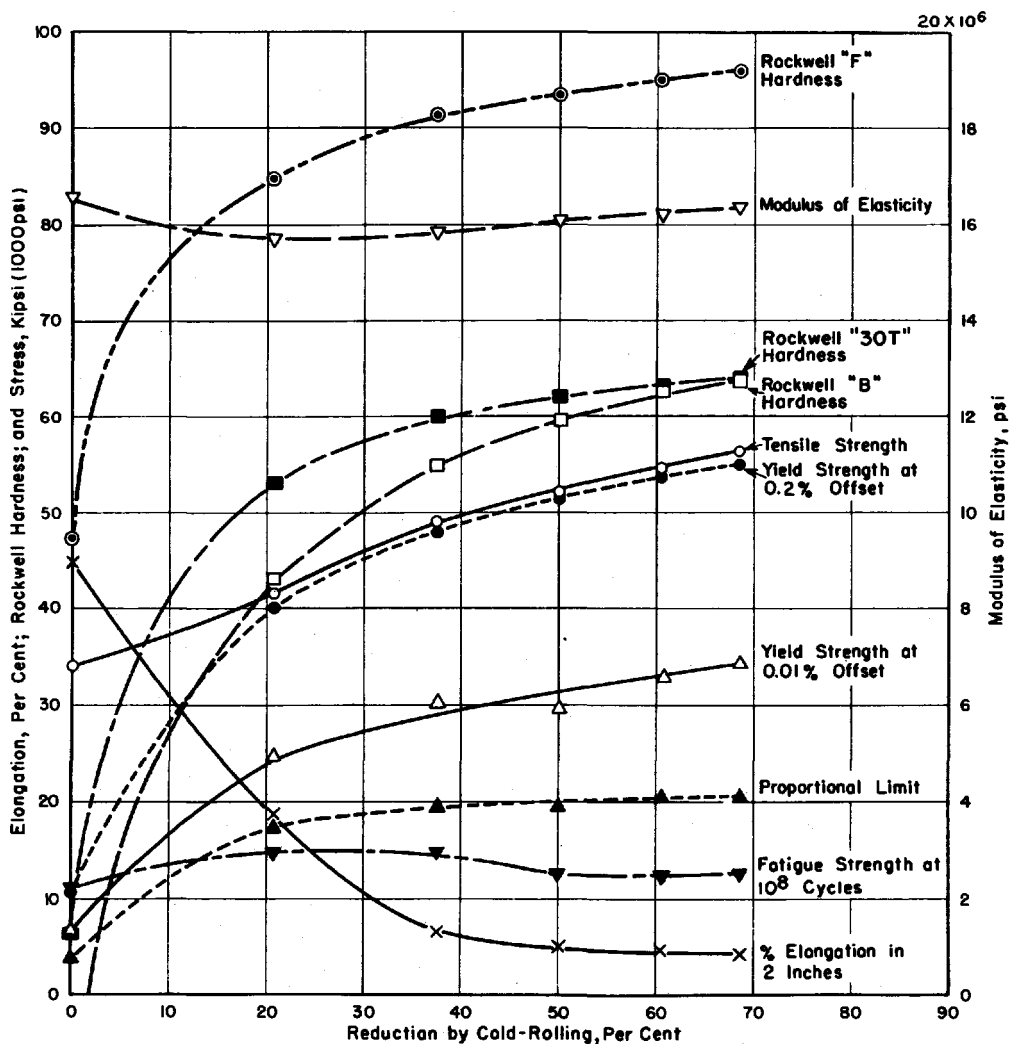


FIG. 2.—Mechanical Properties of Electrolytic Tough Pitch Copper Strip.

Nominal ready-to-finish grain size—0.015 mm

Nominal thickness—0.040 in.

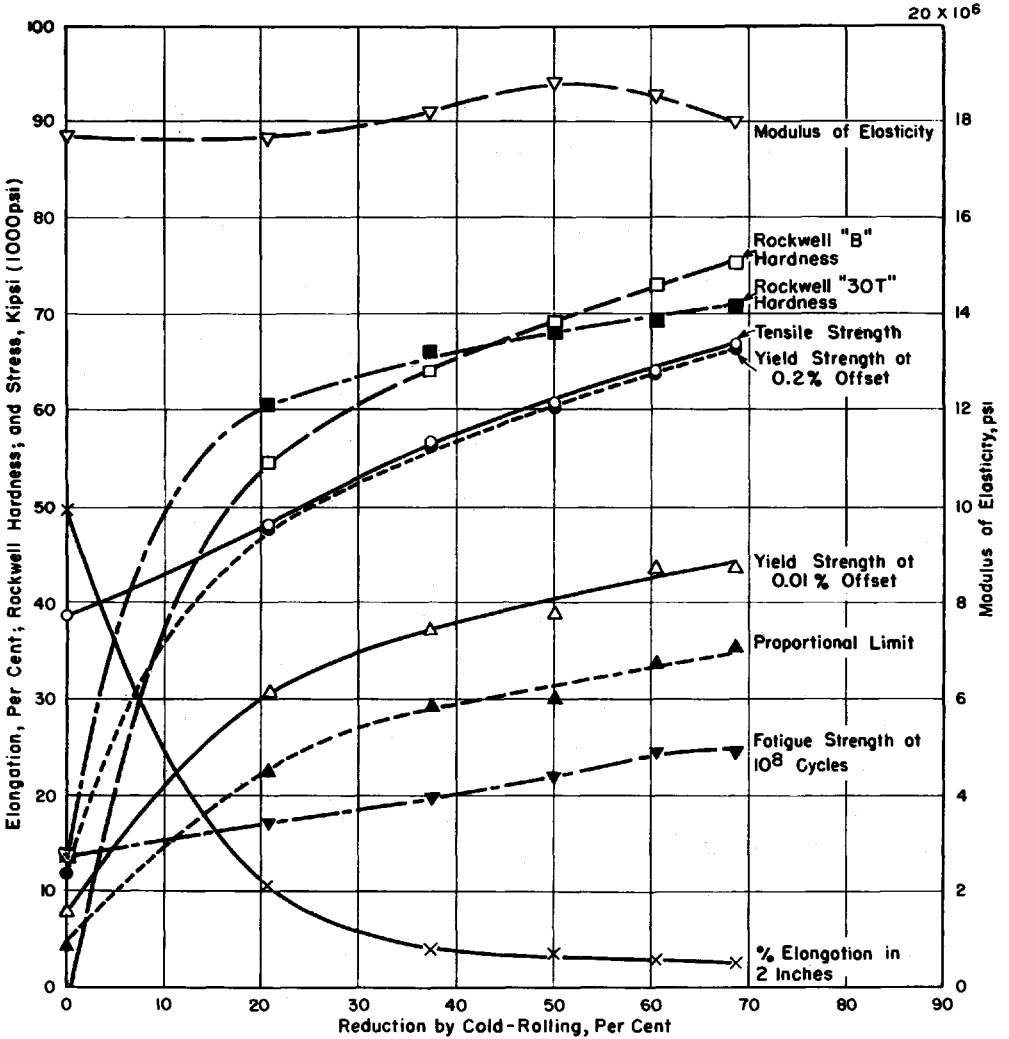


FIG. 3.—Mechanical Properties of 0.5 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.

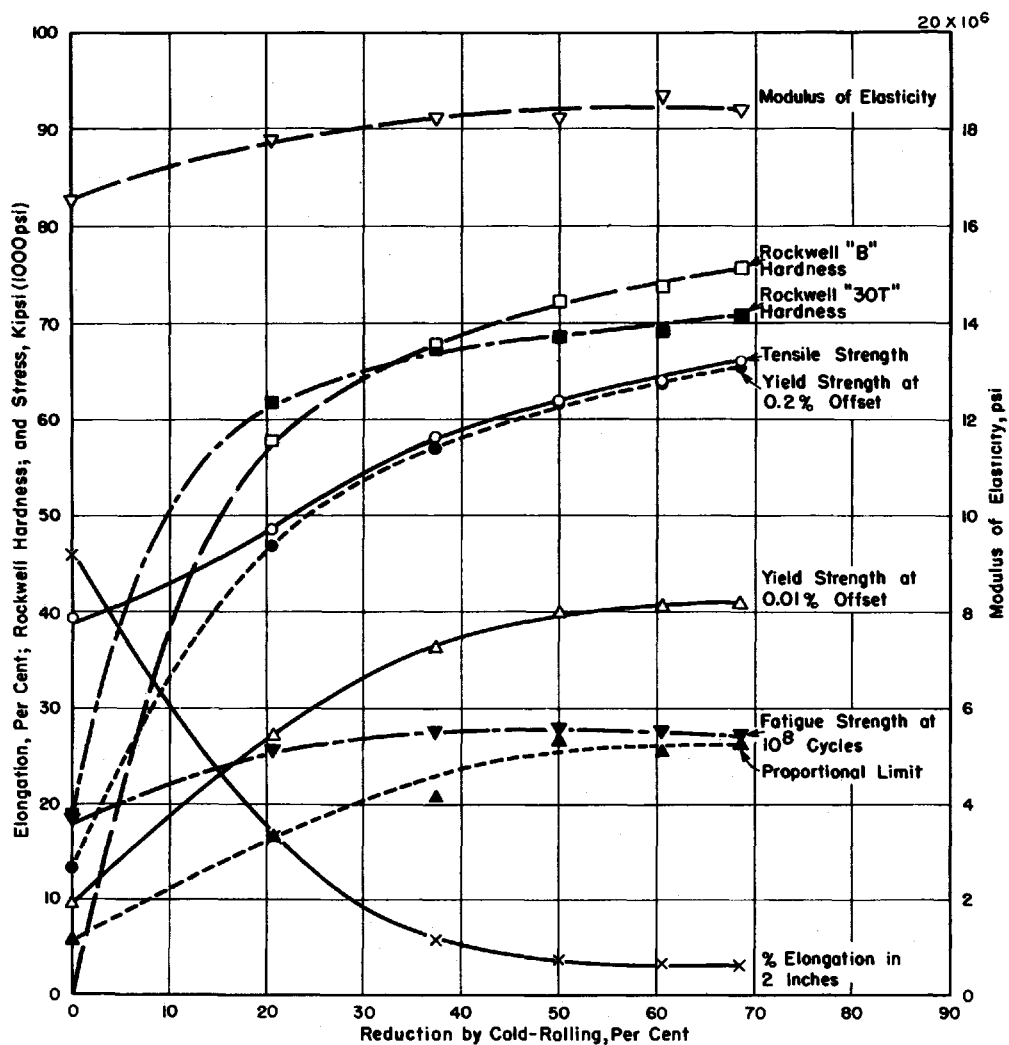


FIG. 4.—Mechanical Properties of 0.5 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.015 mm

Nominal thickness—0.040 in.

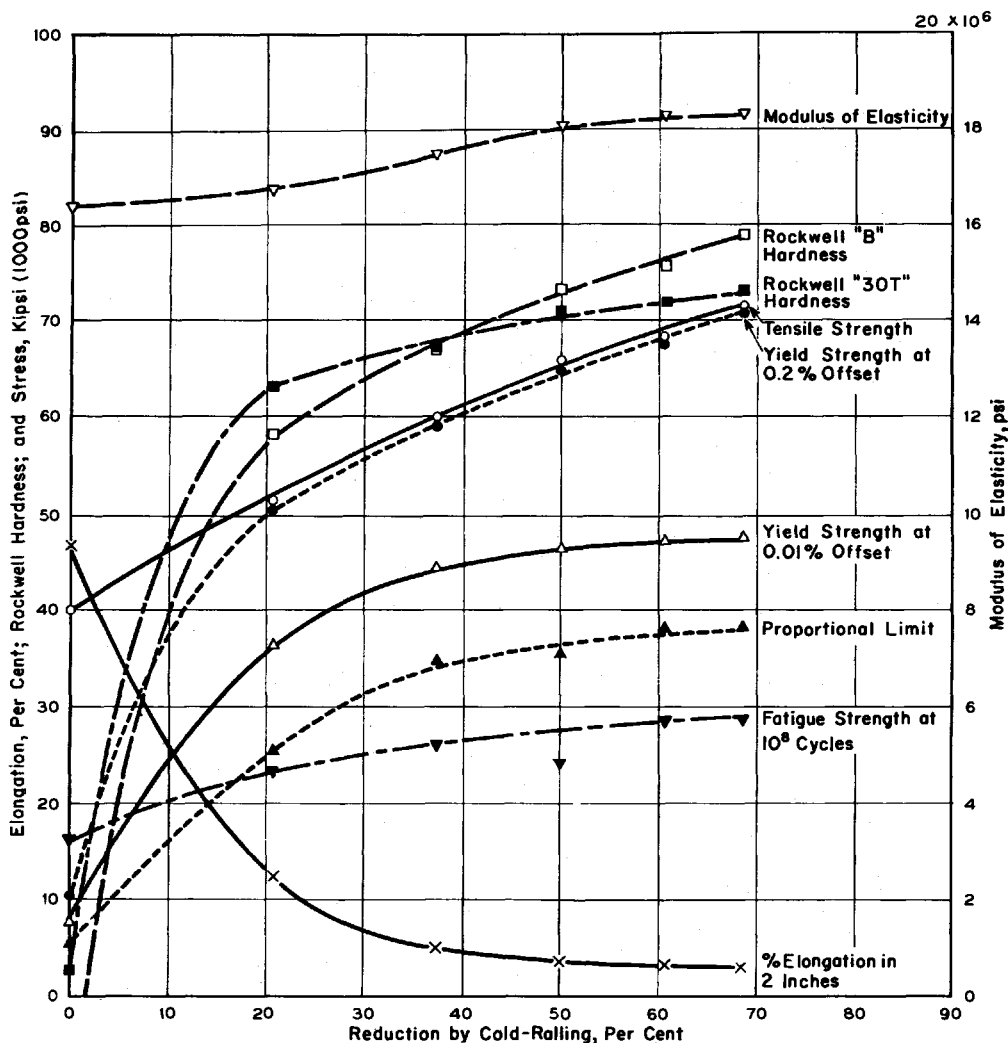


FIG. 5.—Mechanical Properties of 1 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.

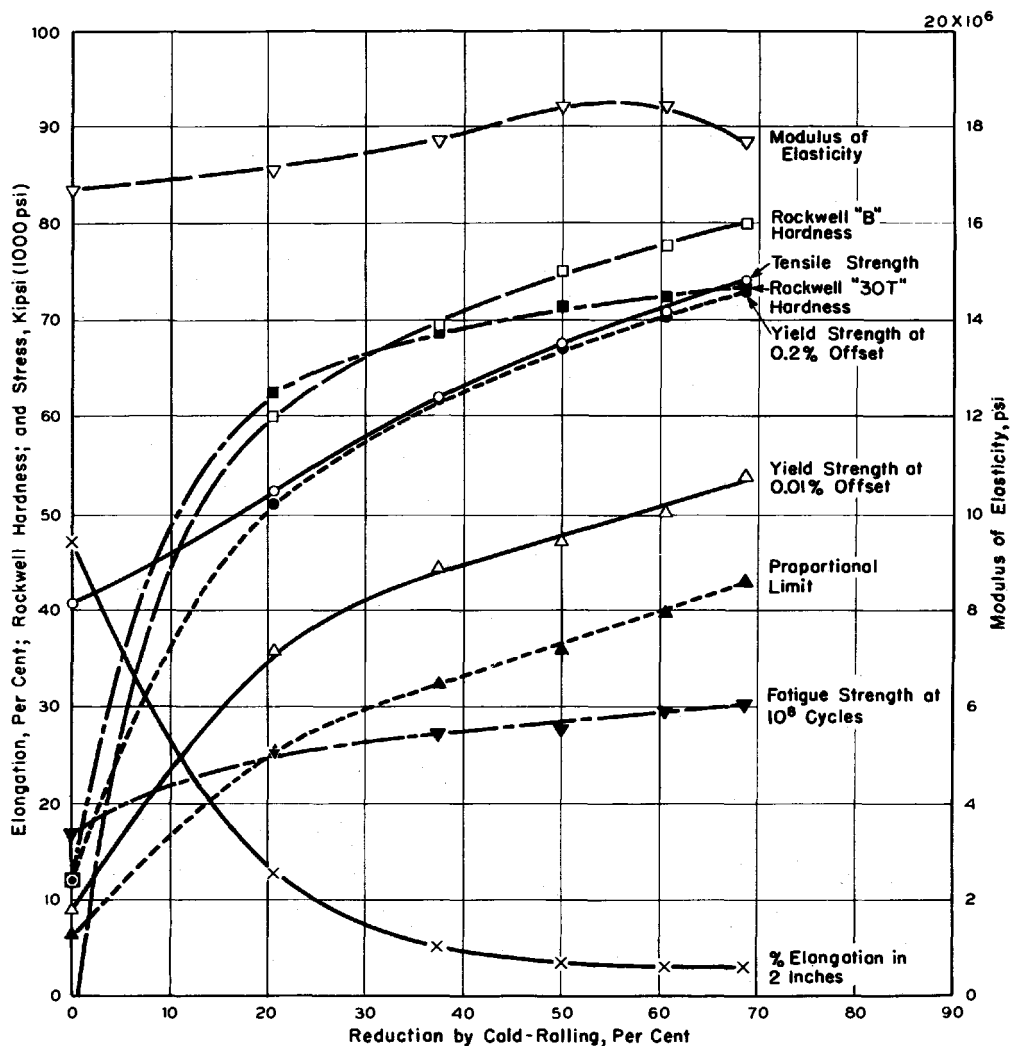


FIG. 6.—Mechanical Properties of 1 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.015 mm

Nominal thickness—0.040 in.

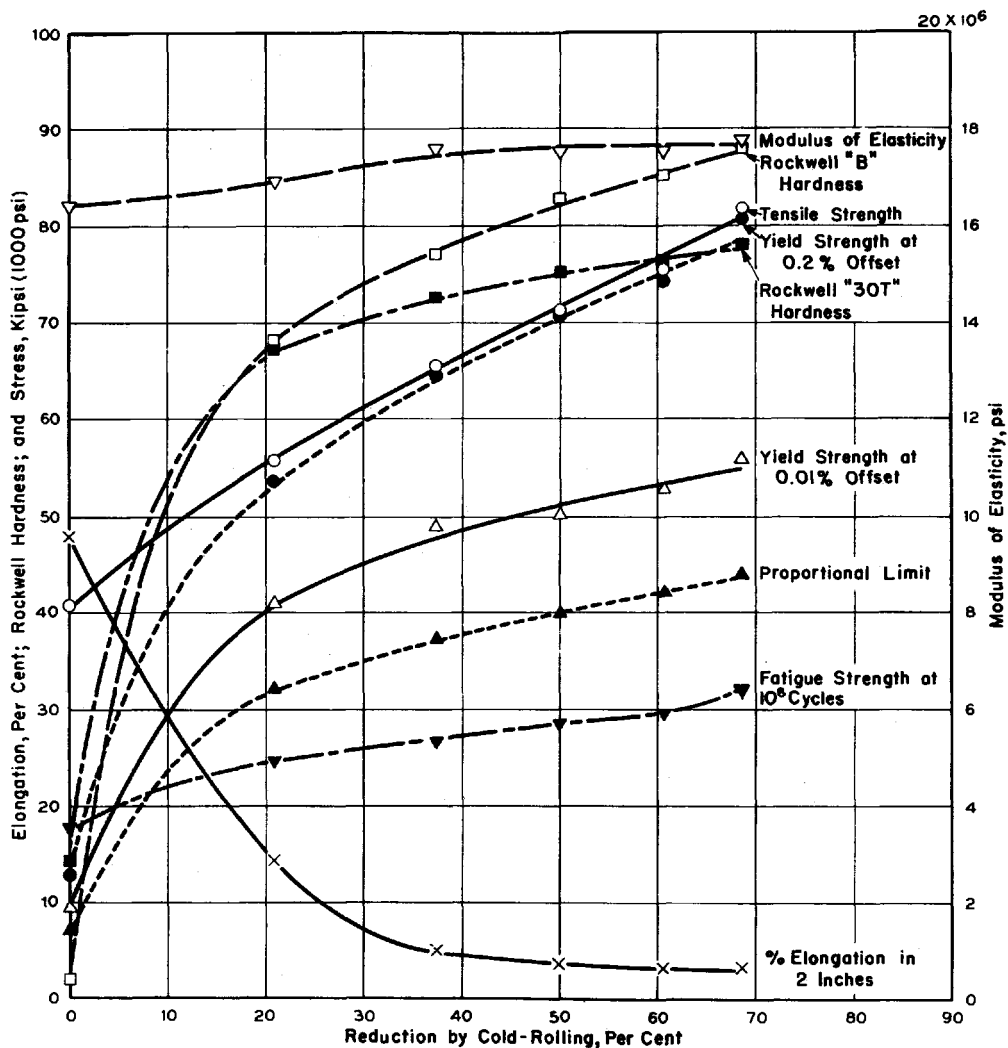


FIG. 7.—Mechanical Properties of 2 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.



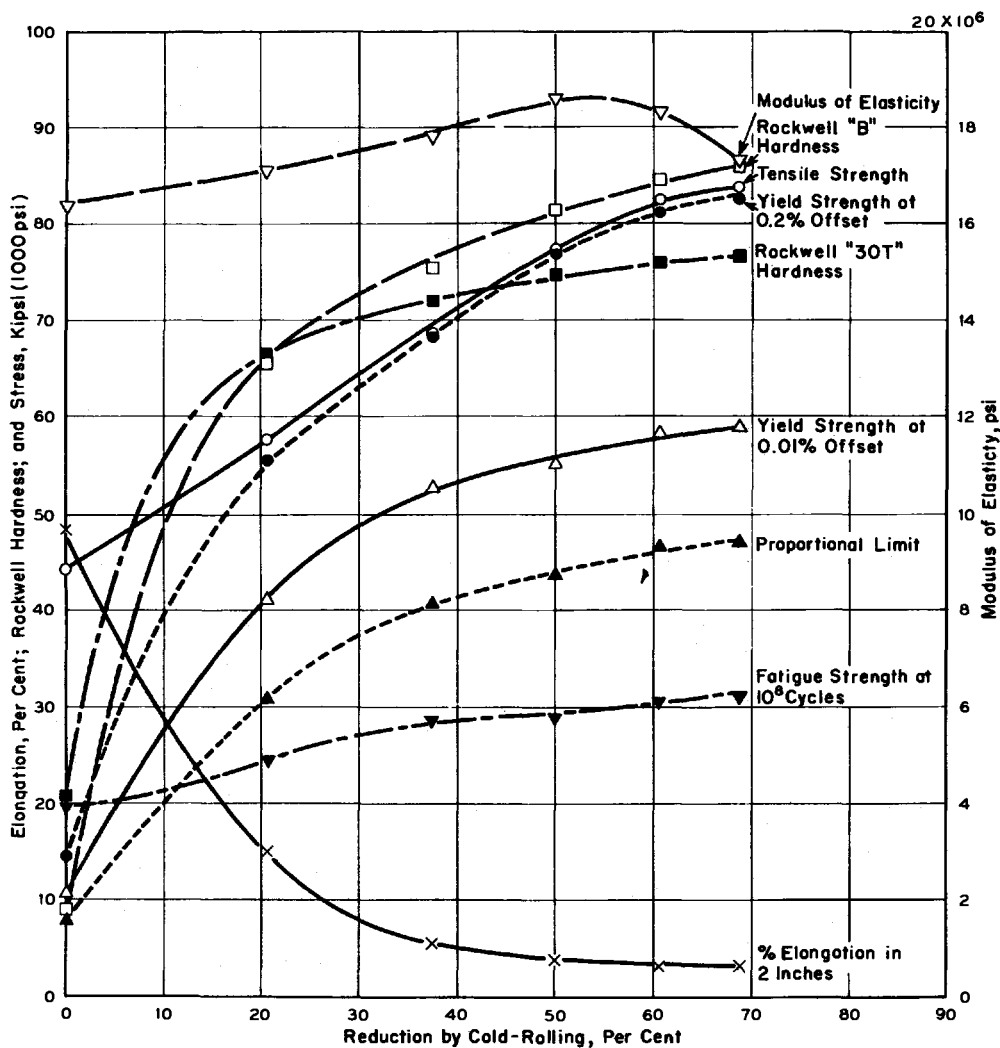


FIG. 8.—Mechanical Properties of 2 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.015 mm

Nominal thickness—0.040 in.

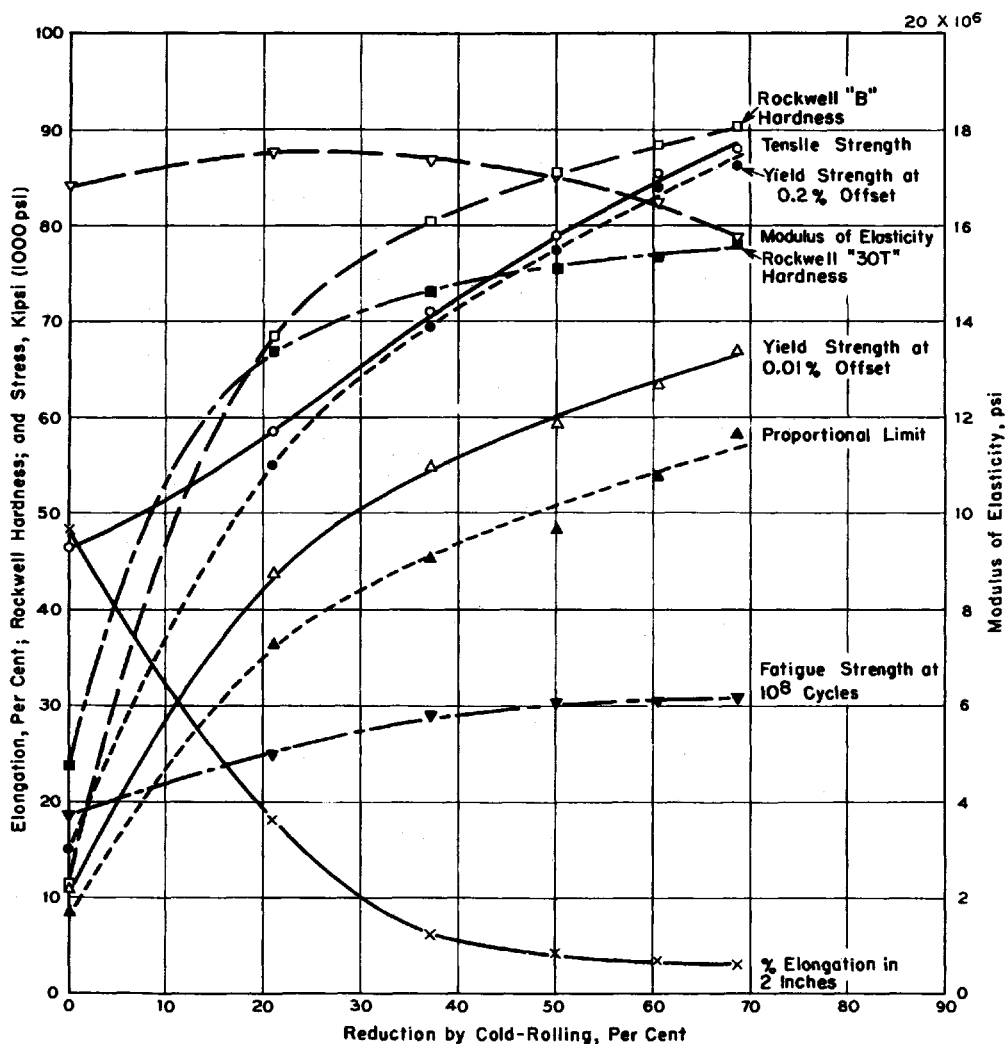


FIG. 9.—Mechanical Properties of 3 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.

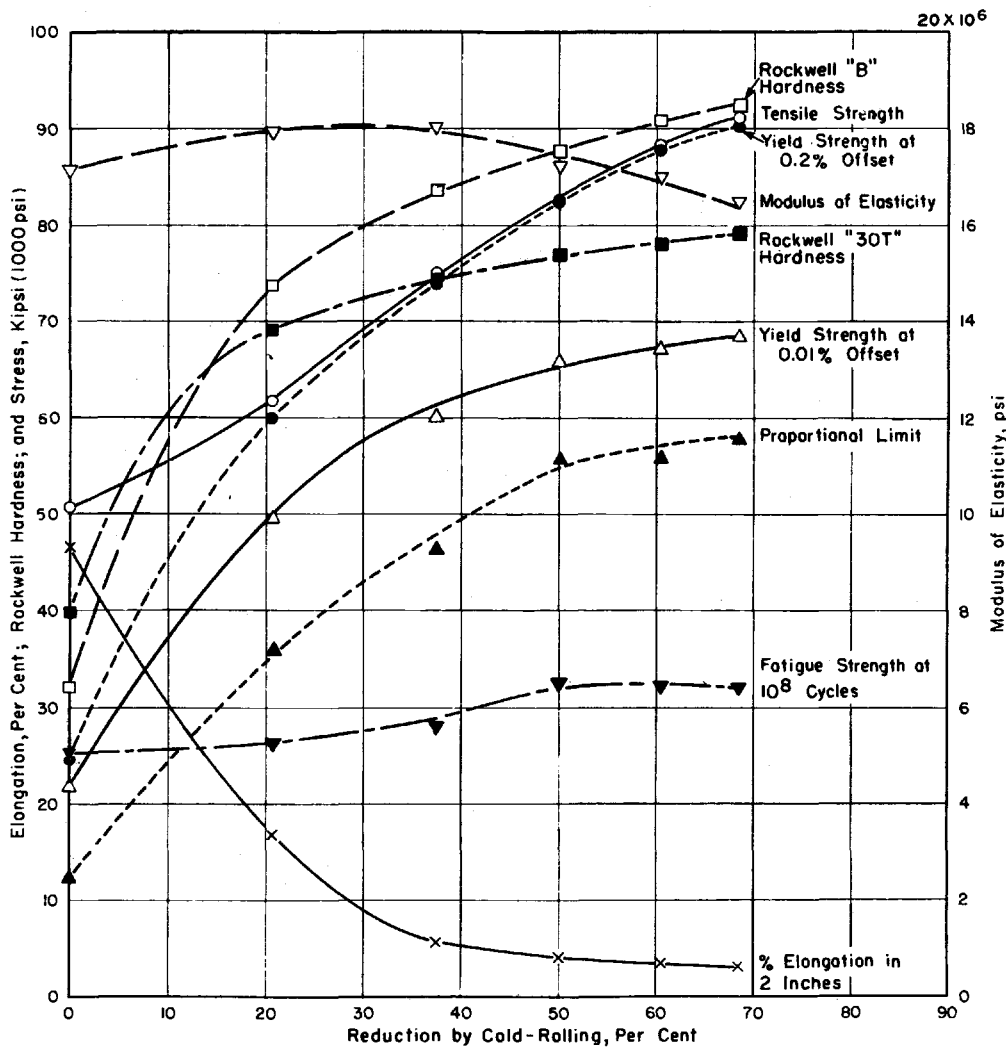


FIG. 10.—Mechanical Properties of 3 per cent Tin Phosphor Bronze Strip.  
Nominal phosphorus content—0.05 per cent  
Nominal ready-to-finish grain size—0.015 mm  
Nominal thickness—0.040 in.

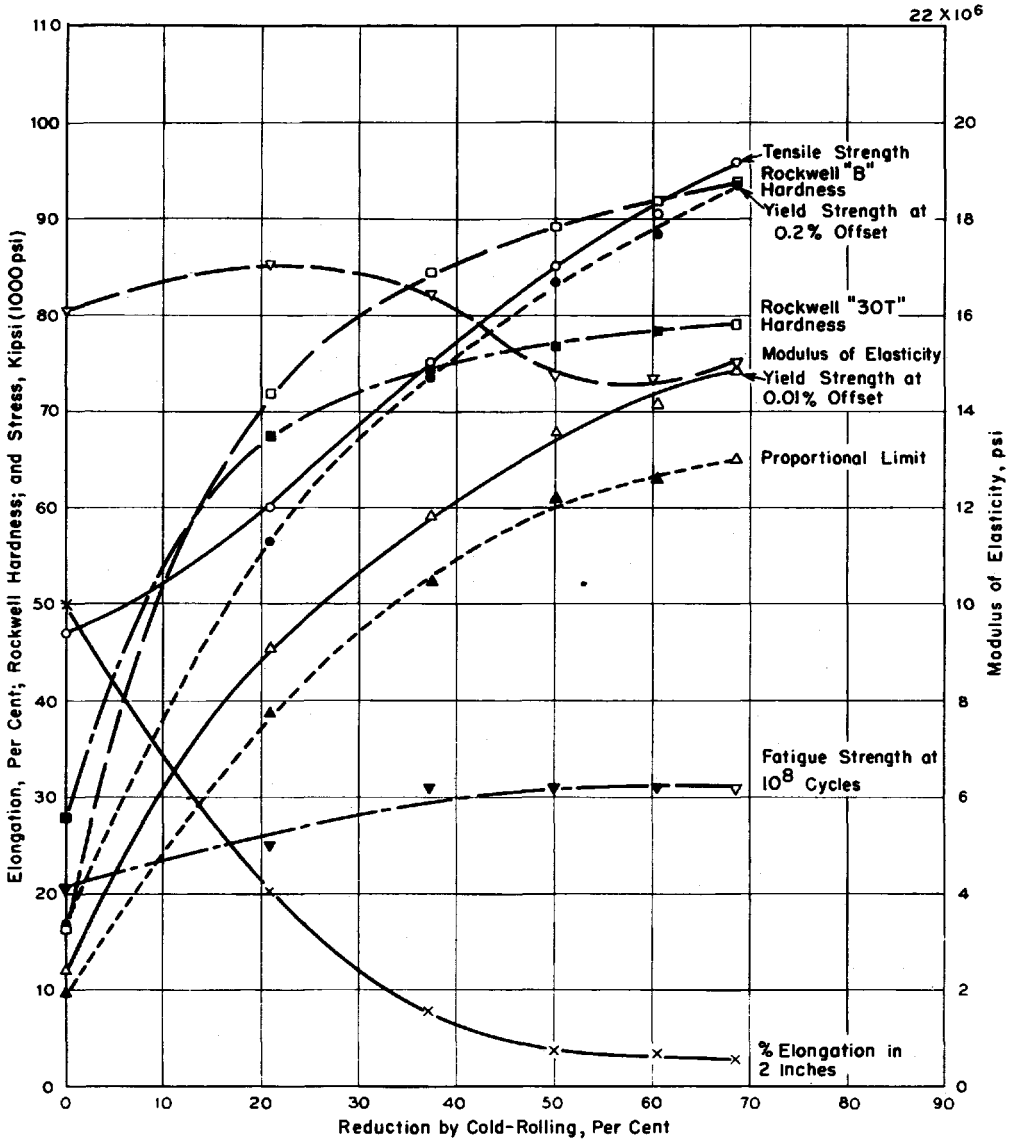


FIG. 11.—Mechanical Properties of 4 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
 Nominal ready-to-finish grain size—0.035 mm  
 Nominal thickness—0.040 in.

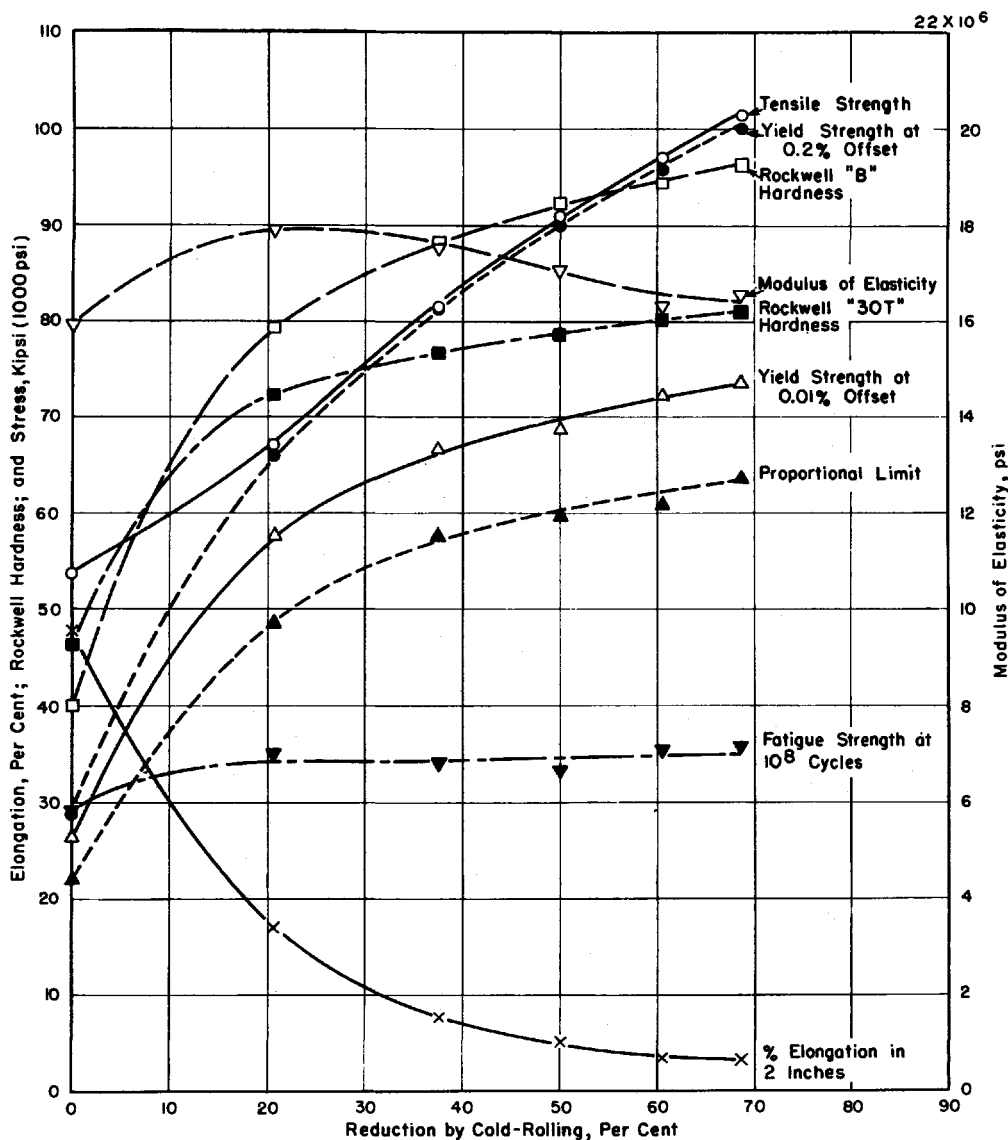


FIG. 12.—Mechanical Properties of 4 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.015 mm

Nominal thickness—0.040 in.

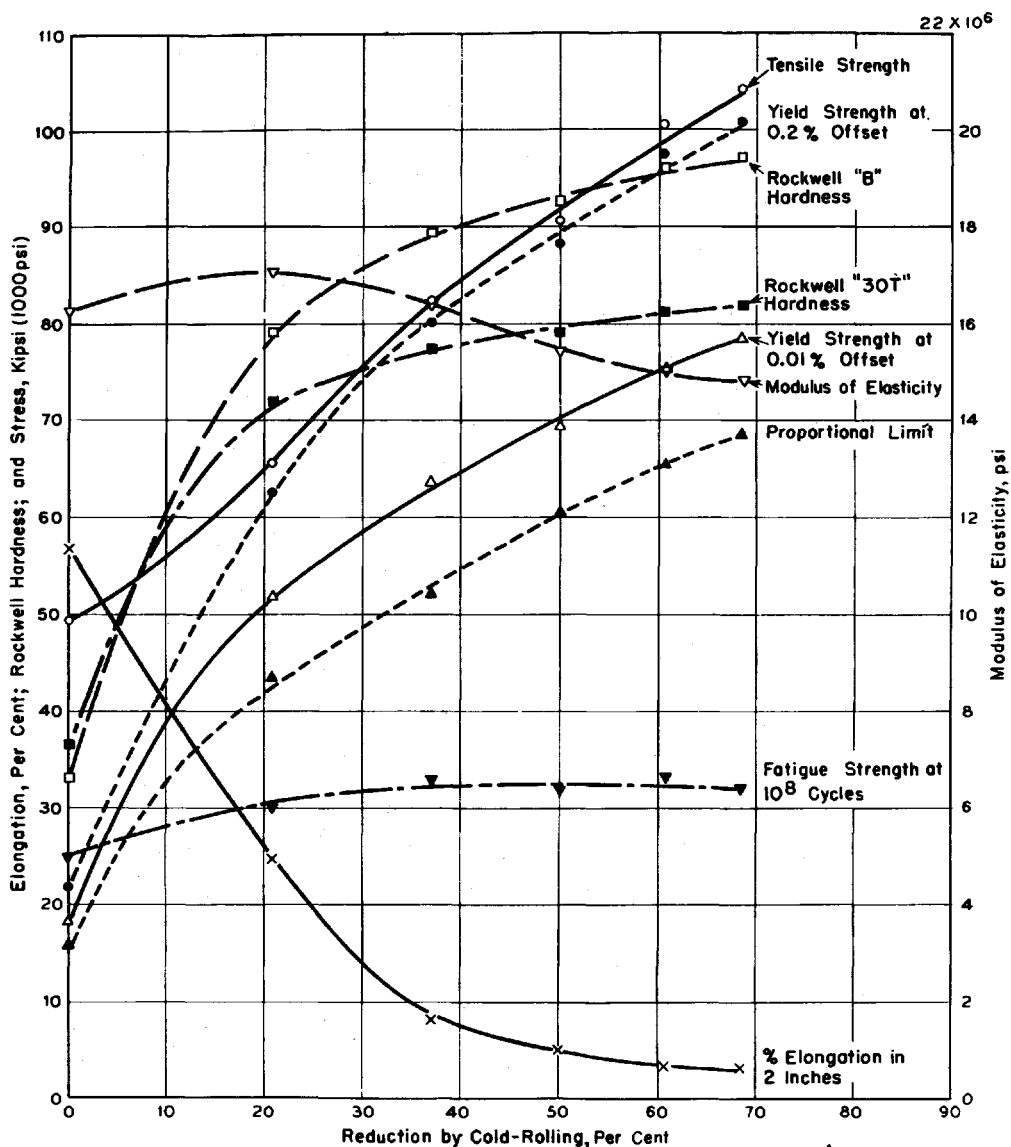


FIG. 13.—Mechanical Properties of 5 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.

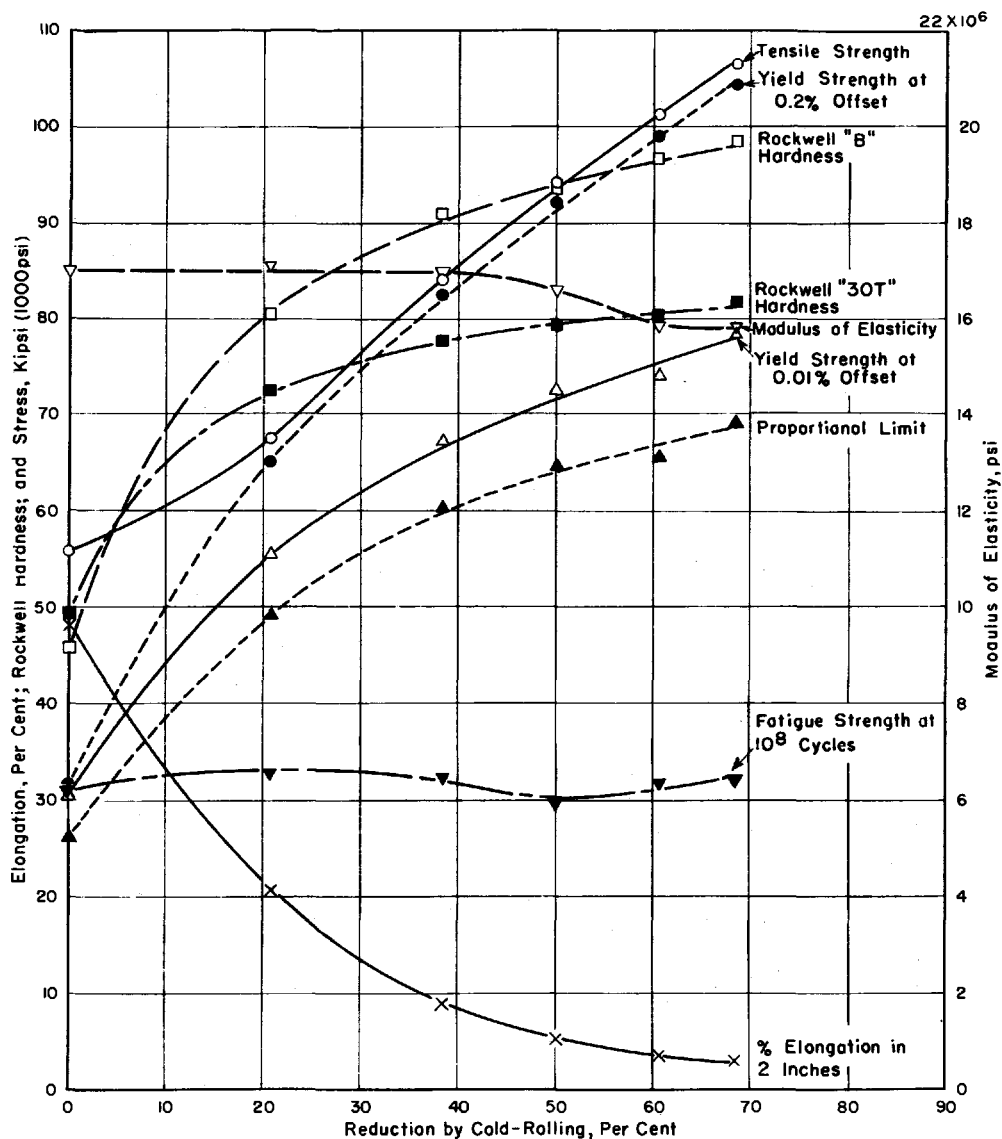


FIG. 14.—Mechanical Properties of 5 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.015 mm

Nominal thickness—0.040 in.

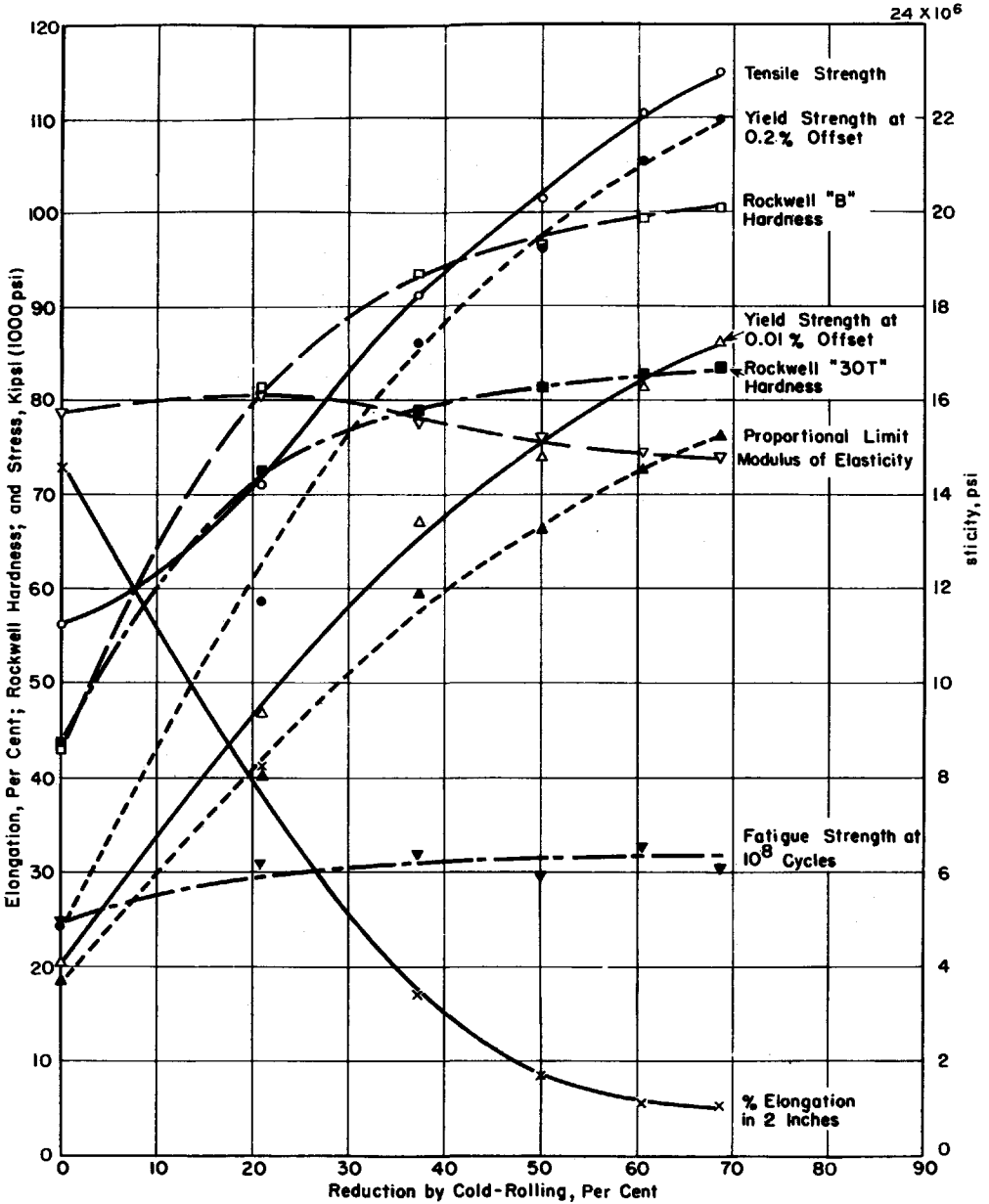


FIG. 15.—Mechanical Properties of 8 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.



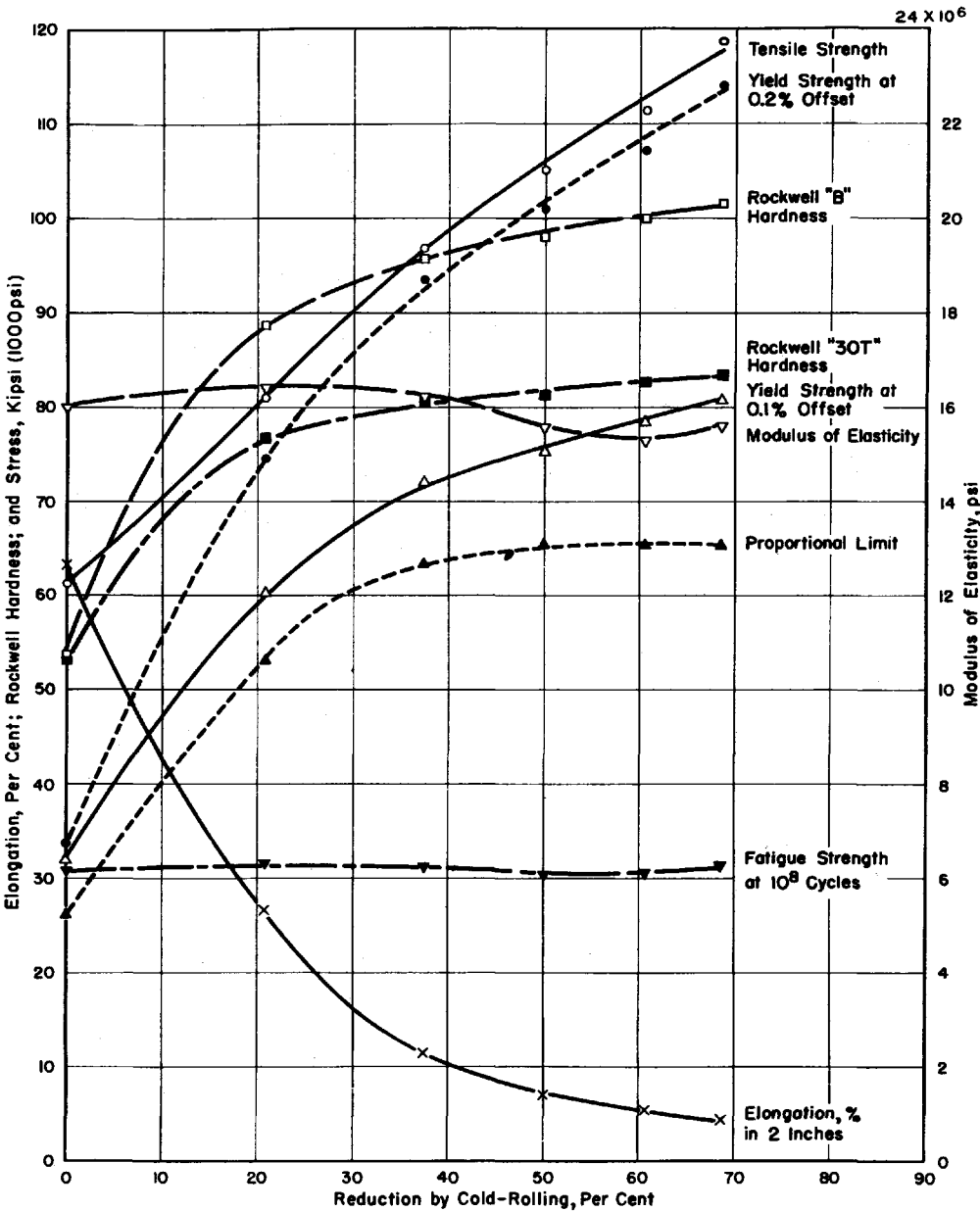


FIG. 16.—Mechanical Properties of 8 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.015 mm

Nominal thickness—0.040 in.

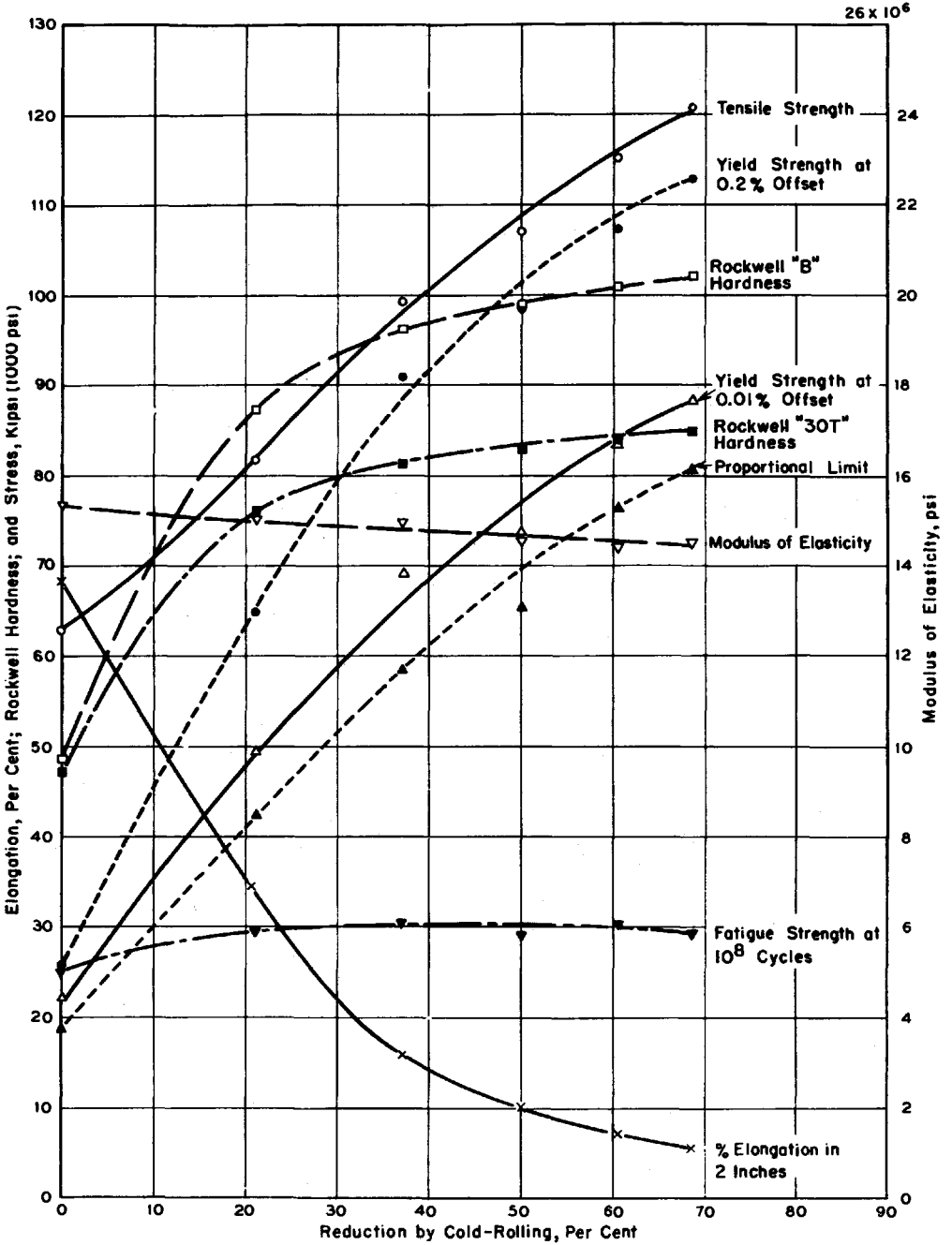


FIG. 17.—Mechanical Properties of 10 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
 Nominal ready-to-finish grain size—0.035 mm  
 Nominal thickness—0.040 in.

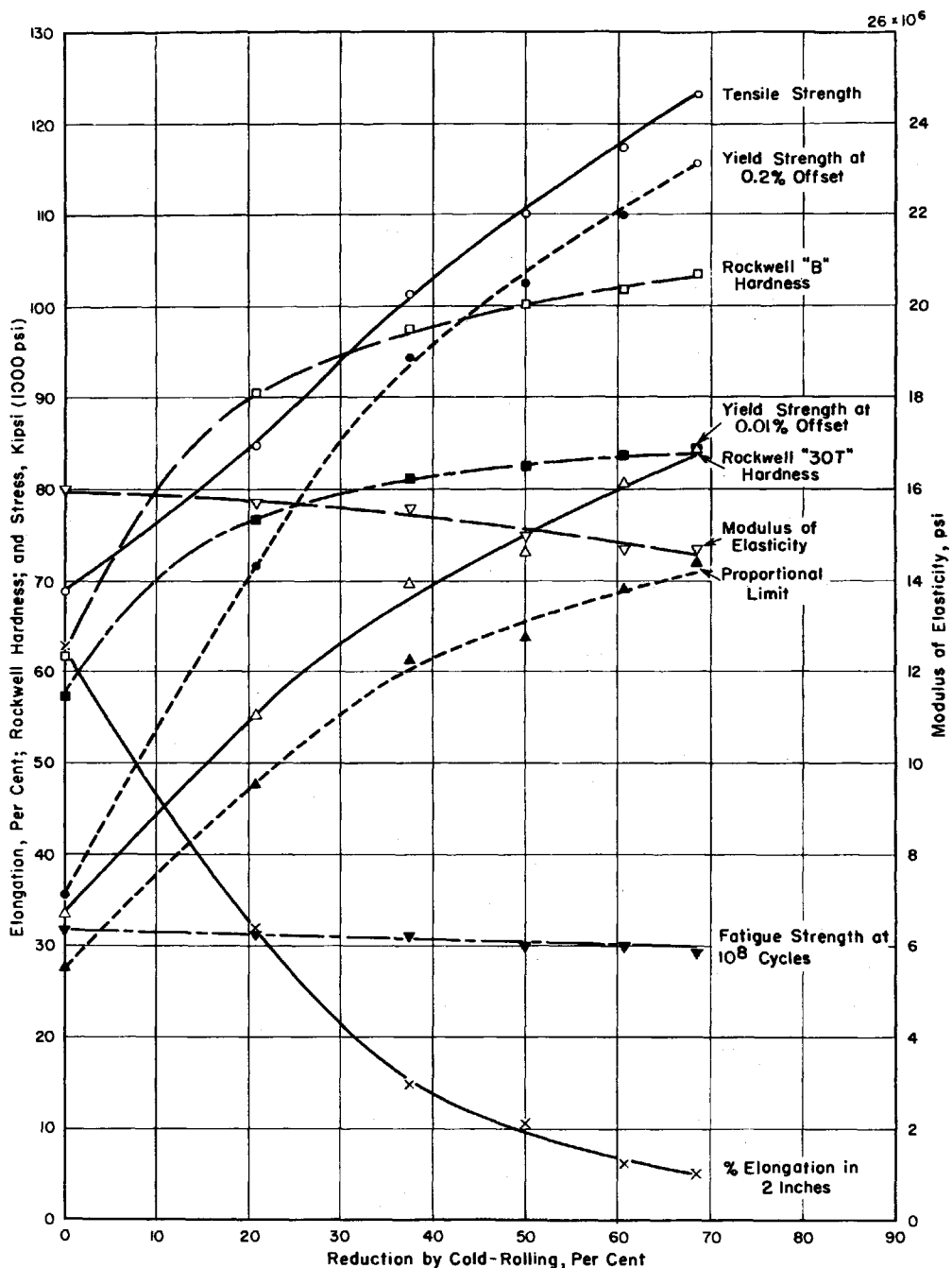


FIG. 18.—Mechanical Properties of 10 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.015 mm

Nominal thickness—0.040 in.

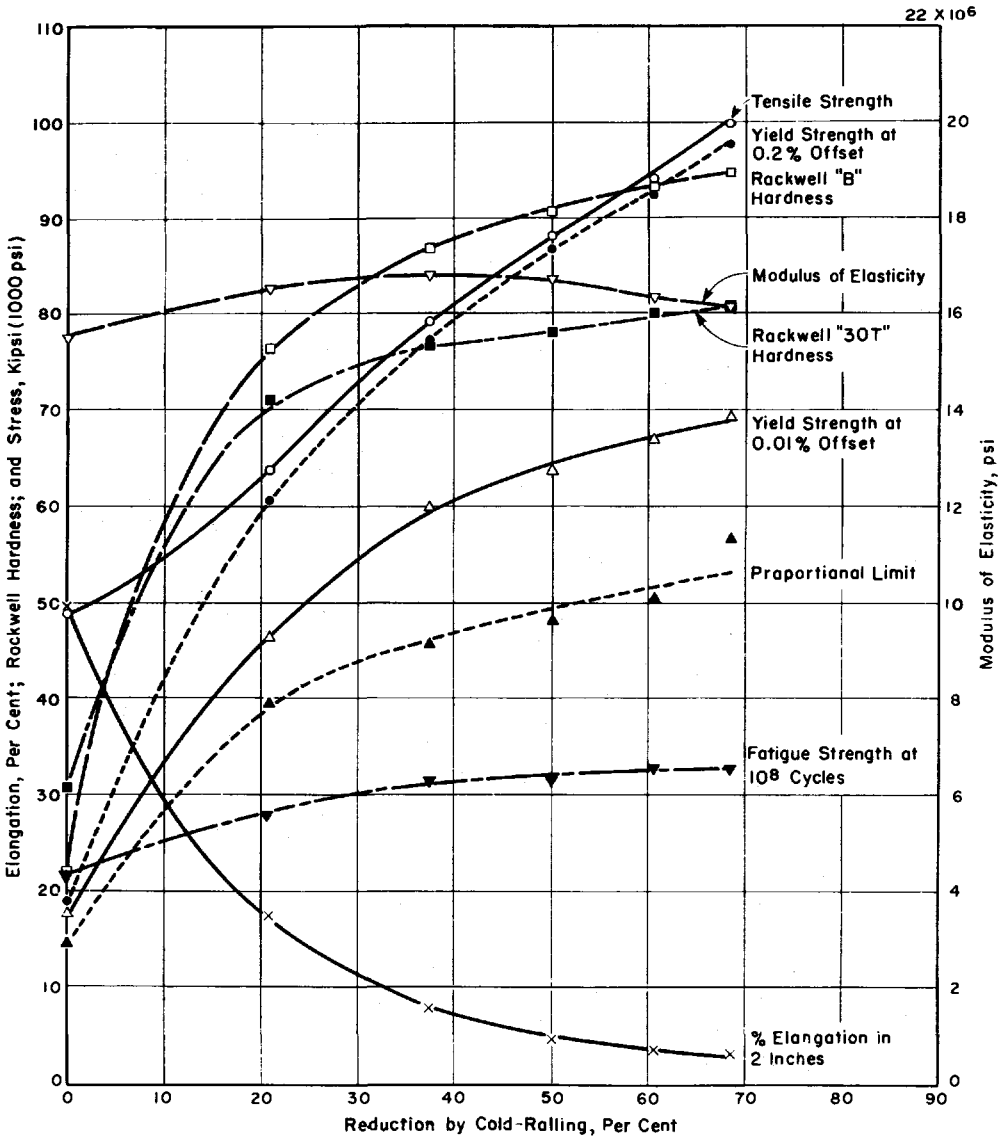


FIG. 19.—Mechanical Properties of 3 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.40 per cent

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.

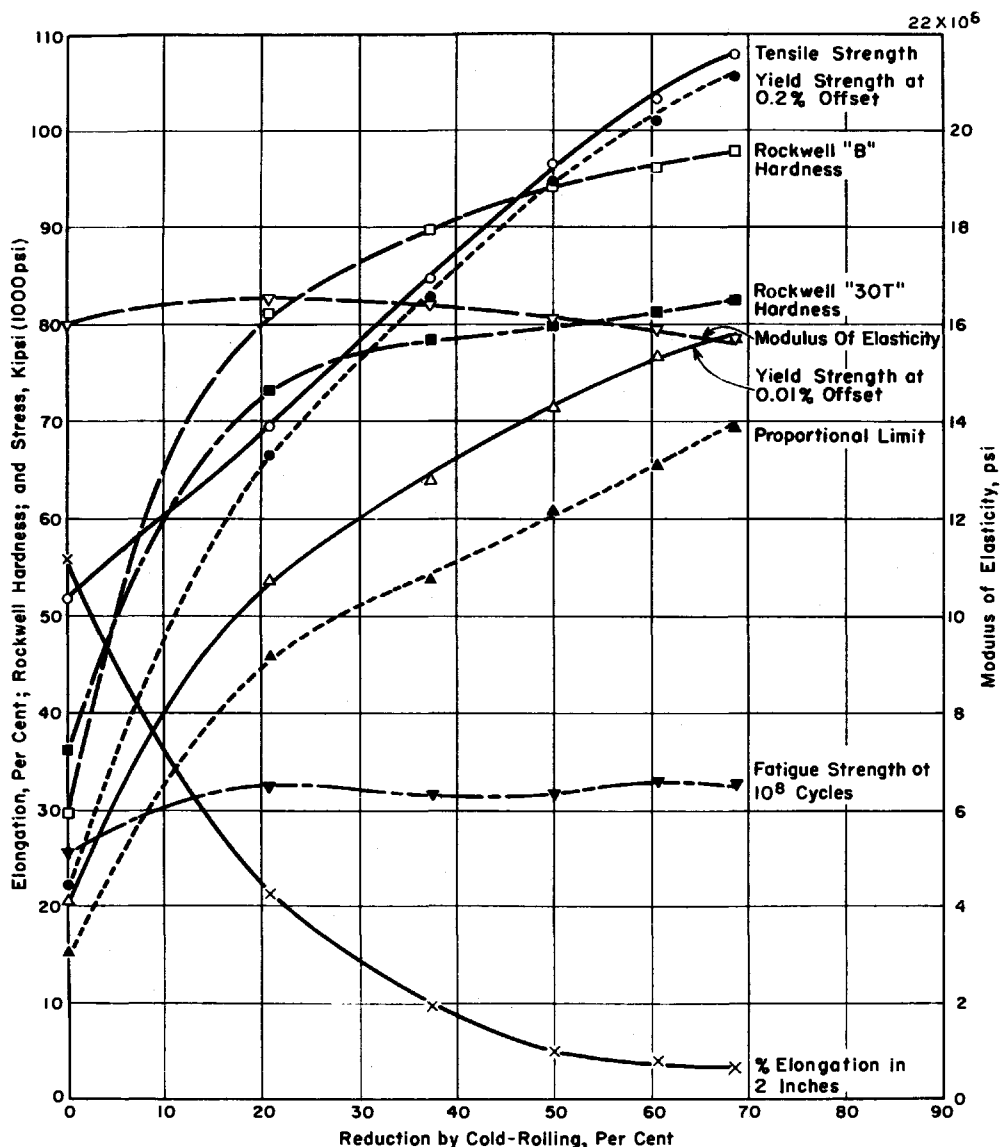


FIG. 20.—Mechanical Properties of 4 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.40 per cent  
 Nominal ready-to-finish grain size—0.035 mm  
 Nominal thickness—0.040 in.

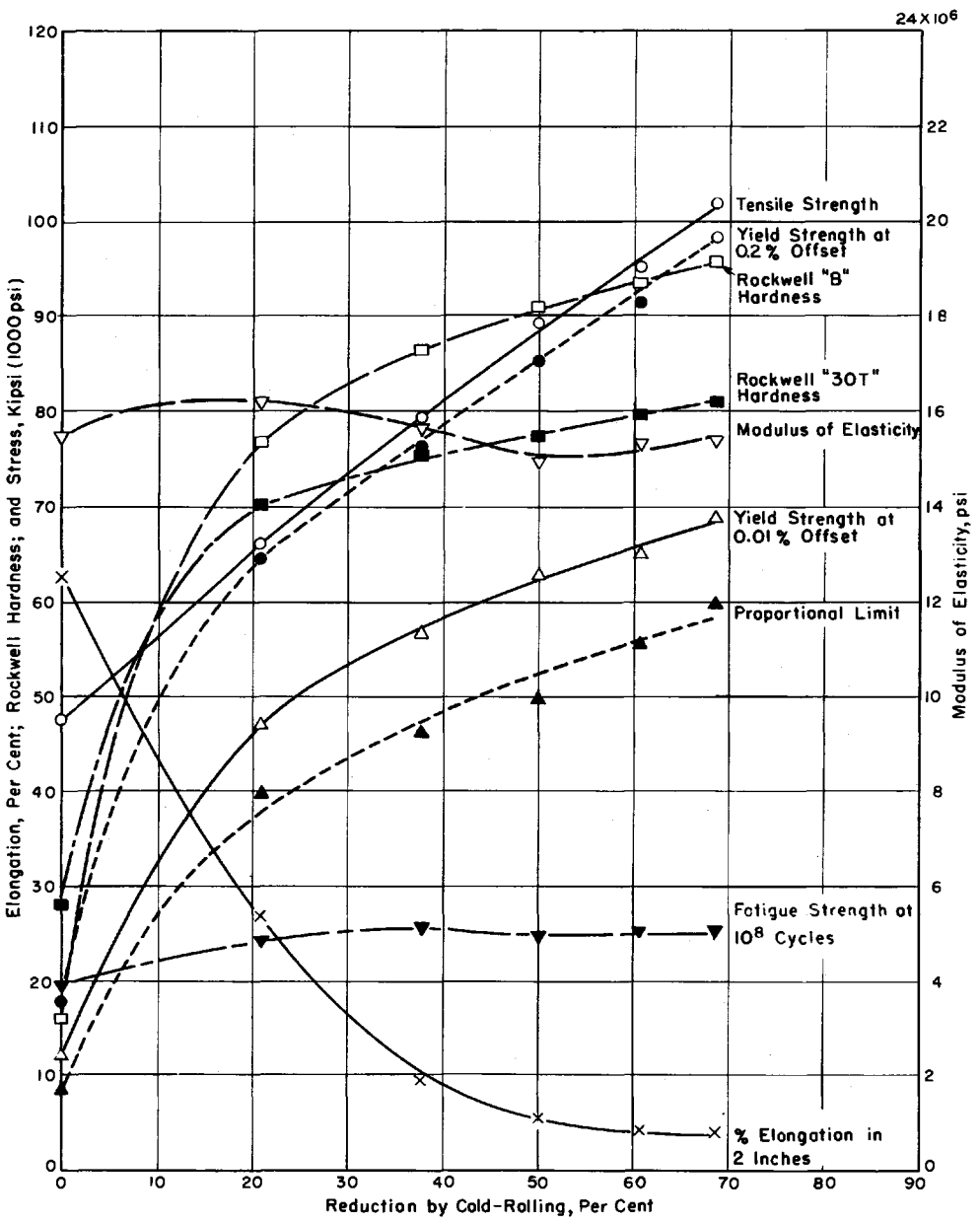


FIG. 21.—Mechanical Properties of 4 per cent Tin Phosphor Bronze Strip.  
Nominal phosphorus content—0.40 per cent  
Nominal ready-to-finish grain size—0.075 mm  
Nominal thickness—0.040 in.

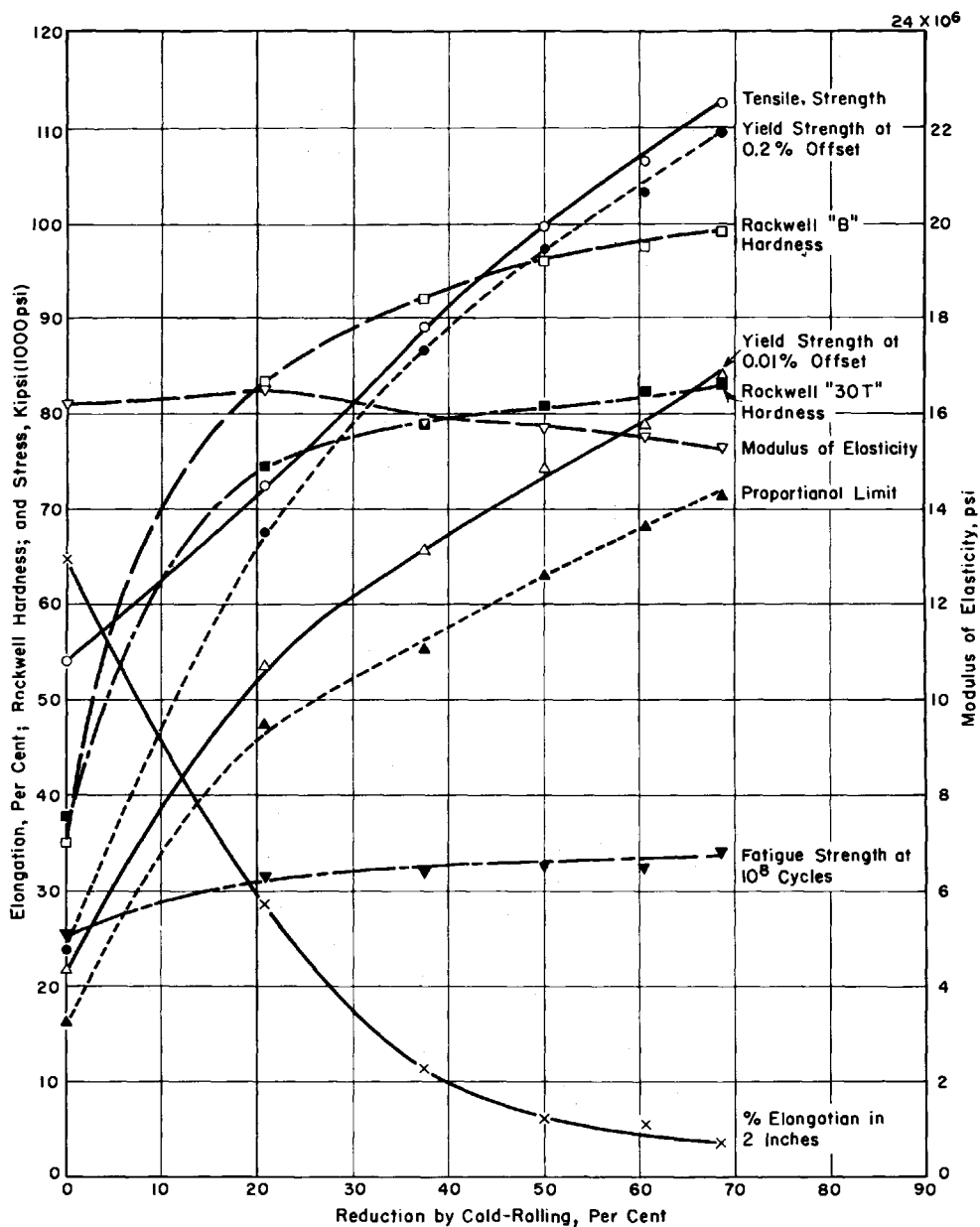


FIG. 22.—Mechanical Properties of 5 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.40 per cent

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.

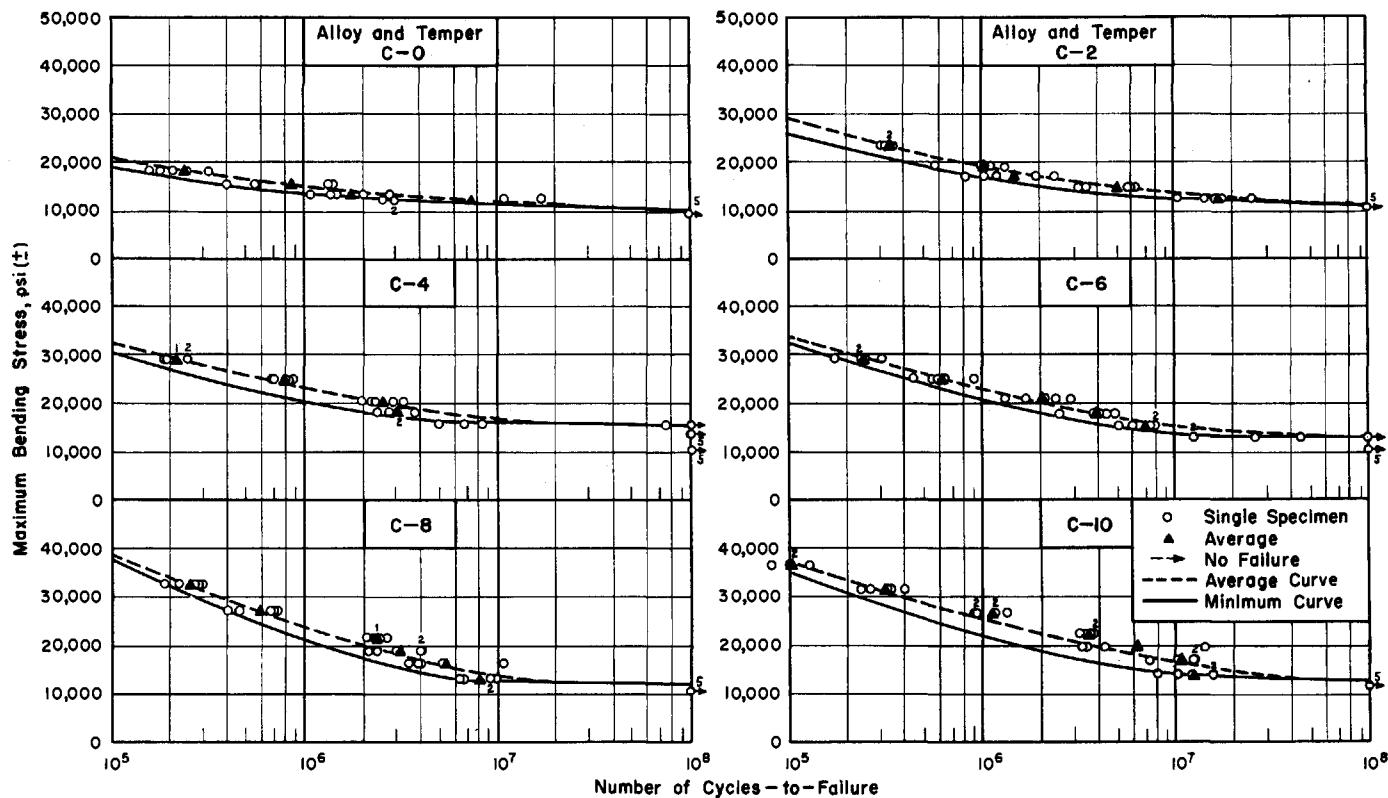


FIG. 23.—Fatigue Characteristics of Electrolytic Tough Pitch Copper Strip.

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.



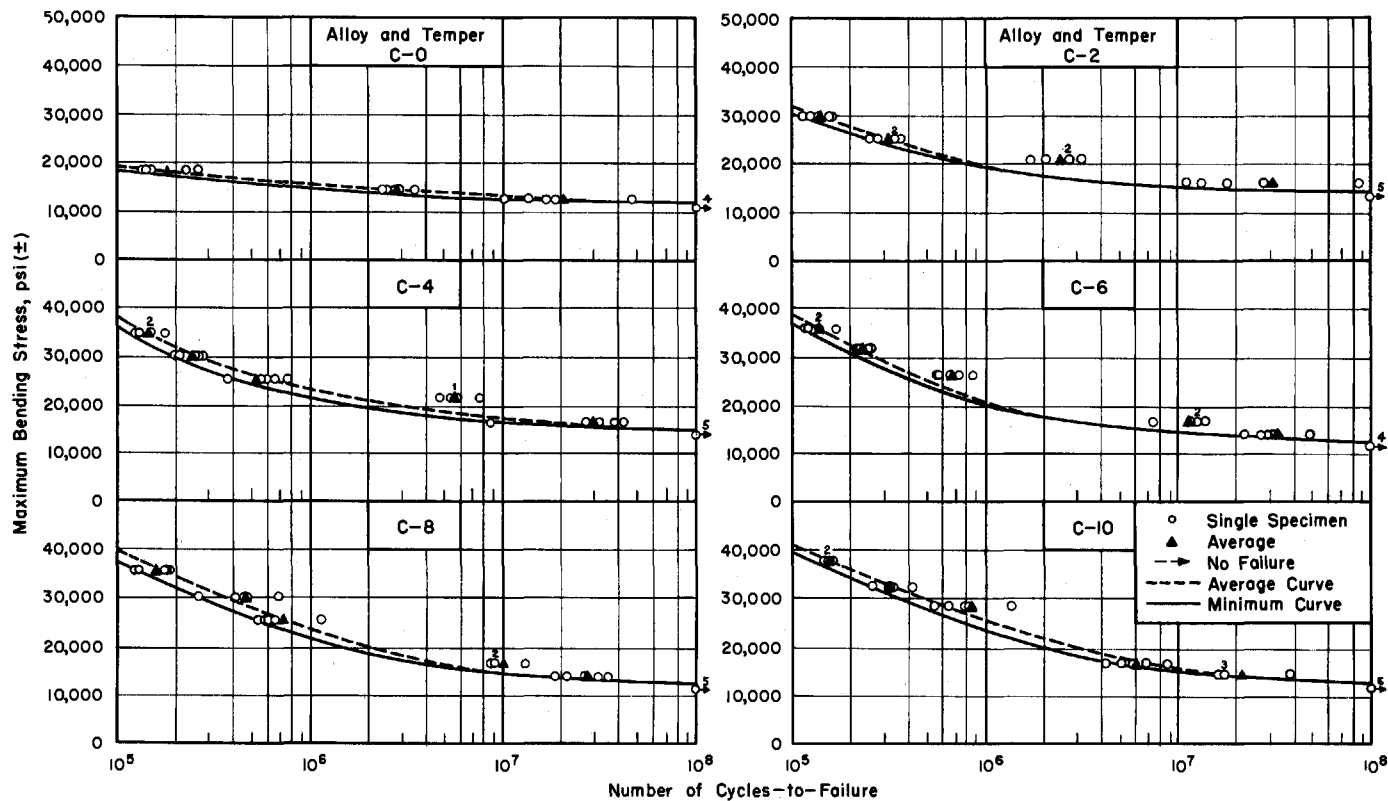


FIG. 24.—Fatigue Characteristics of Electrolytic Tough Pitch Copper Strip.

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.

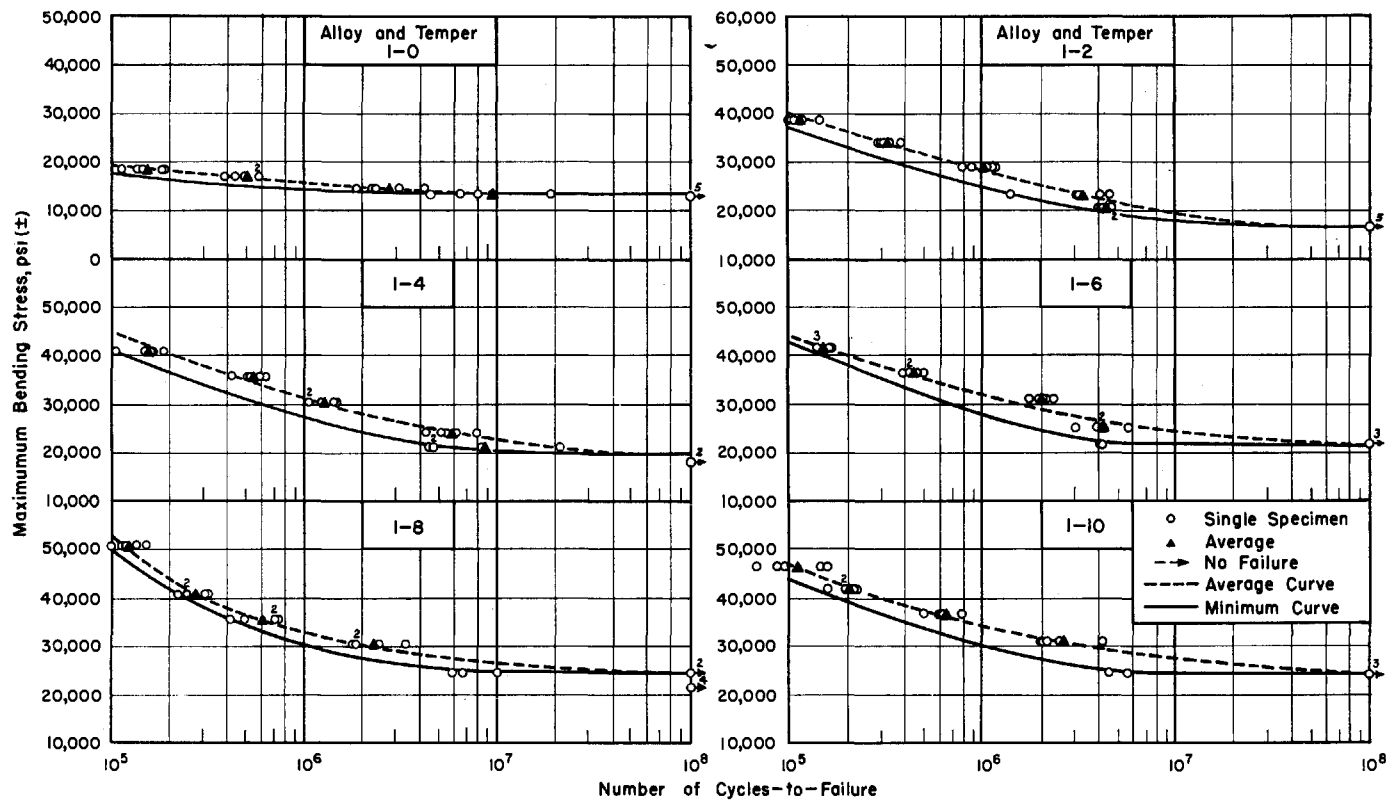


FIG. 25.—Fatigue Characteristics of 0.5 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.

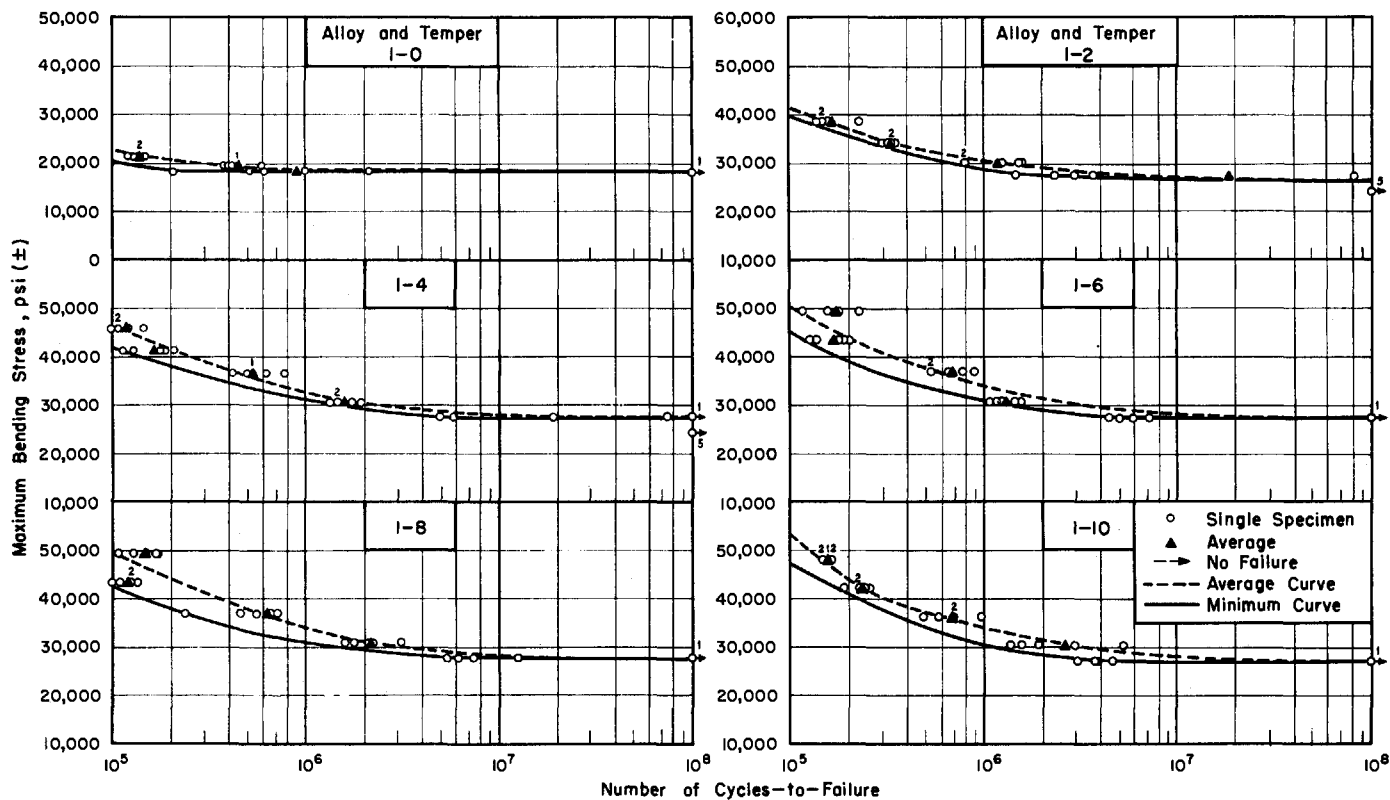


FIG. 26.—Fatigue Characteristics of 0.5 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.015 mm

Nominal thickness—0.040 in.

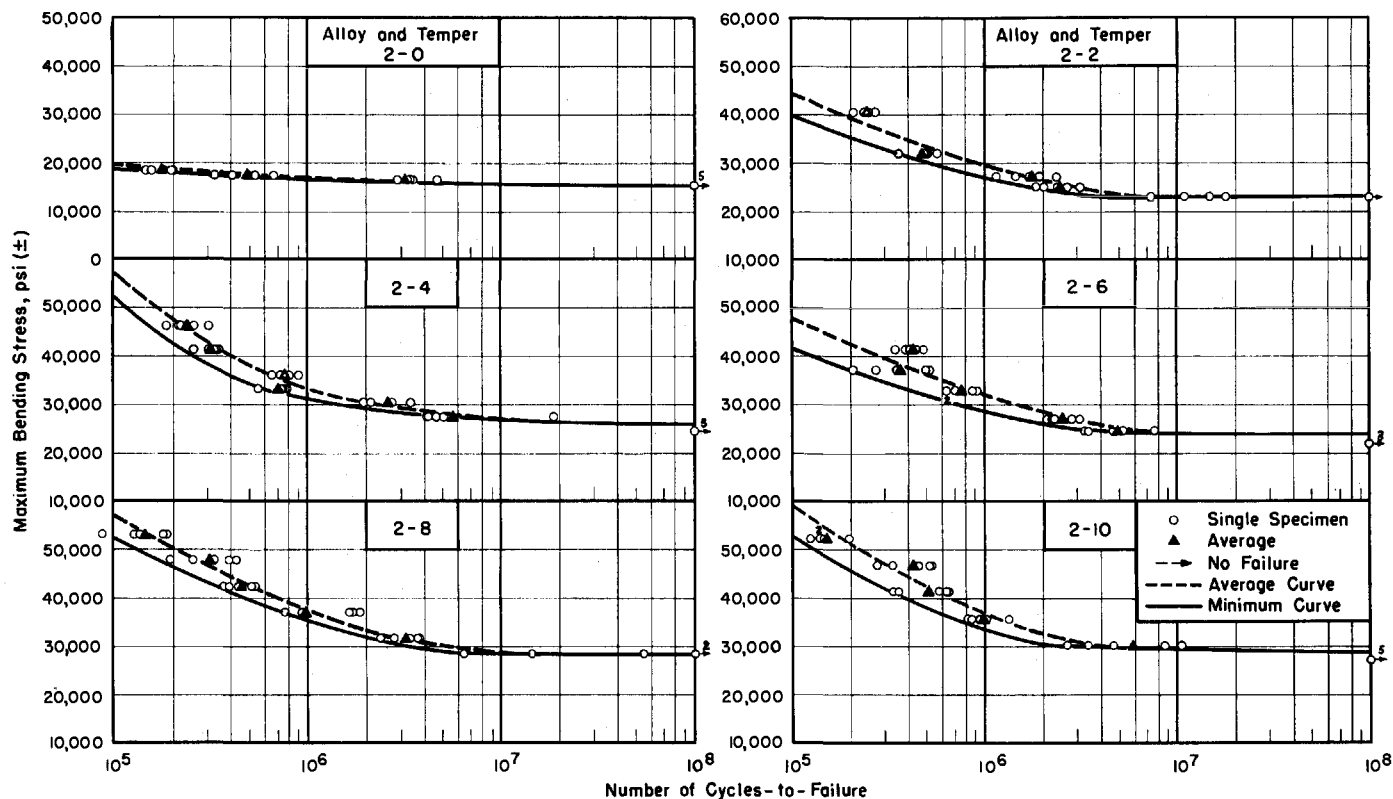


FIG. 27.—Fatigue Characteristics of 1 per cent Tin Phosphor Bronze Strip.

Nominal Phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.

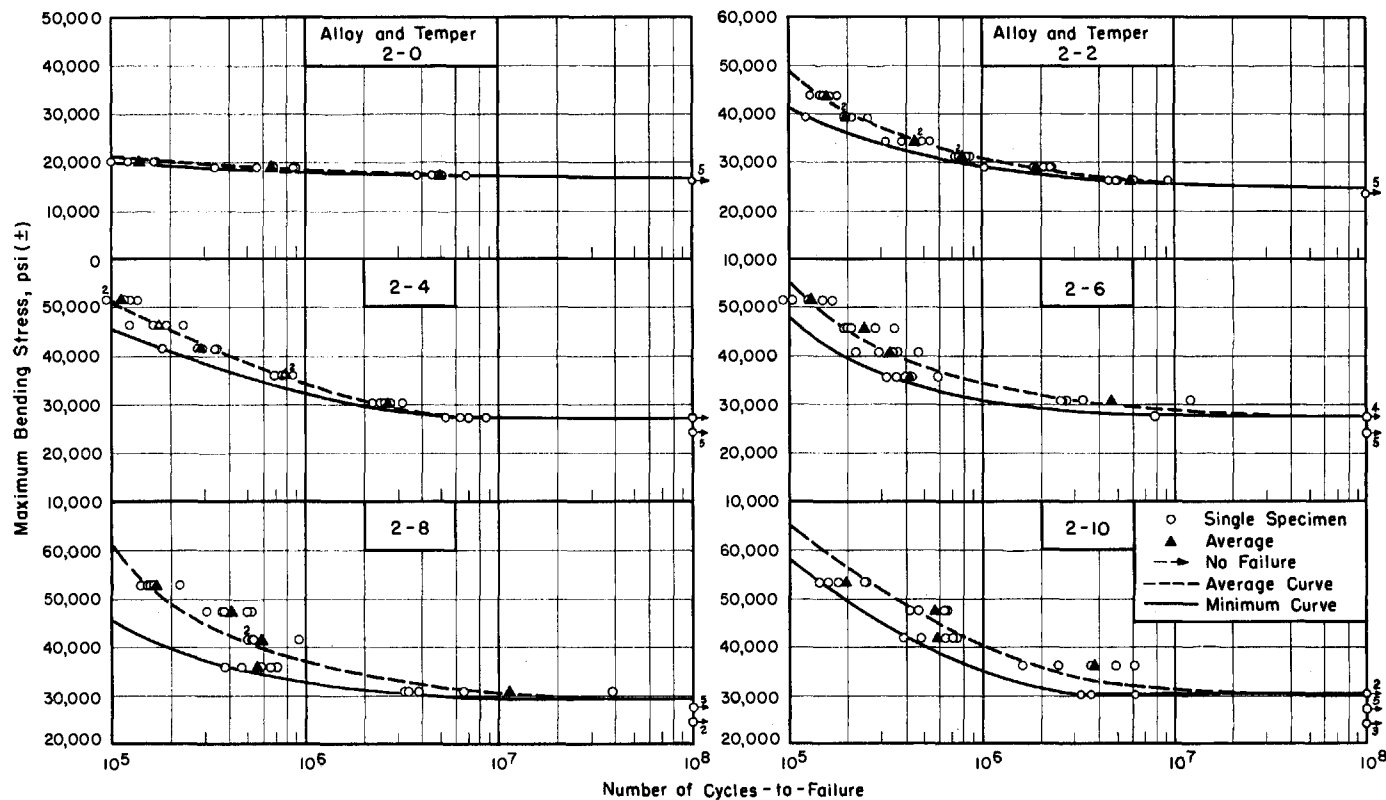


FIG. 28.—Fatigue Characteristics of 1 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
 Nominal ready-to-finish grain size—0.015 mm  
 Nominal thickness—0.040 in.

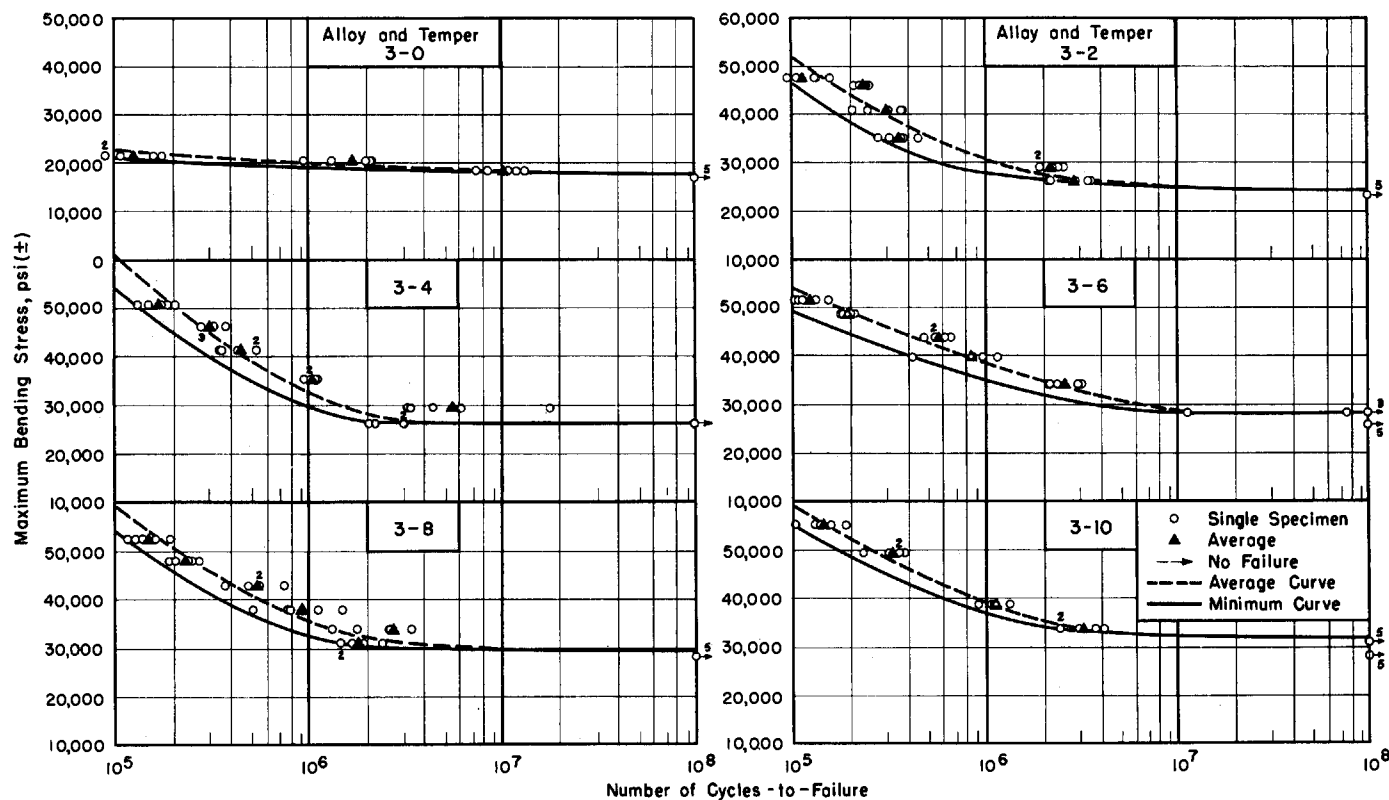


FIG. 29.—Fatigue Characteristics of 2 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.

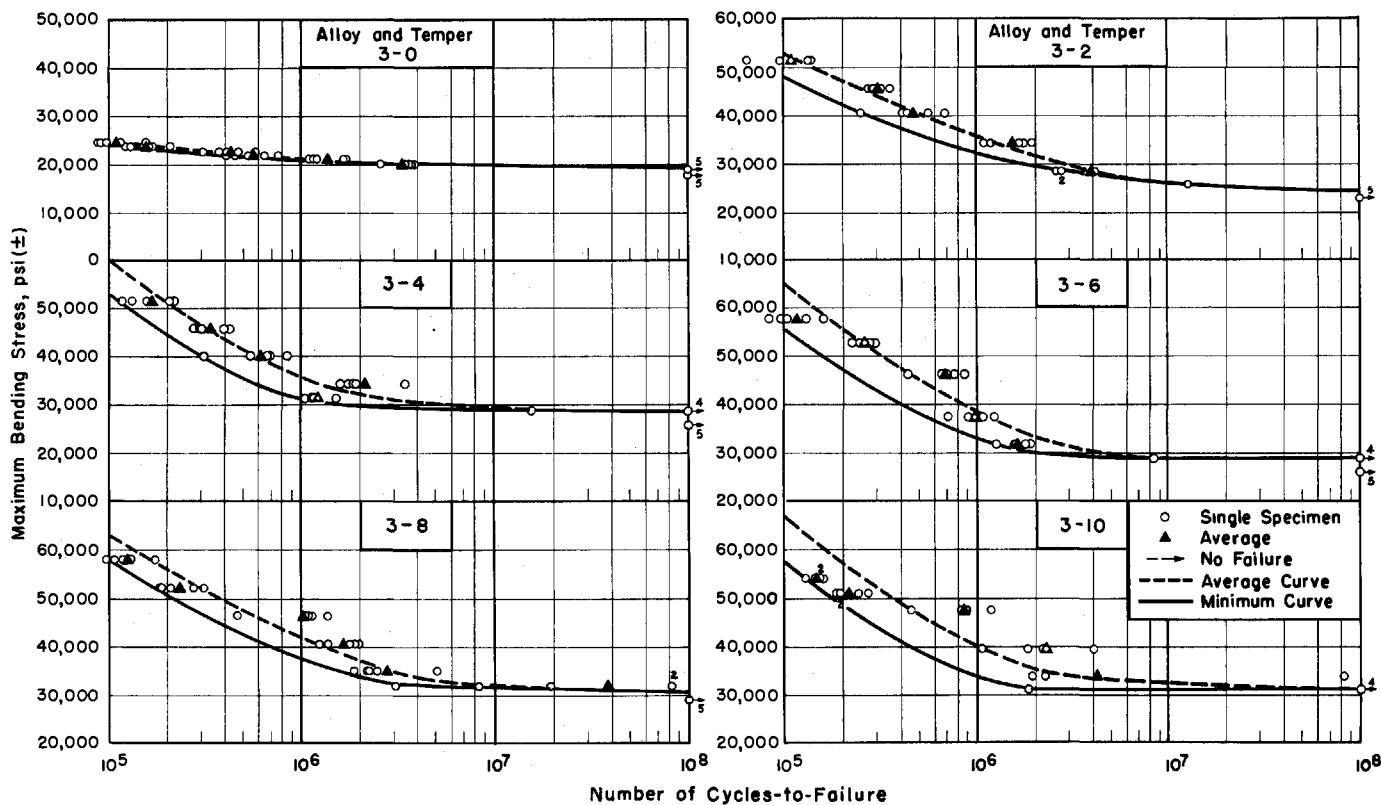


FIG. 30.—Fatigue Characteristics of 2 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
 Nominal ready-to-finish grain size—0.015 mm  
 Nominal thickness—0.040 in.

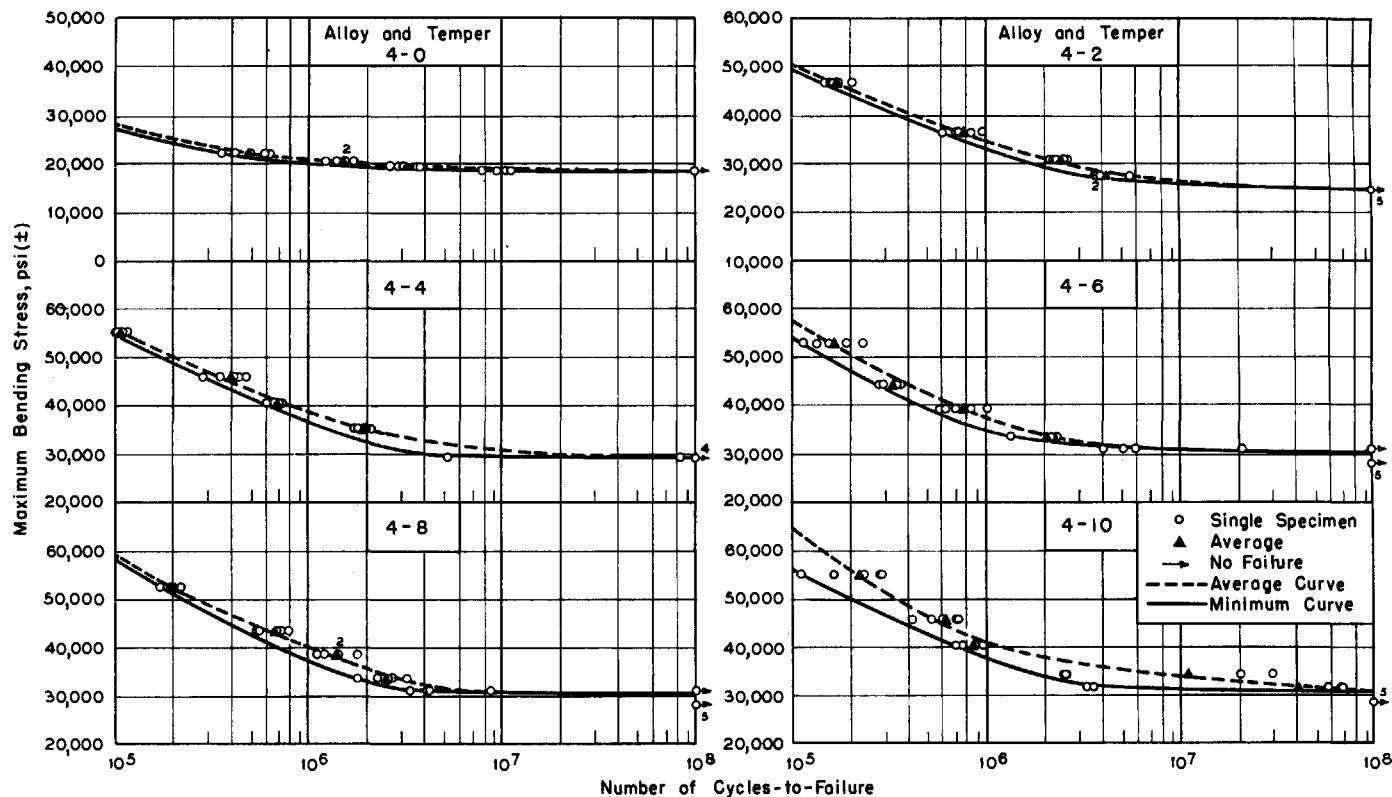


FIG. 31.—Fatigue Characteristics of 3 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.



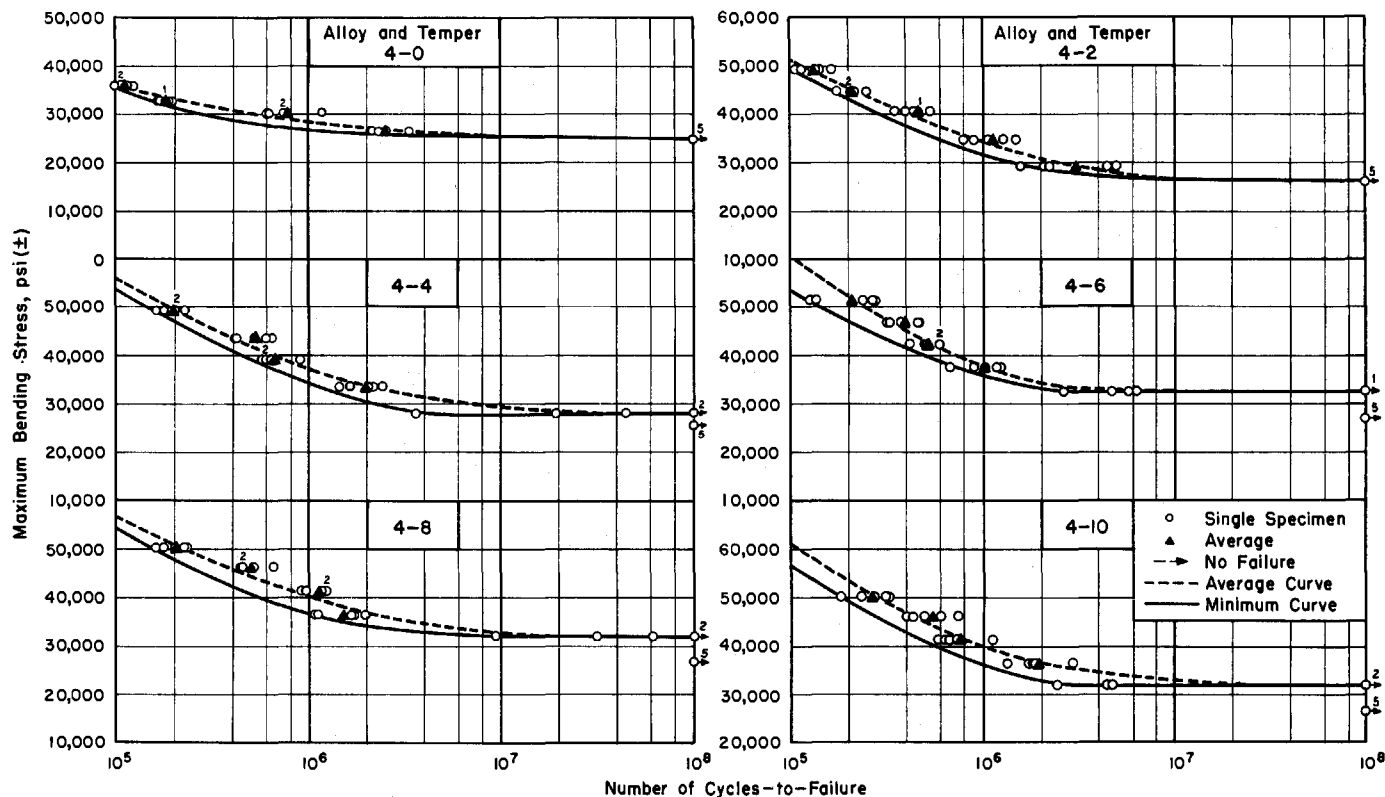


FIG. 32.—Fatigue Characteristics of 3 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.015 mm

Nominal thickness—0.040 in.

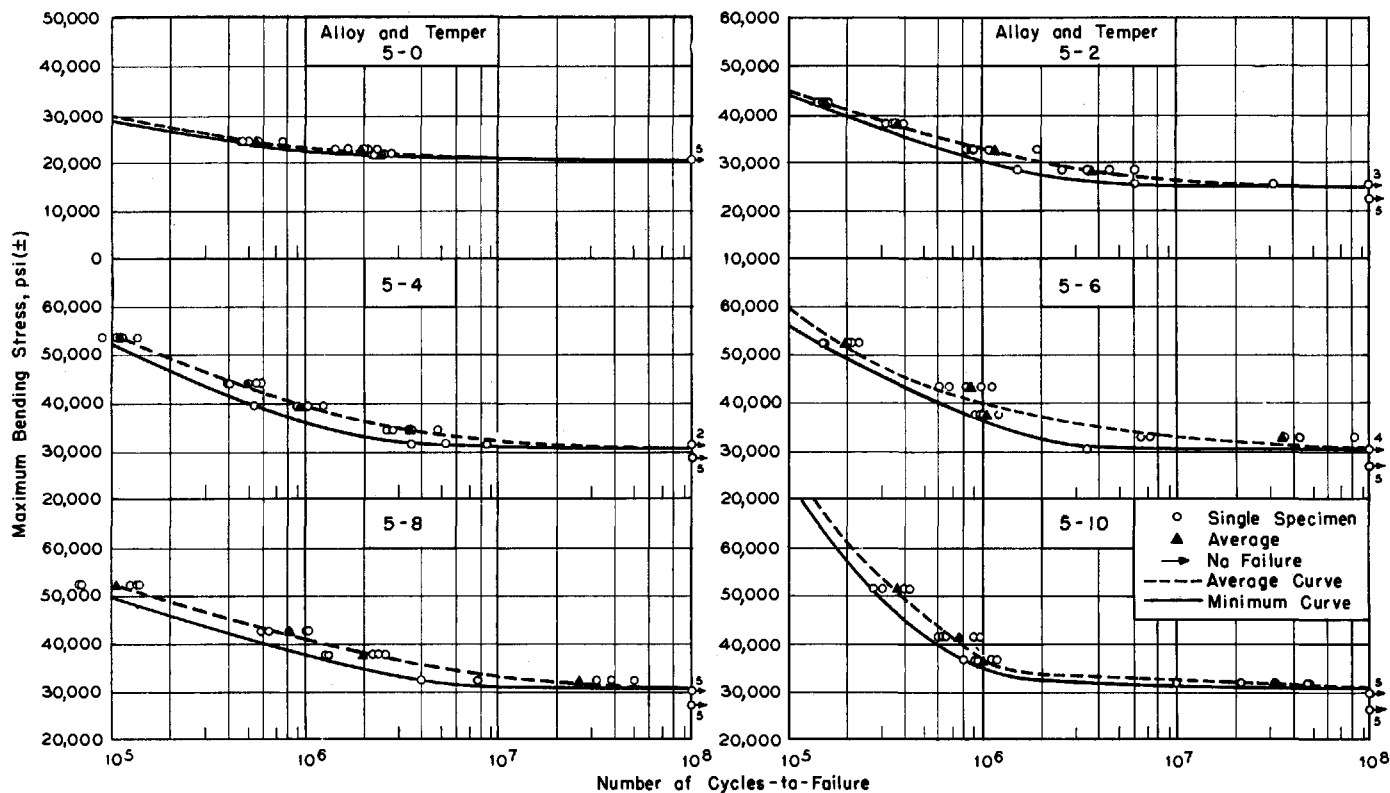


FIG. 33.—Fatigue Characteristics of 4 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.

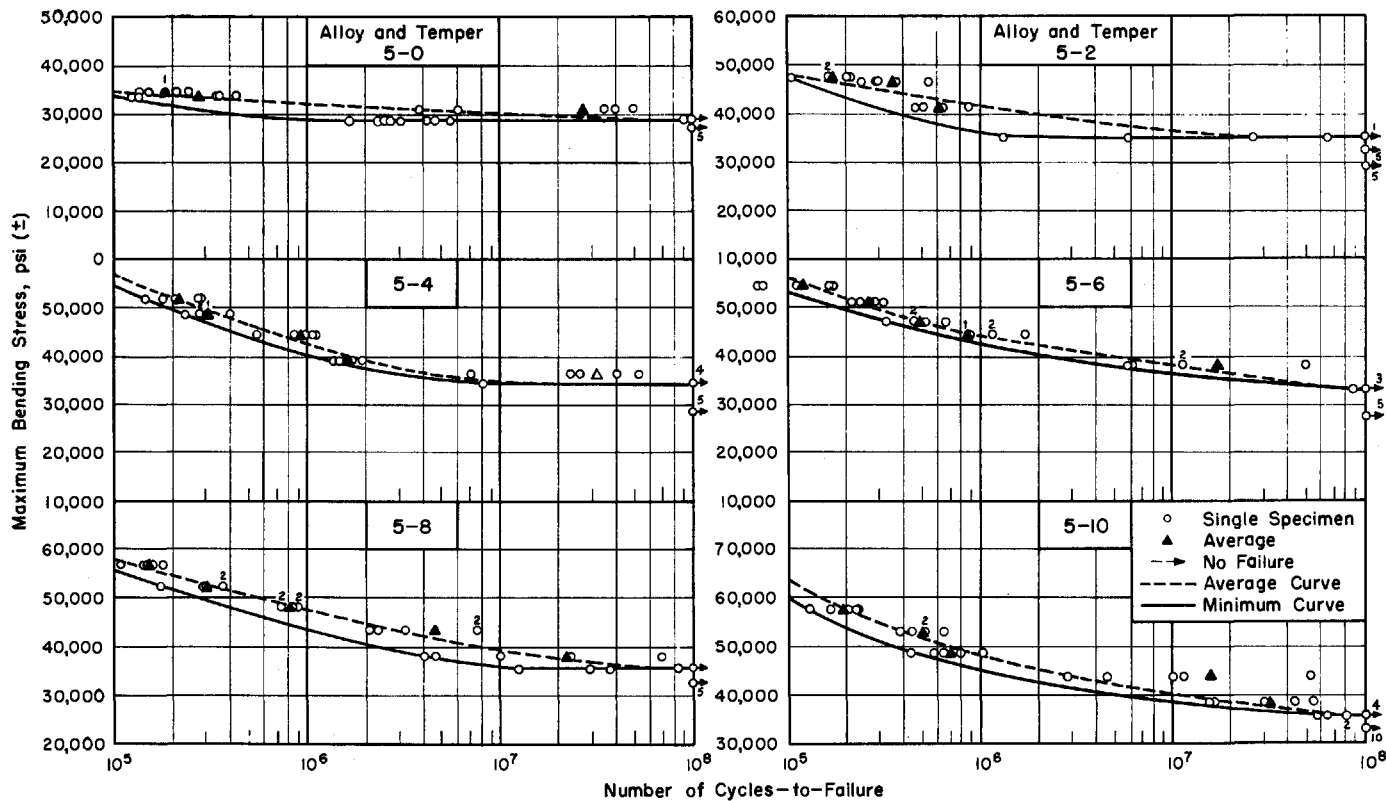


FIG. 34.—Fatigue Characteristics of 4 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.015 mm

Nominal thickness—0.040 in.

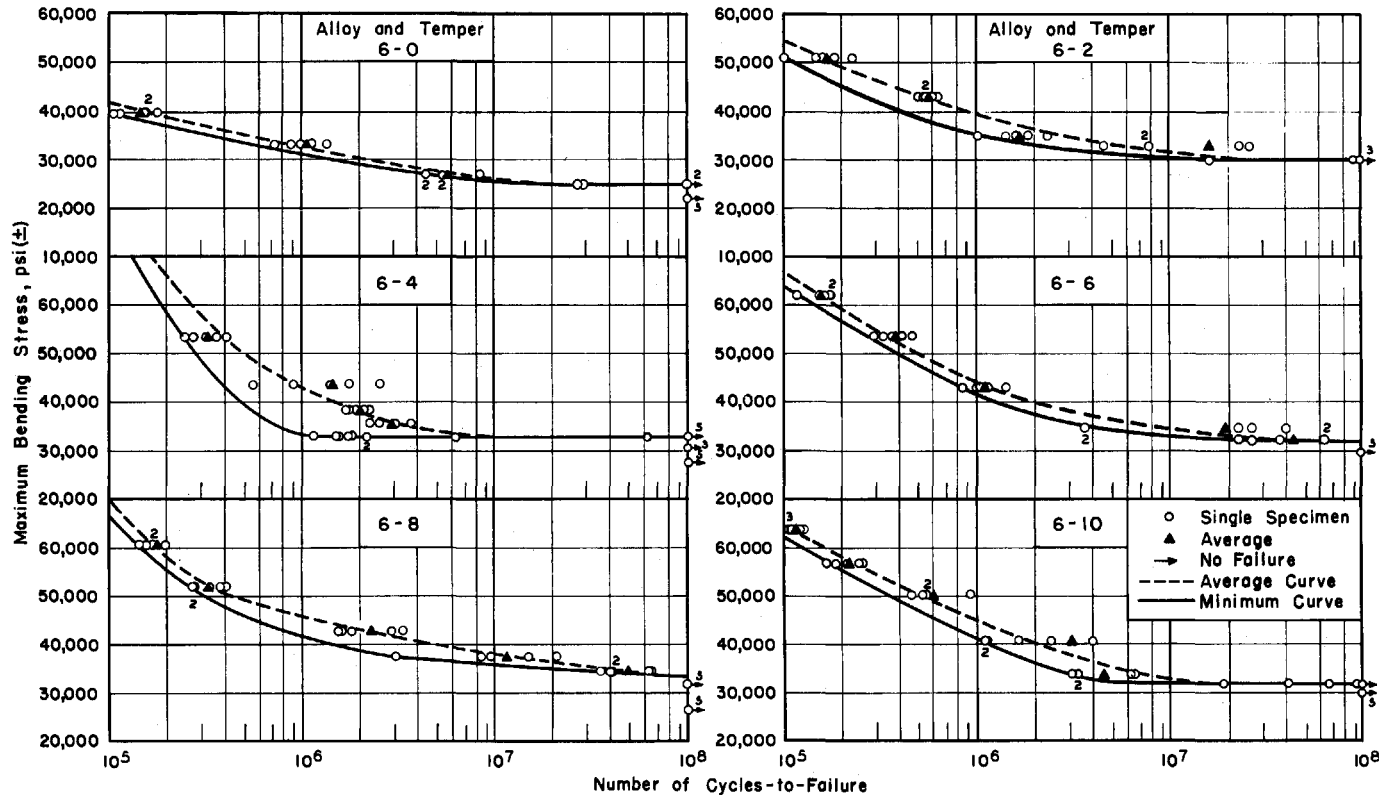


FIG. 35.—Fatigue Characteristics of 5 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.

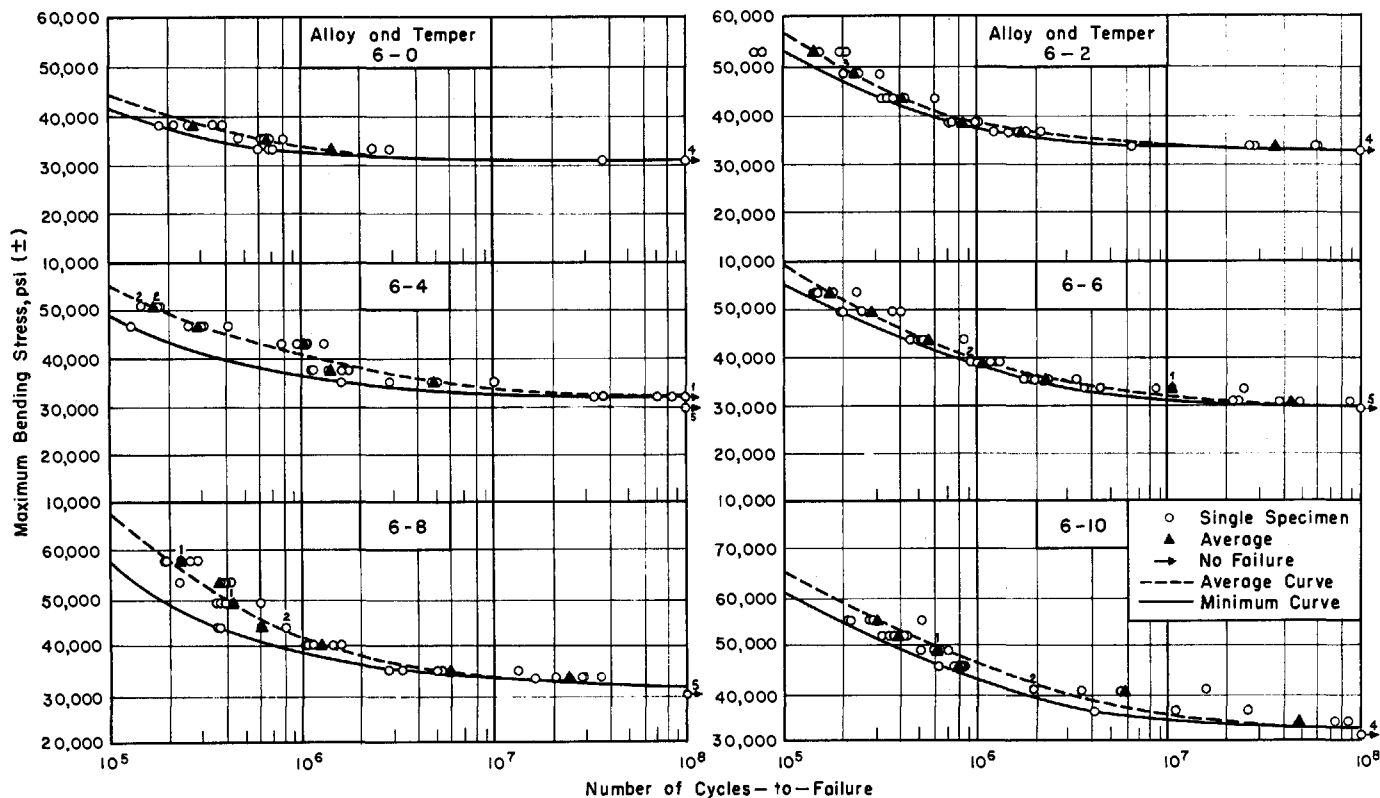


FIG. 36.—Fatigue Characteristics of 5 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.015 mm

Nominal thickness—0.040 in.

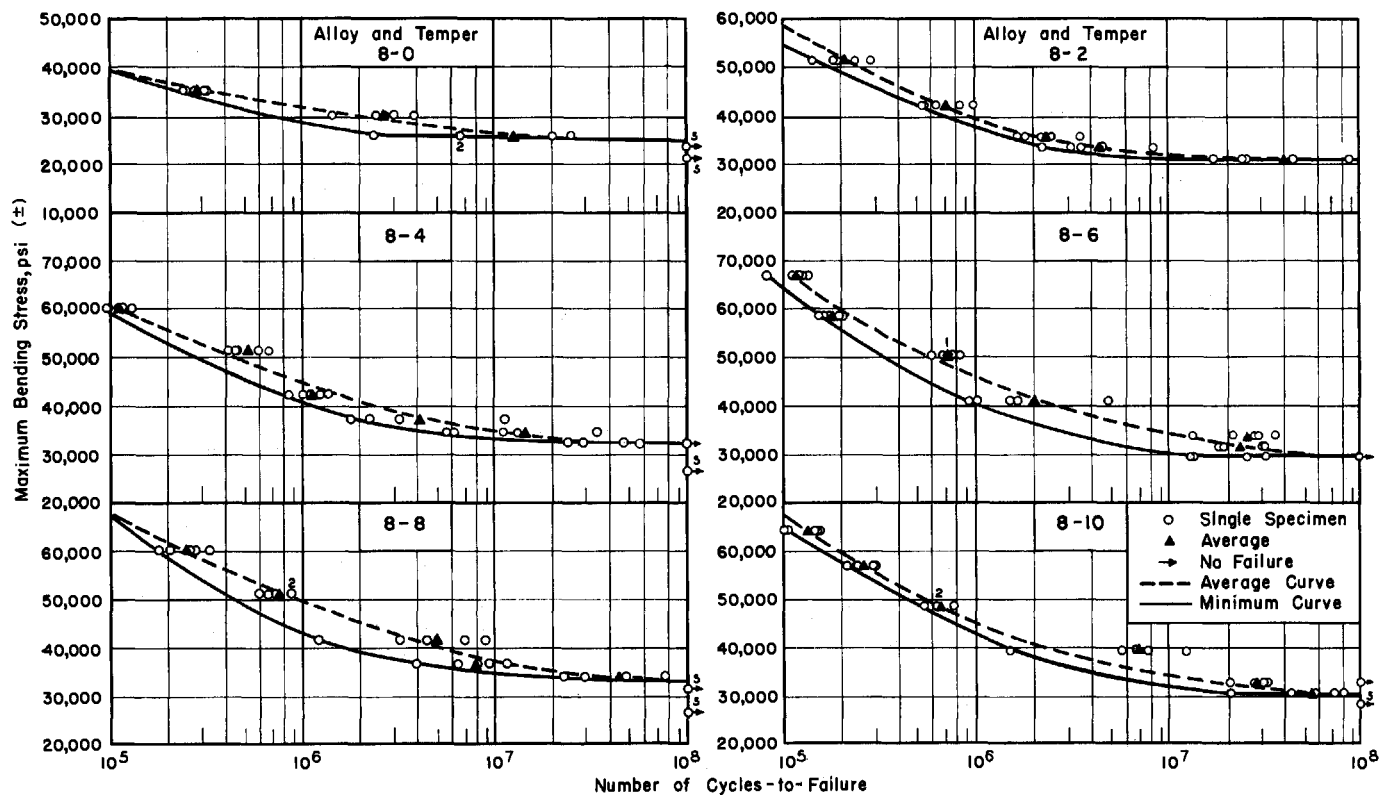


FIG. 37.—Fatigue Characteristics of 8 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.

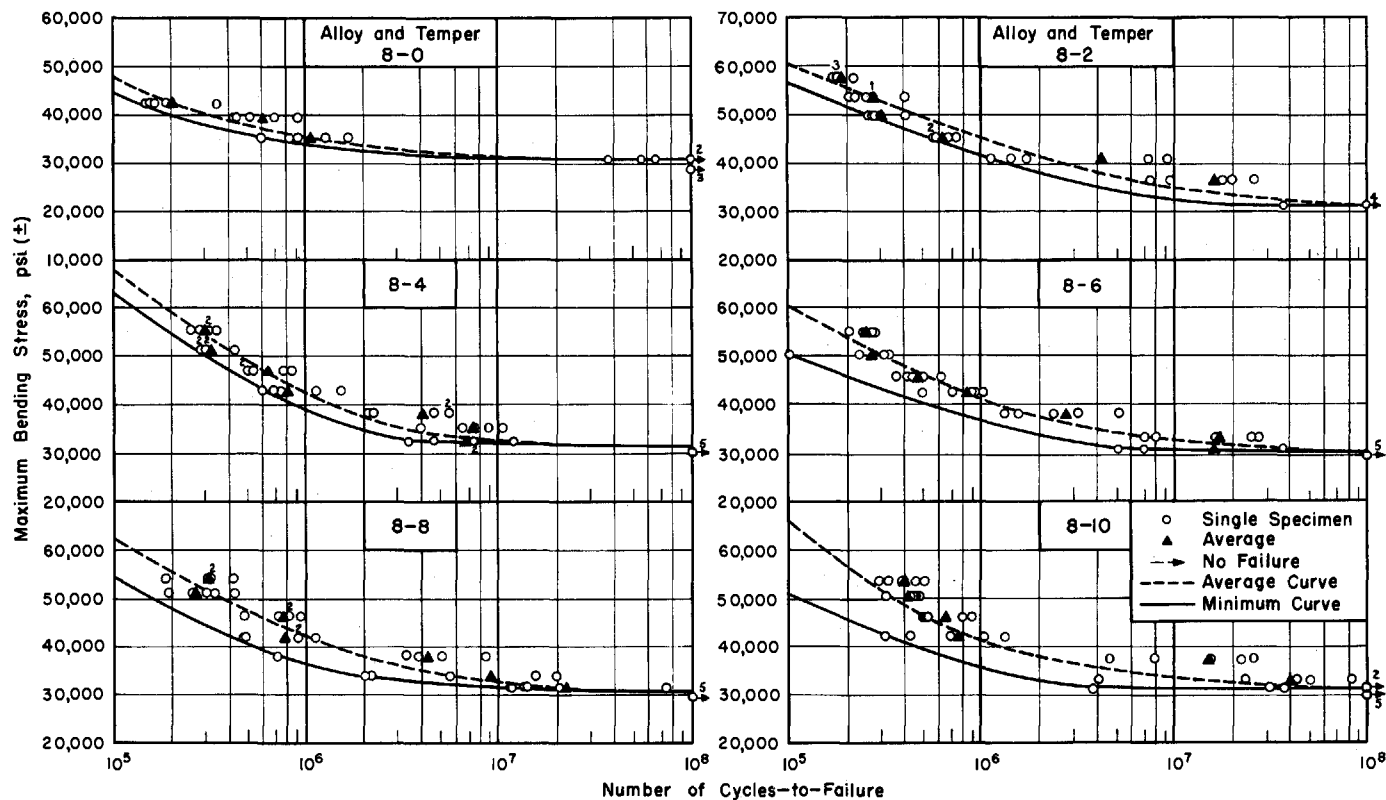


FIG. 38.—Fatigue Characteristics of 8 per cent Tin Phosphor Bronze Strip.  
 Nominal phosphorus content—0.05 per cent  
 Nominal ready-to-finish grain size—0.015 mm  
 Nominal thickness—0.040 in.

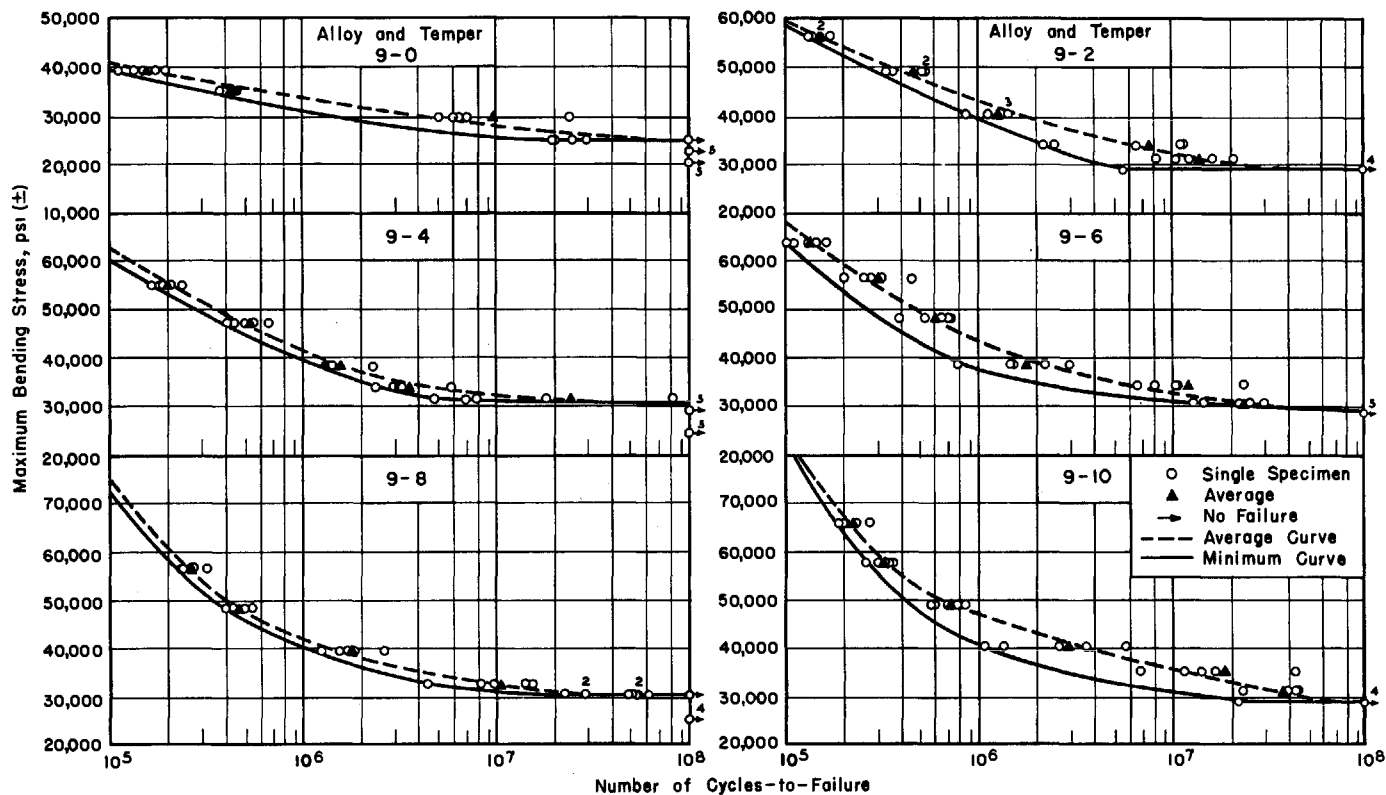


FIG. 39.—Fatigue Characteristic of 10 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.



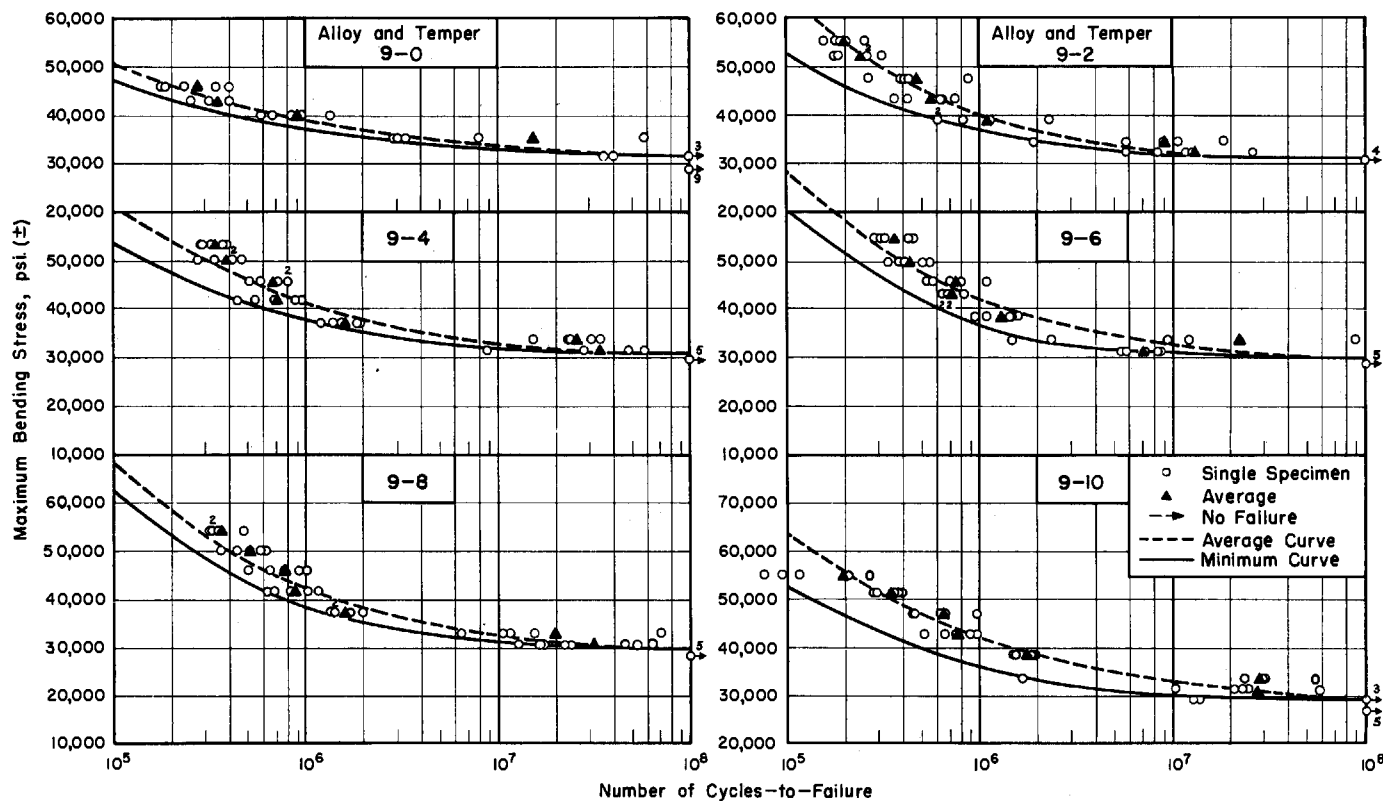


FIG. 40.—Fatigue Characteristics of 10 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.015 mm

Nominal thickness—0.040 in.

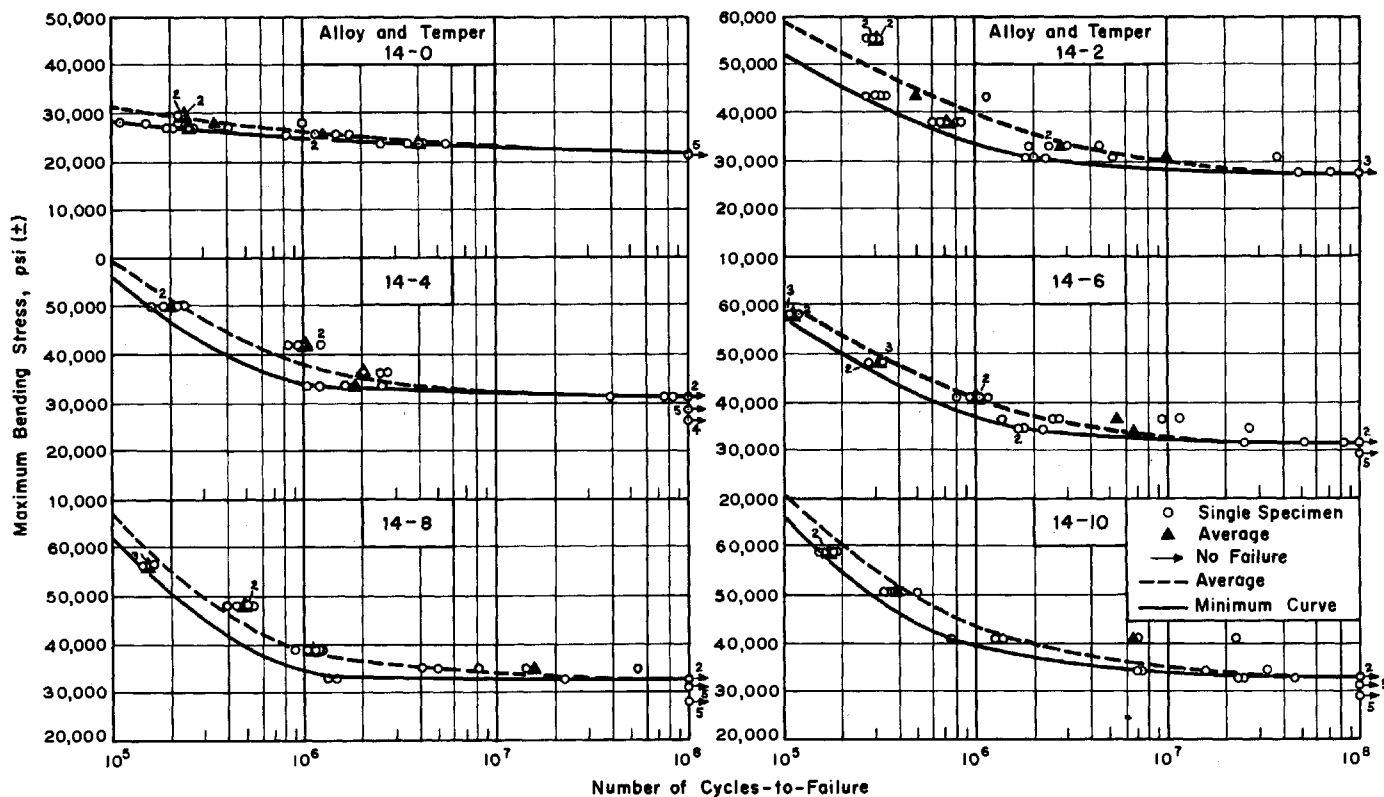


FIG. 41.—Fatigue Characteristics of 3 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.40 per cent

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.

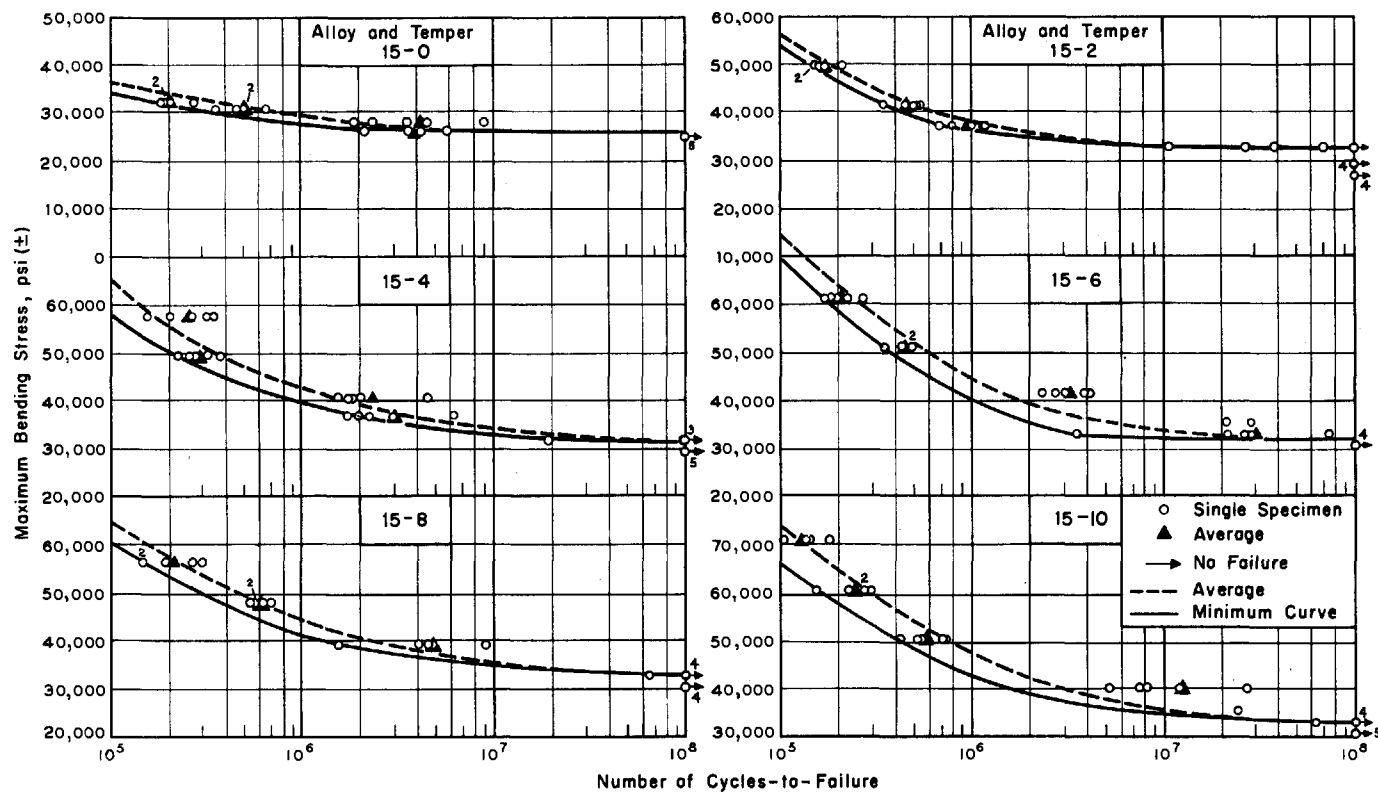


FIG. 42.—Fatigue Characteristics of 4 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.40 per cent

Nominal ready-to-finish grain size—0.035 mm

Nominal thickness—0.040 in.

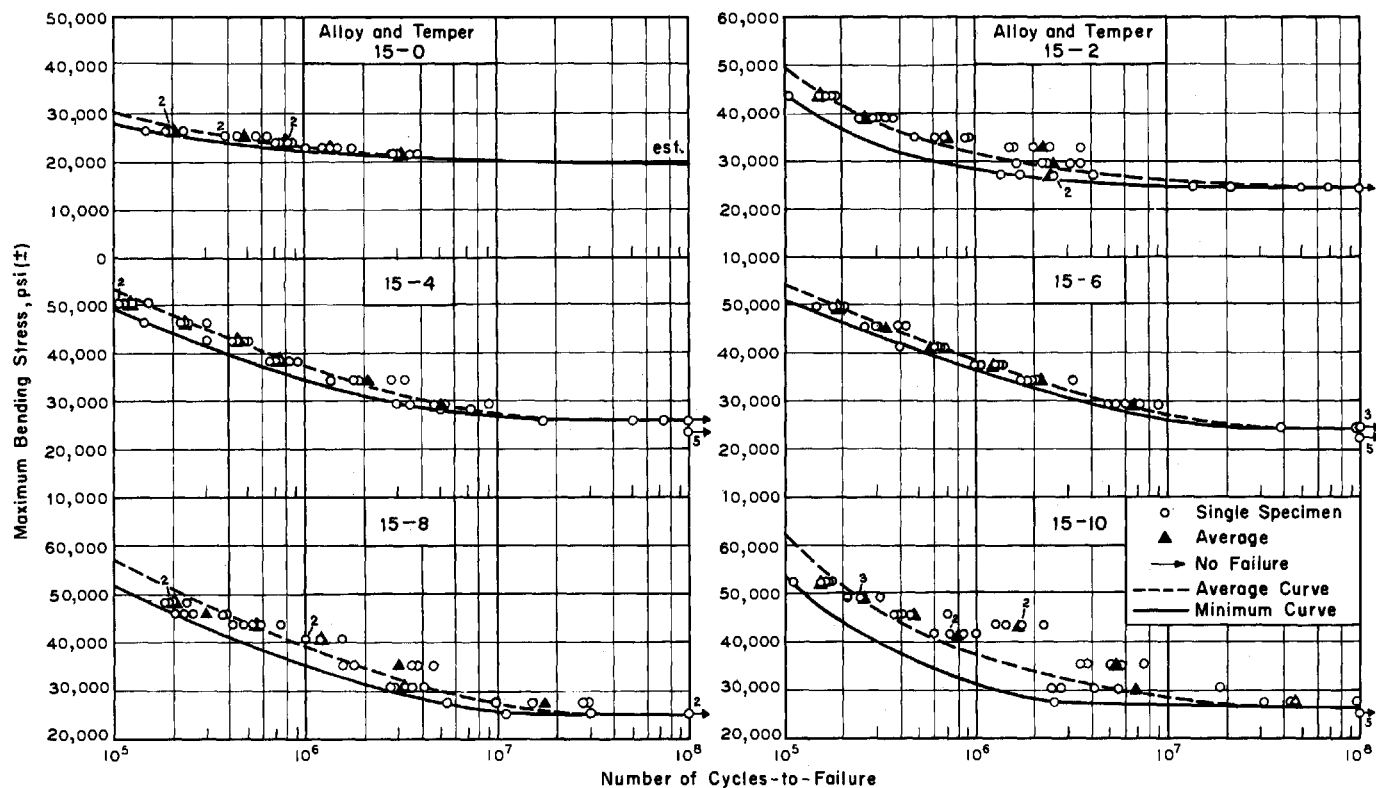


FIG. 43.—Fatigue Characteristics of 4 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.40 per cent

Nominal ready-to-finish grain size—0.075 mm

Nominal thickness—0.040 in.

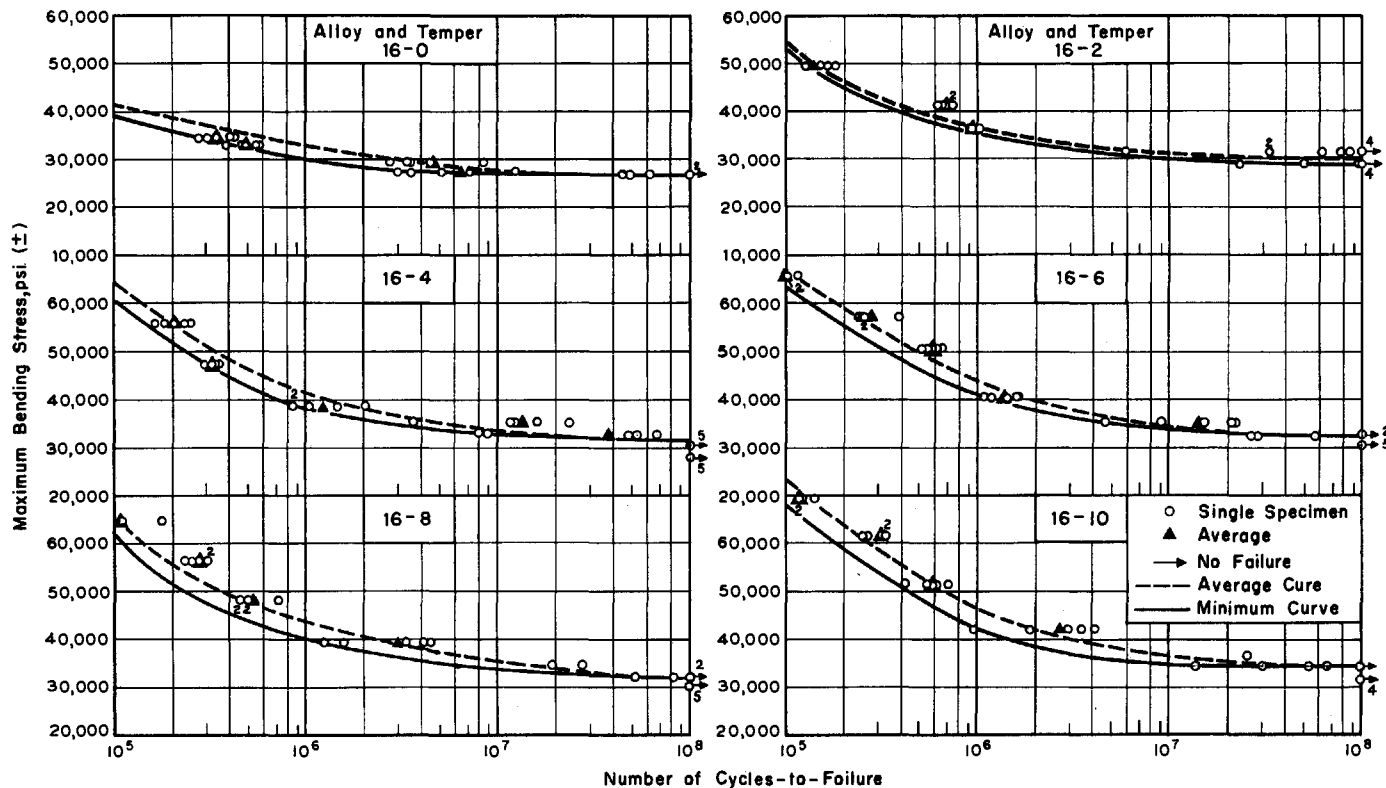


FIG. 44.—Fatigue Characteristics of 5 per cent Tin Phosphor Bronze Strip.  
 Nominal phosphorus content—0.40 per cent  
 Nominal ready-to-finish grain size—0.035 mm  
 Nominal thickness—0.040 in.

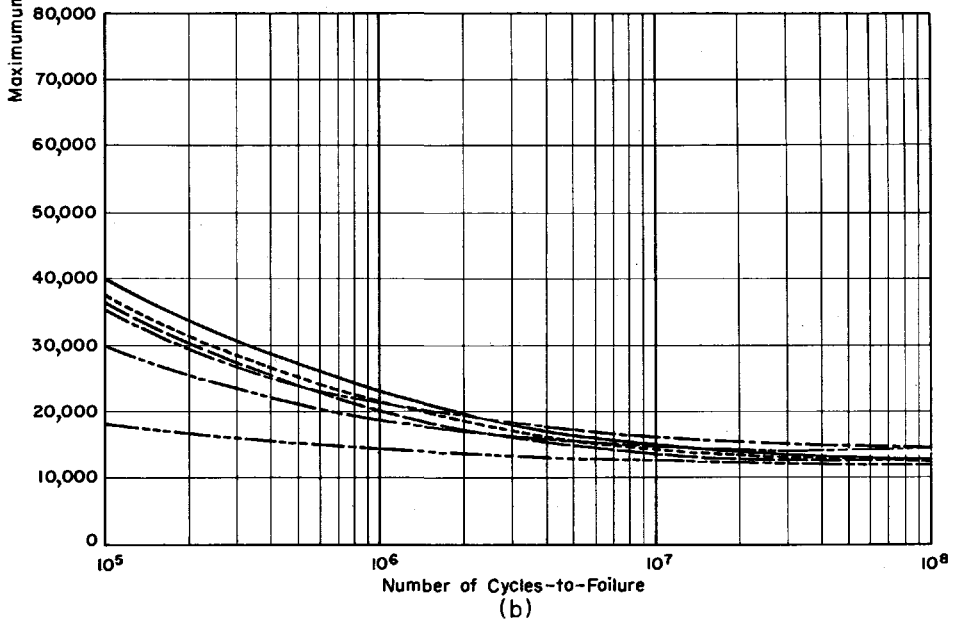
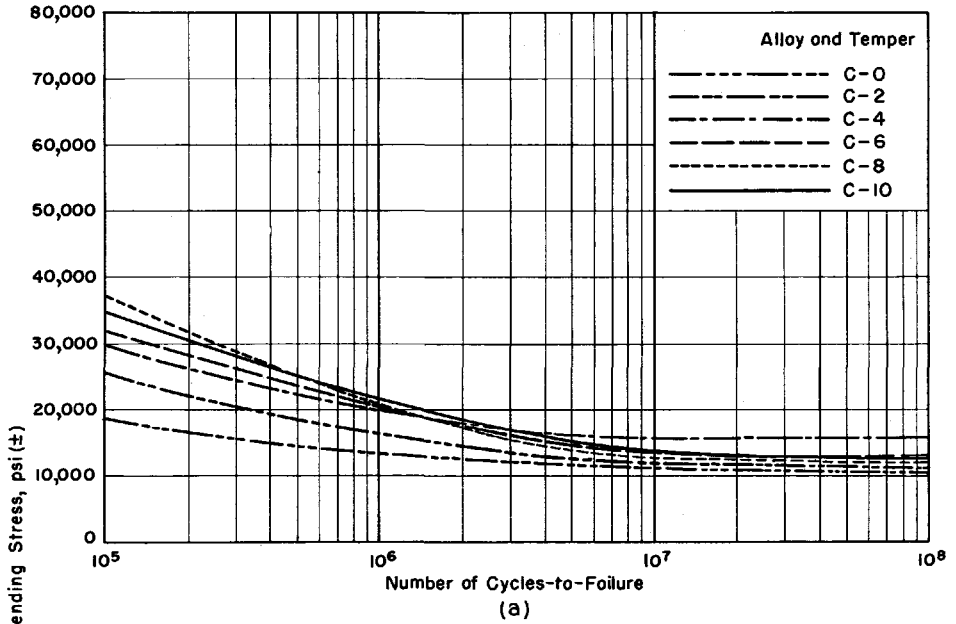


FIG. 45.—Comparison of Fatigue Characteristics of Electrolytic Tough Pitch Copper Strip.

Nominal thickness—0.040 in.

(a) Nominal ready-to-finish grain size—0.035 mm.

(b) Nominal ready-to-finish grain size—0.015 mm.

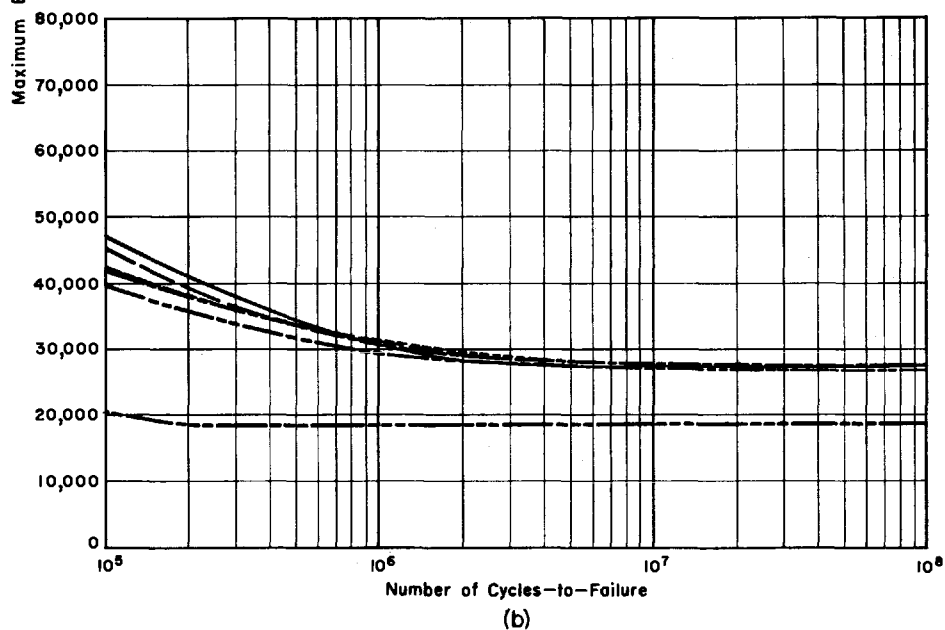
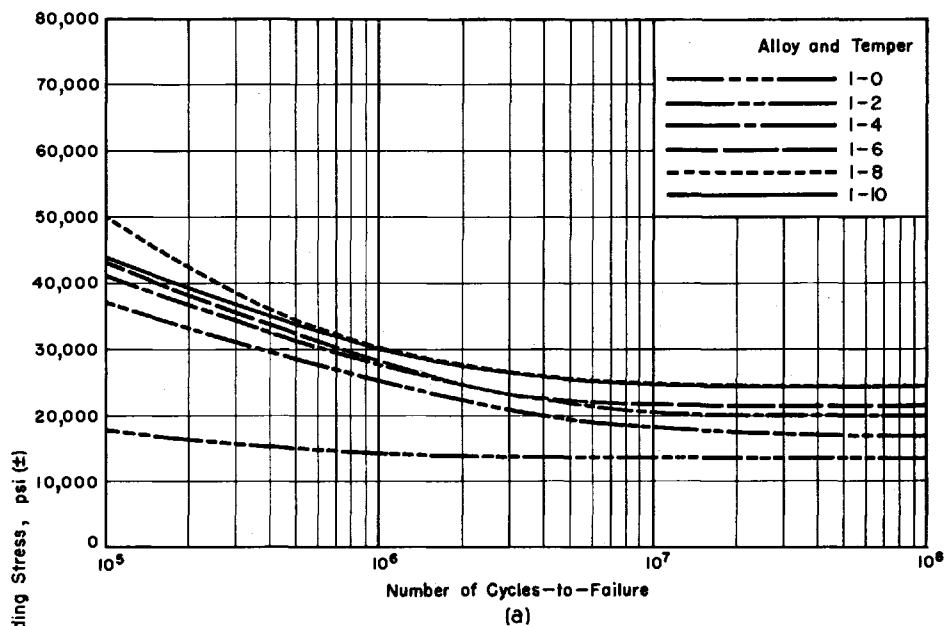


FIG. 46.—Comparison of Fatigue Characteristics of 0.5 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal thickness—0.040 in.

(a) Nominal ready-to-finish grain size—0.035 mm.

(b) Nominal ready-to-finish grain size—0.015 mm.

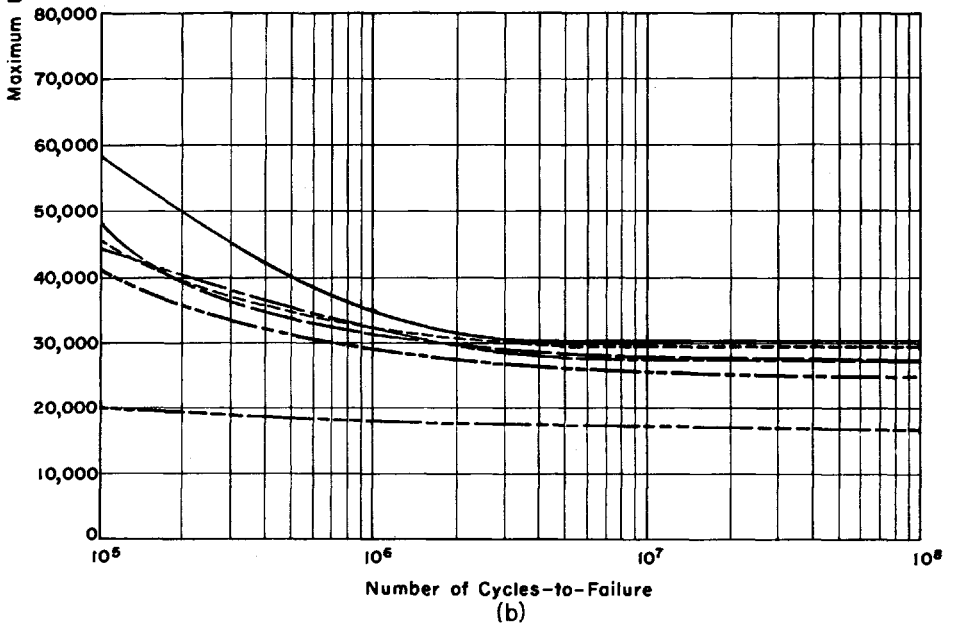
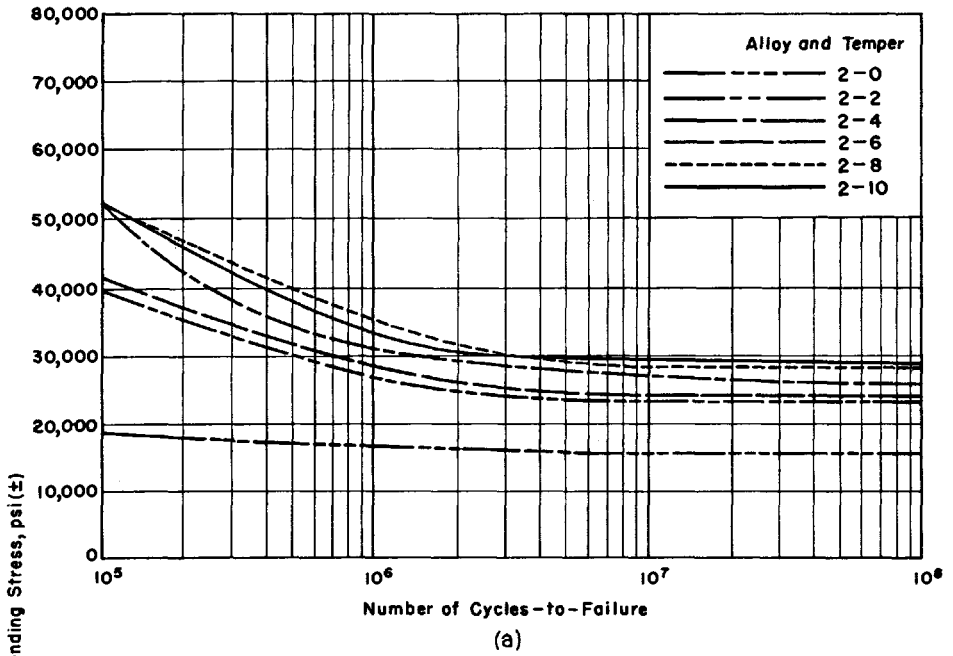


FIG. 47.—Comparison of Fatigue Characteristics of 1 per cent Tin Phosphor Bronze Strip.

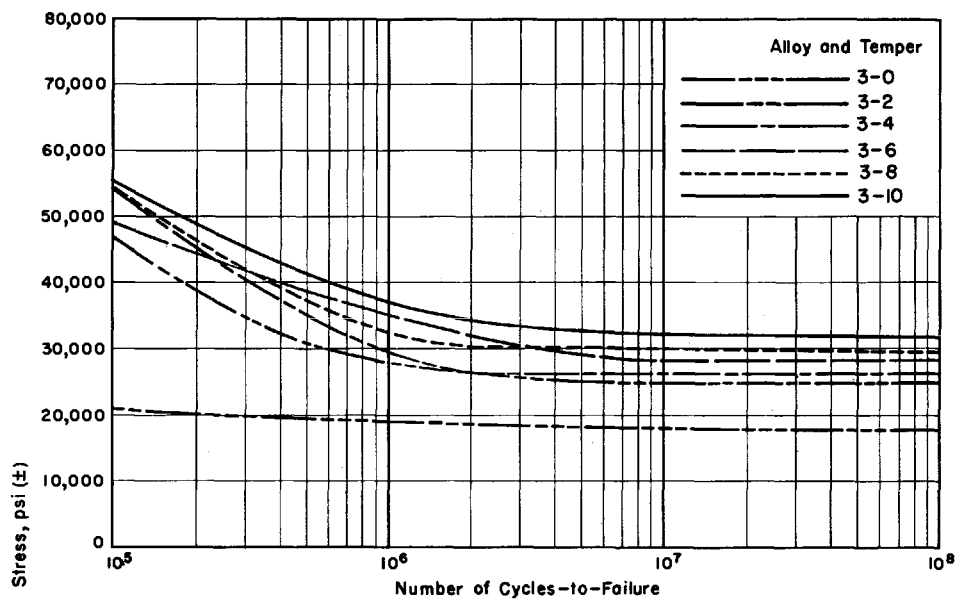
Nominal phosphorus content—0.05 per cent

Nominal thickness—0.040 in.

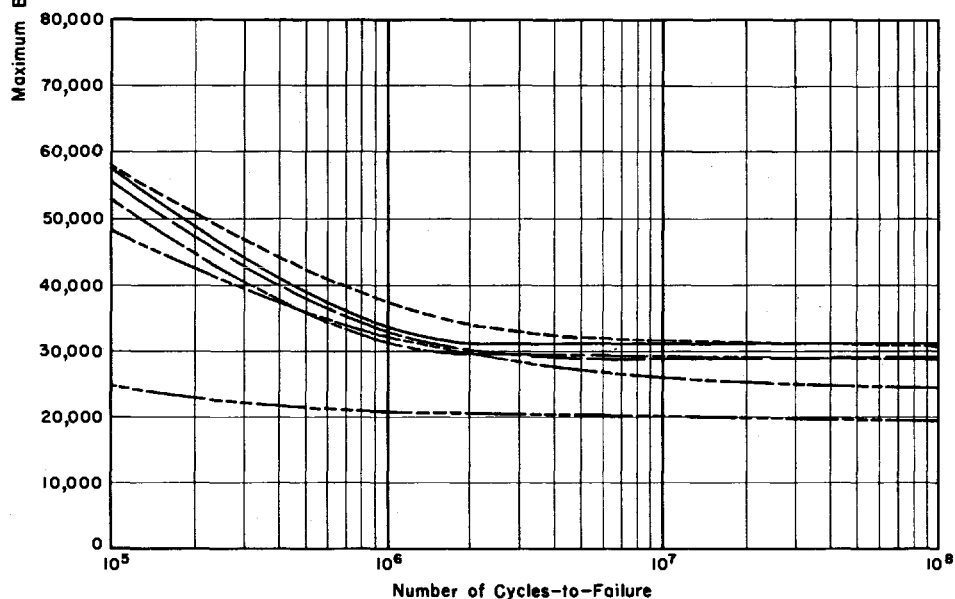
(a) Nominal ready-to-finish grain size—0.035 mm.

(b) Nominal ready-to-finish grain size—0.015 mm.





(a)



(b)

FIG. 48.—Comparison of Fatigue Characteristics of 2 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal thickness—0.040 in.

(a) Nominal ready-to-finish grain size—0.035 mm.

(b) Nominal ready-to-finish grain size—0.015 mm.

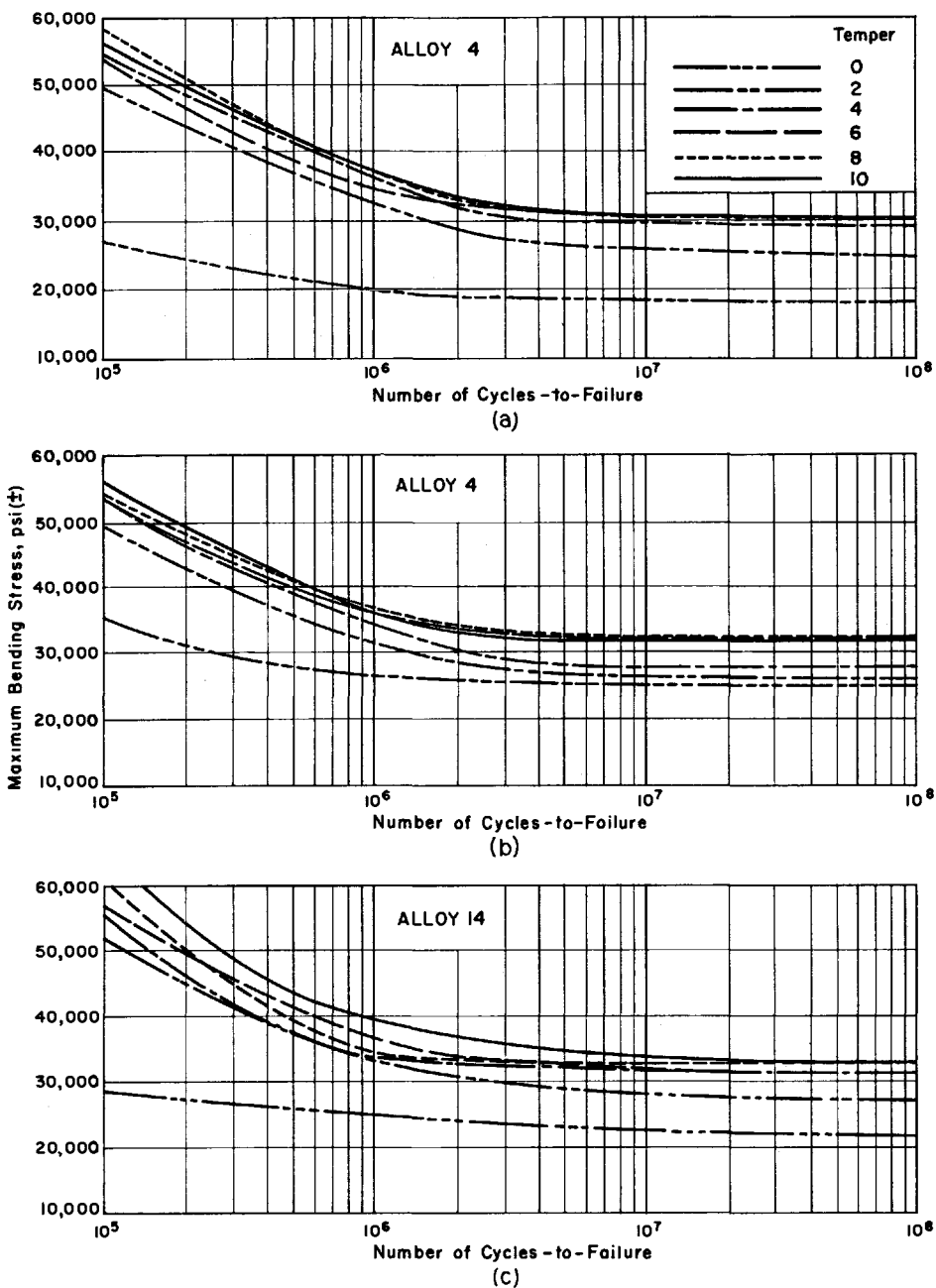


FIG. 49.—Comparison of Fatigue Characteristics of 3 per cent Tin Phosphor Bronze Strip.

Nominal thickness—0.040 in.

- (a) Nominal ready-to-finish grain size—0.035 mm, Nominal phosphorus content—0.05 per cent.
- (b) Nominal ready-to-finish grain size—0.015 mm, Nominal phosphorus content—0.05 per cent.
- (c) Nominal ready-to-finish grain size—0.035 mm, Nominal phosphorus content—0.40 per cent.

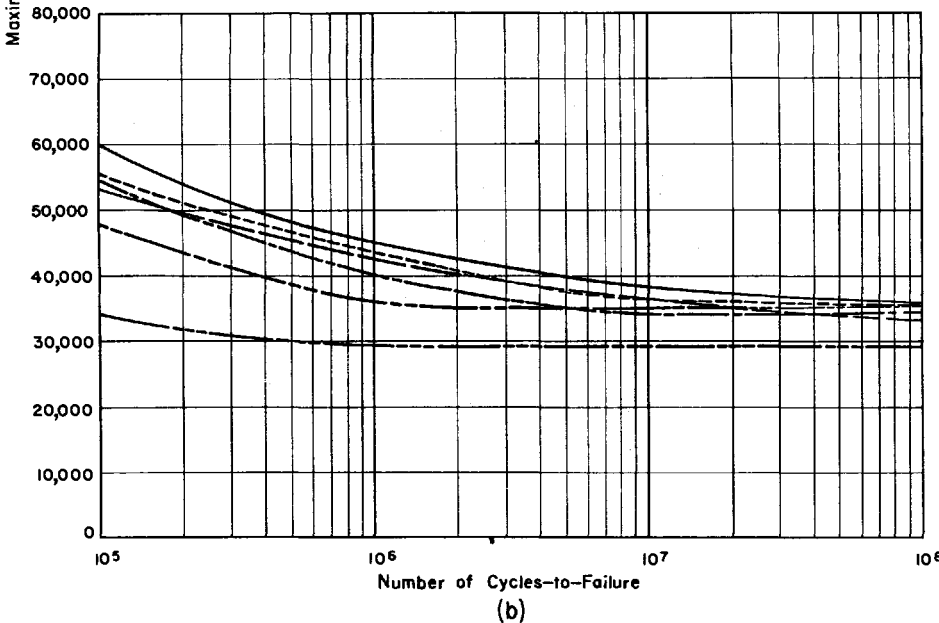
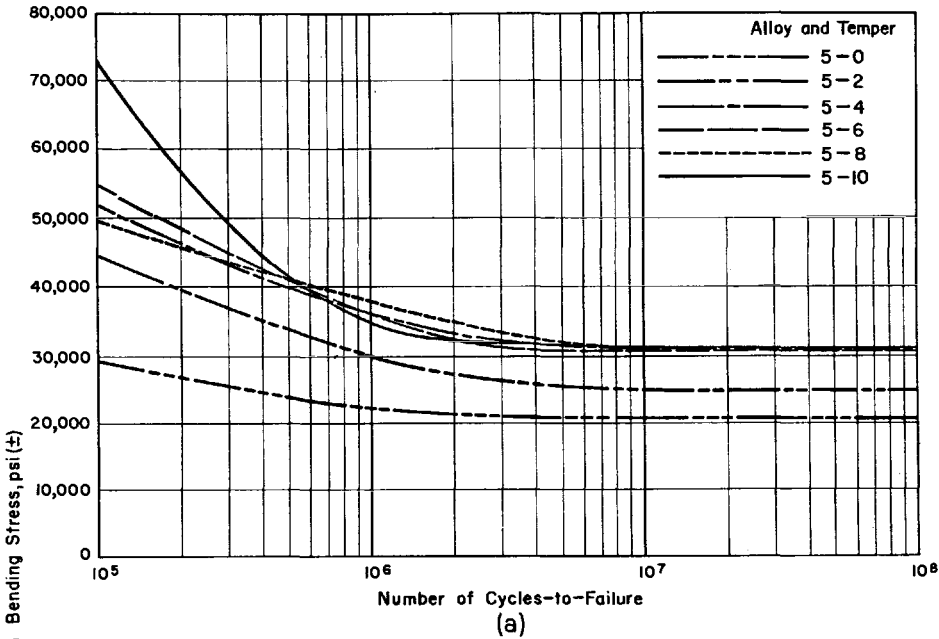


FIG. 50.—Comparison of Fatigue Characteristics of 4 per cent Tin Phosphor Bronze Strip.  
Nominal phosphorus content—0.05 per cent.  
Nominal thickness—0.040 in.  
(a) Nominal ready-to-finish grain size—0.035 mm.  
(b) Nominal ready-to-finish grain size—0.015 mm.

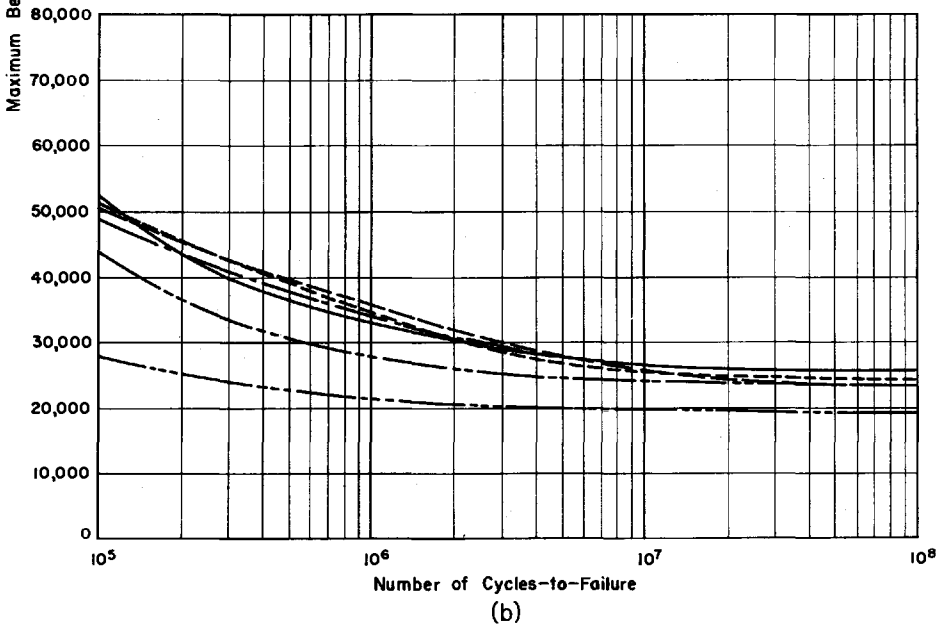
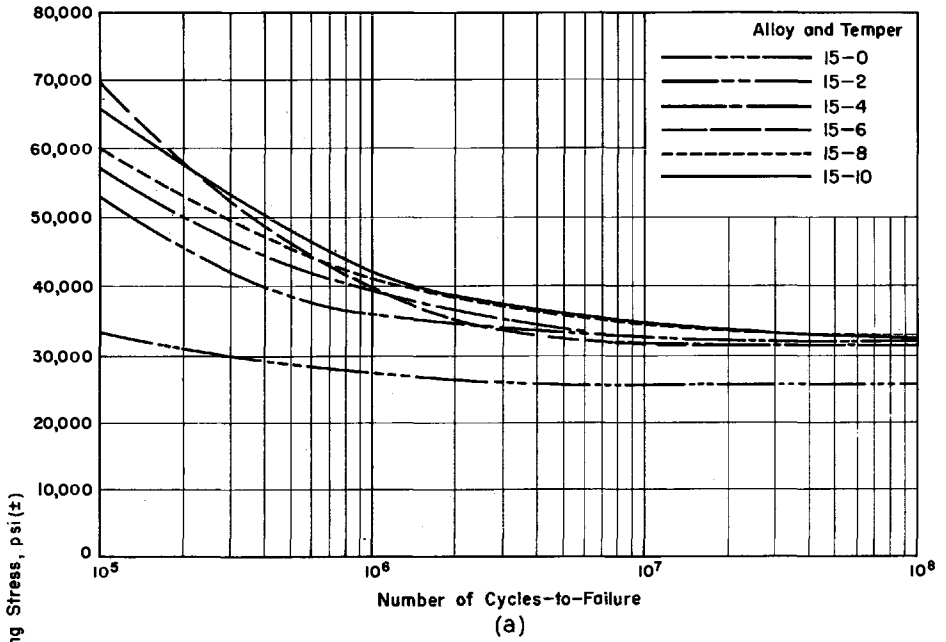


FIG. 51.—Comparison of Fatigue Characteristics of 4 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.40 per cent.

Nominal thickness—0.040 in.

(a) Nominal ready-to-finish grain size—0.035 mm.

(b) Nominal ready-to-finish grain size—0.075 mm.

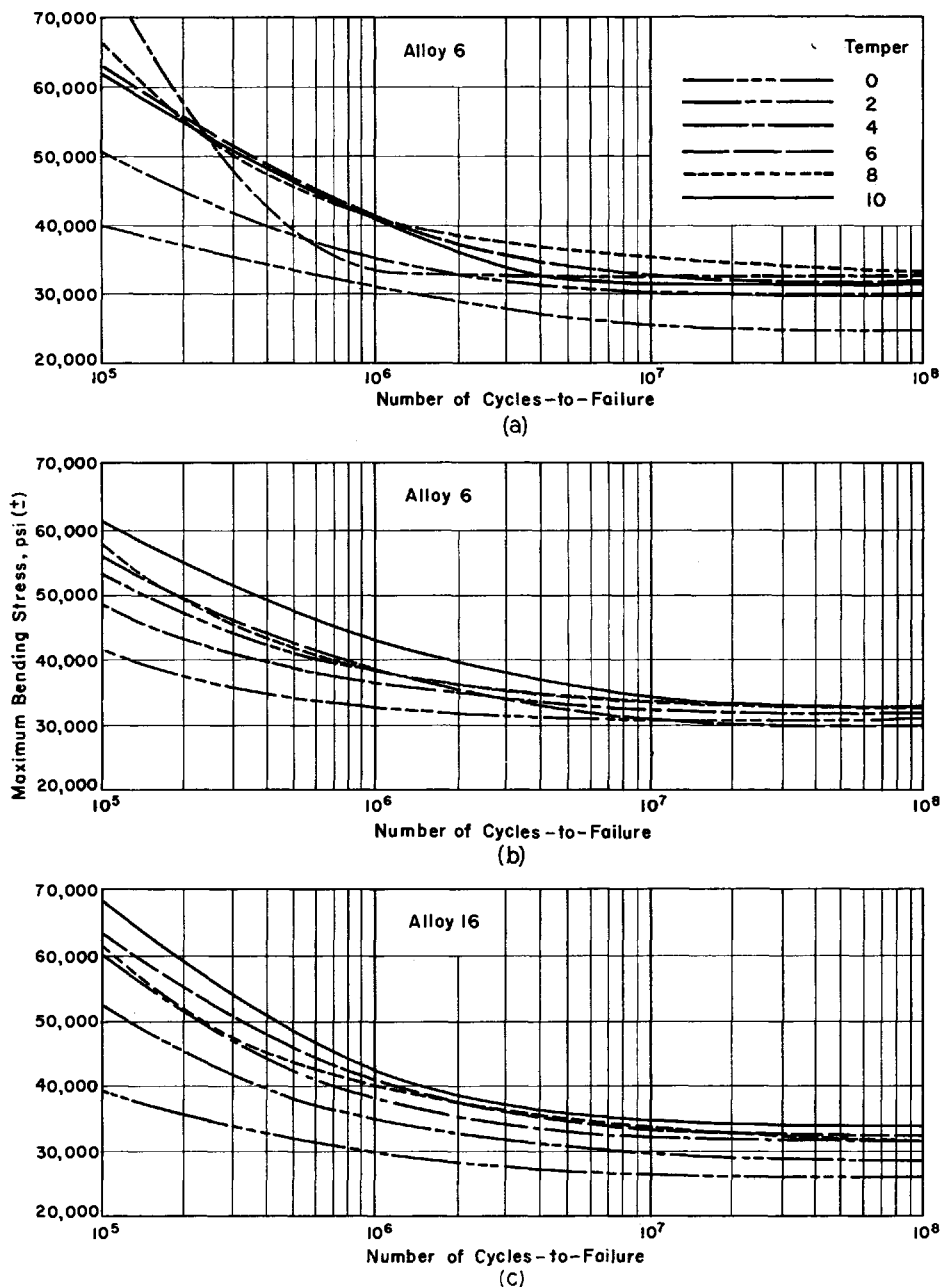


FIG. 52.—Comparison of Fatigue Characteristics of 5 per cent Tin Phosphor Bronze Strip.

Nominal thickness—0.040 in.

(a) Nominal ready-to-finish grain size—0.035 mm, Nominal phosphorus content—0.05 per cent.

(b) Nominal ready-to-finish grain size—0.015 mm, Nominal phosphorus content—0.05 per cent.

(c) Nominal ready-to-finish grain size—0.035 mm, Nominal phosphorus content—0.40 per cent.

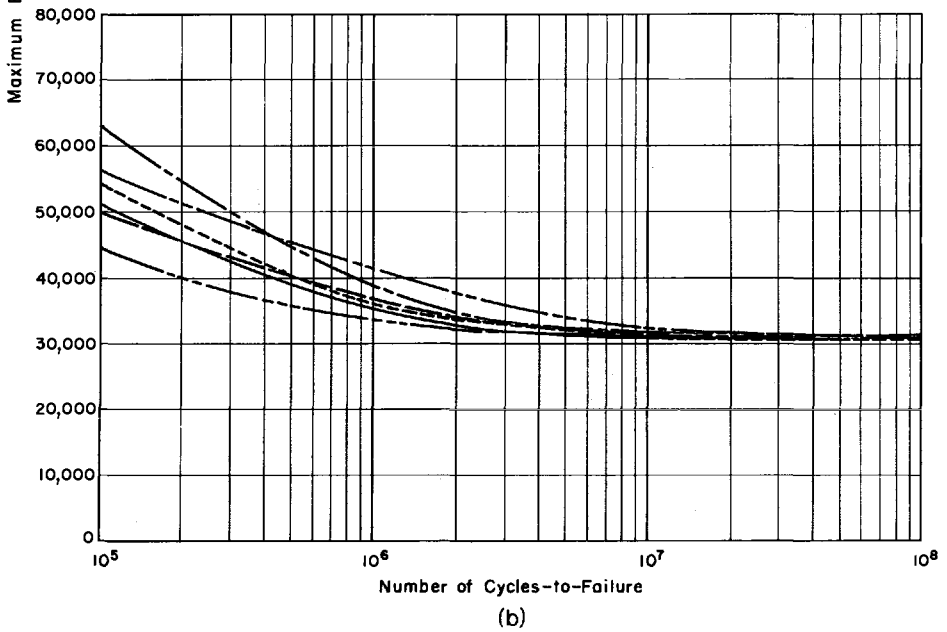
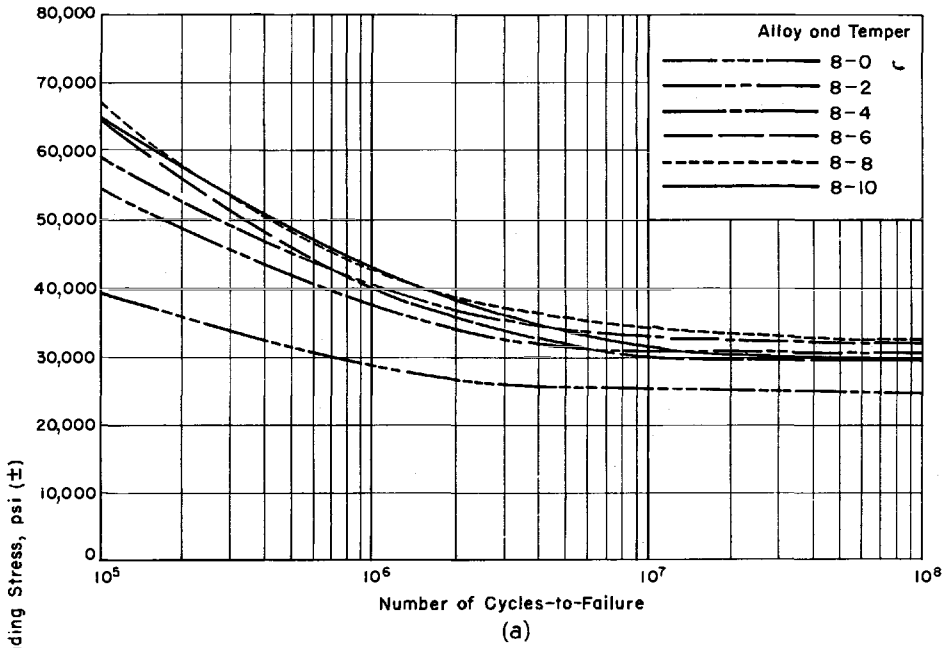


FIG. 53.—Comparison of Fatigue Characteristics of 8 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent.

Nominal thickness—0.040 in.

(a) Nominal ready-to-finish grain size—0.035 mm.

(b) Nominal ready-to-finish grain size—0.015 mm.

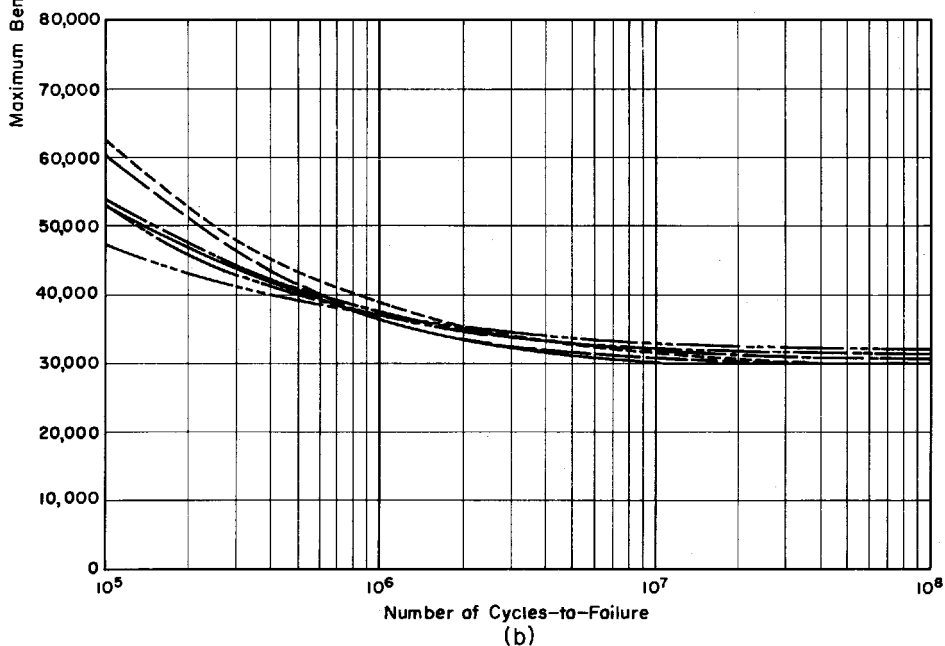
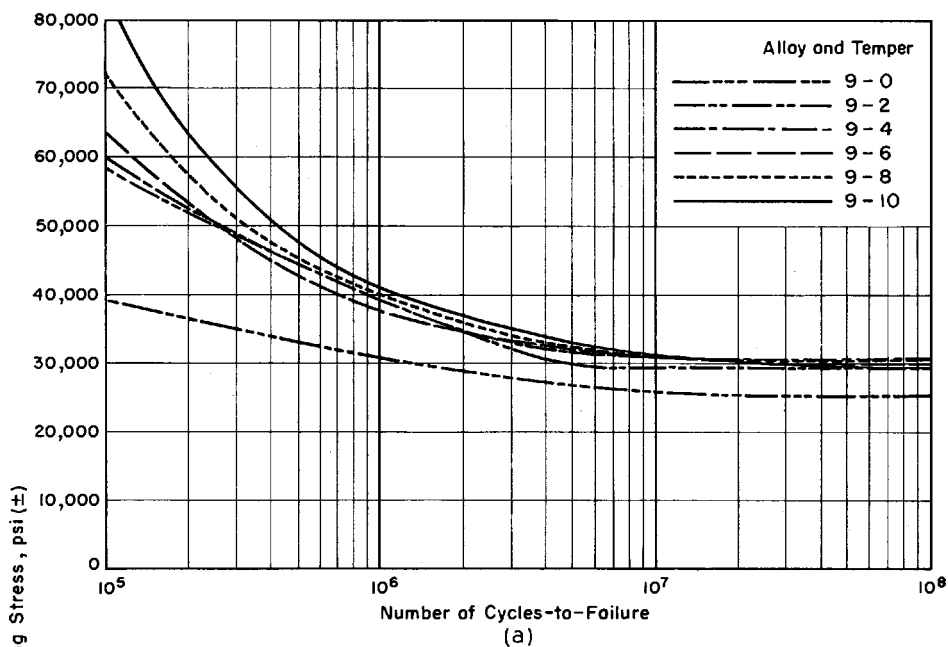


FIG. 54.—Comparison of Fatigue Characteristics of 10 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent.

Nominal thickness—0.040 in.

(a) Nominal ready-to-finish grain size—0.035 mm.

(b) Nominal ready-to-finish grain size—0.015 mm.

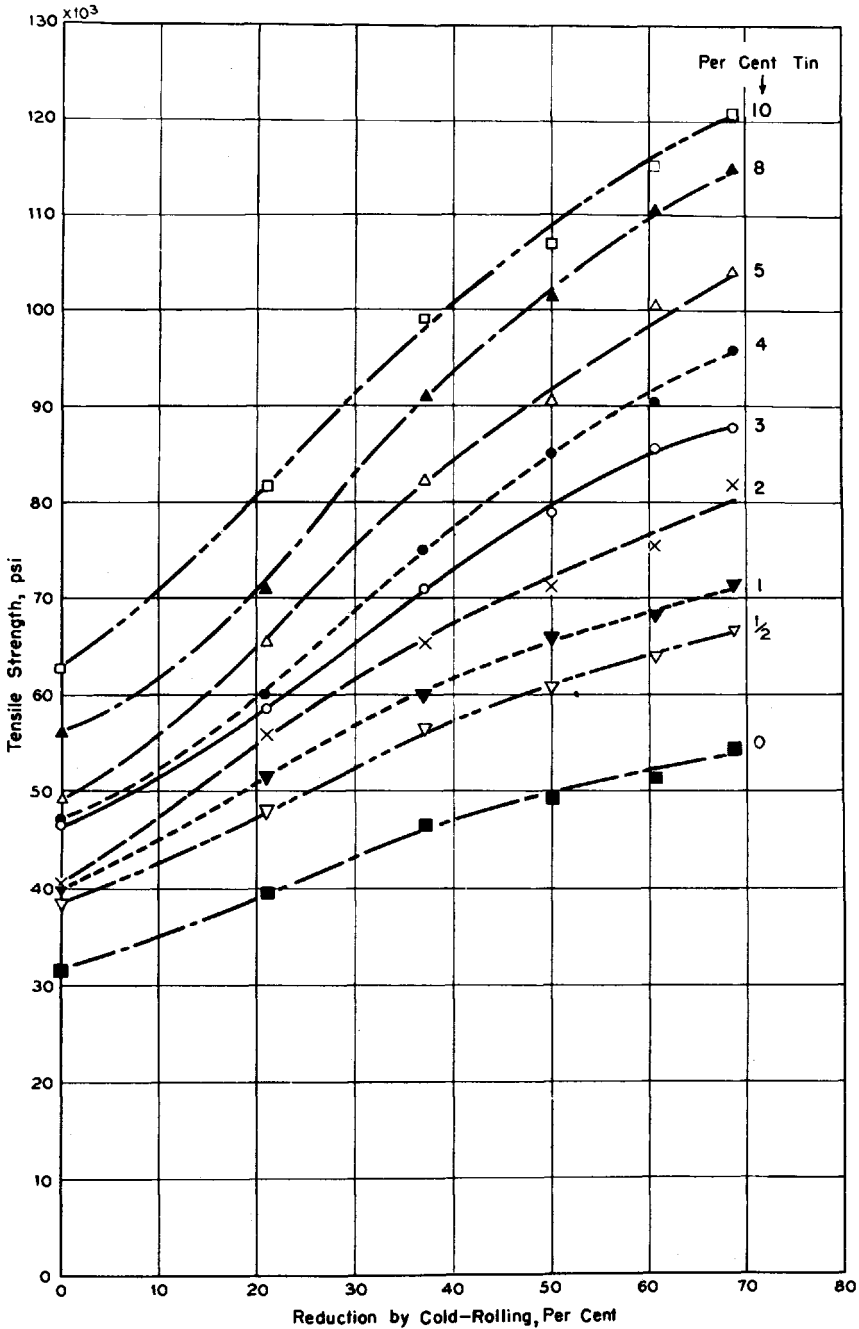


FIG. 55.—Effect of Variation in Tin Content on the Tensile Strength of Phosphor Bronze Strip.  
 Nominal phosphorus content—0.05 per cent.  
 Nominal ready-to-finish grain size—0.035 mm.  
 Nominal thickness—0.040 in.



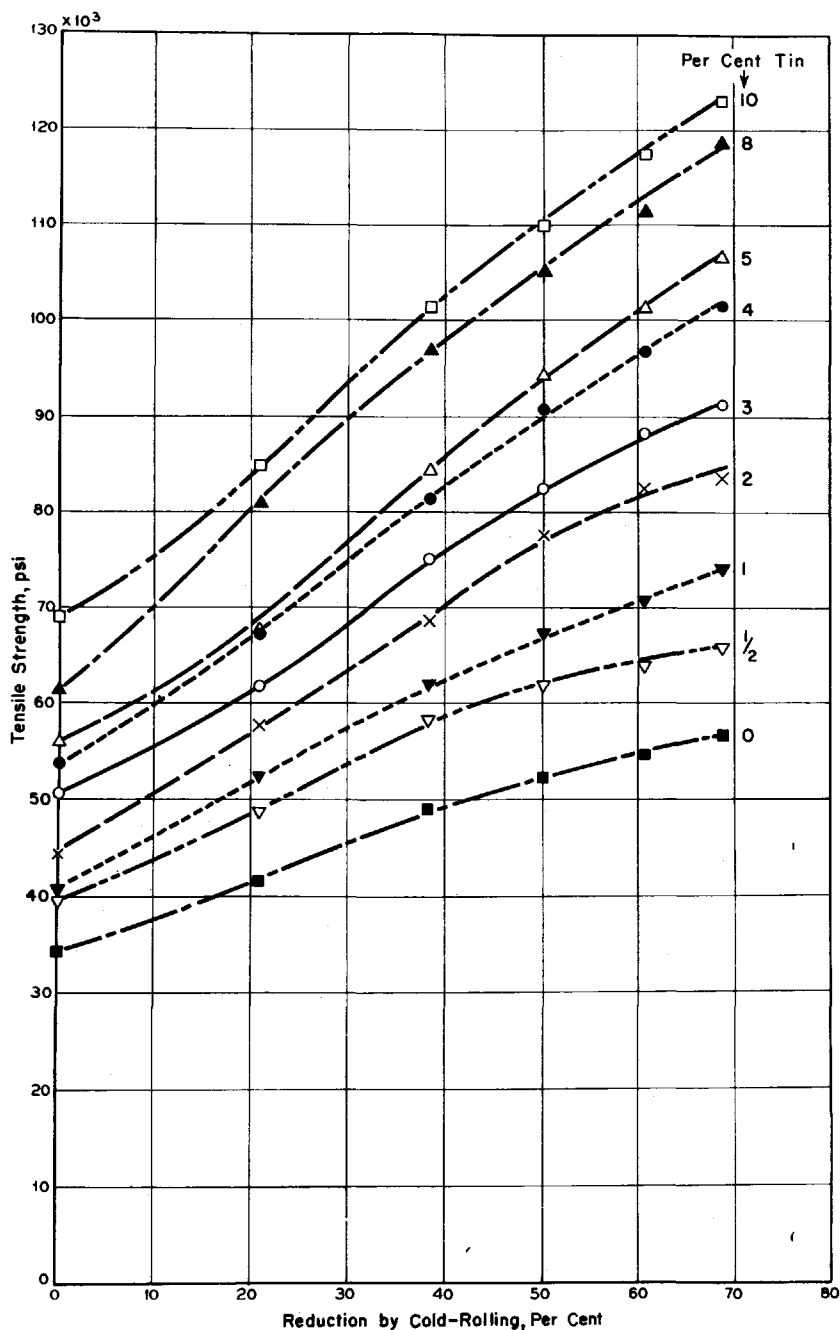


FIG. 56.—Effect of Variation in Tin Content on the Tensile Strength of Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent.

Nominal ready-to-finish grain size—0.015 mm.

Nominal thickness—0.040 in.

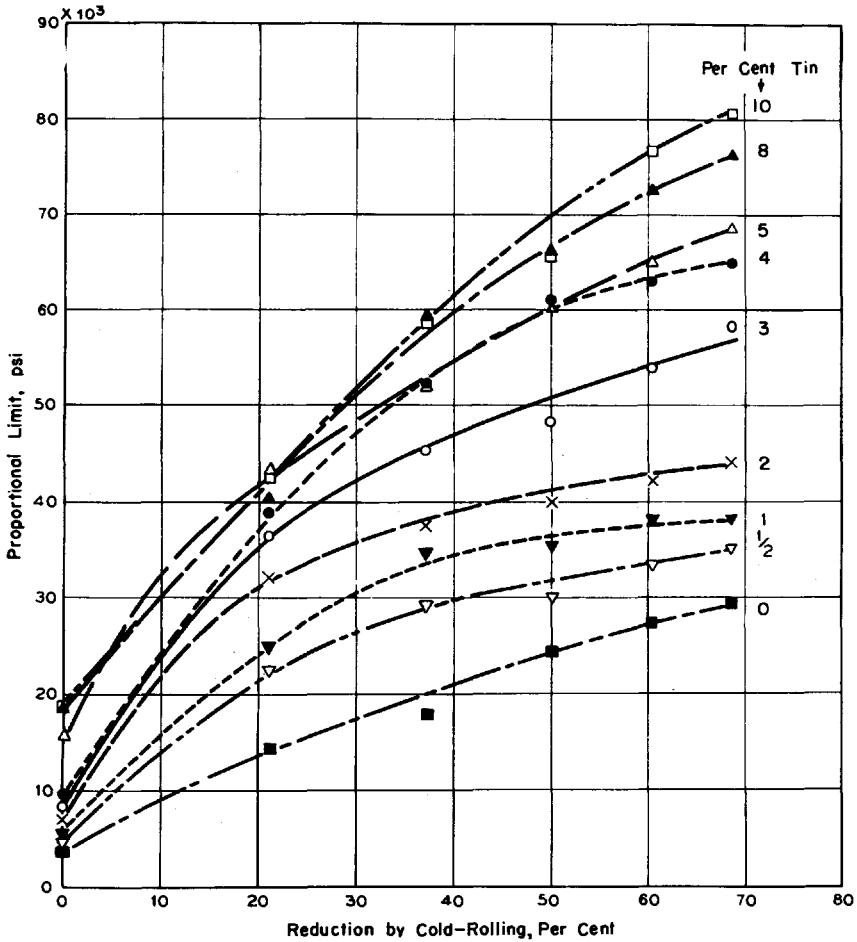


FIG. 57.—Effect of Variation in Tin Content on the Proportional Limit of Phosphor Bronze Strip.  
 Nominal phosphorus content—0.05 per cent.  
 Nominal ready-to-finish grain size—0.035 mm.  
 Nominal thickness—0.040 in.

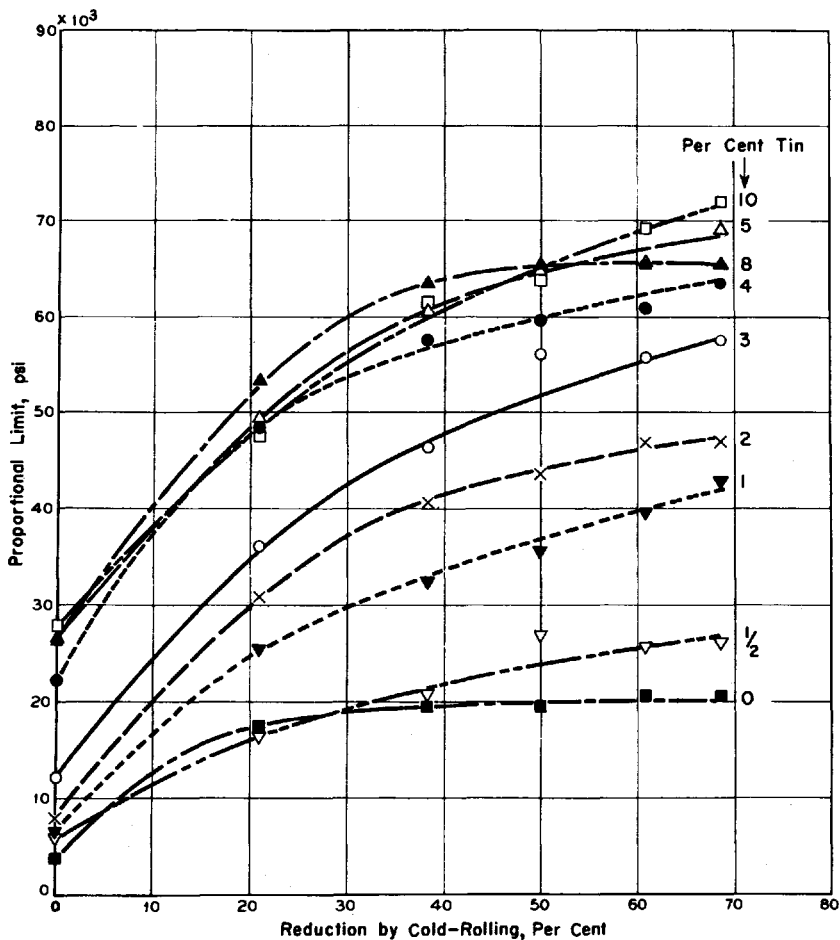


FIG. 58.—Effect of Variation in Tin Content on the Proportional Limit of Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent.

Nominal ready-to-finish grain size—0.015 mm.

Nominal thickness—0.040 in.

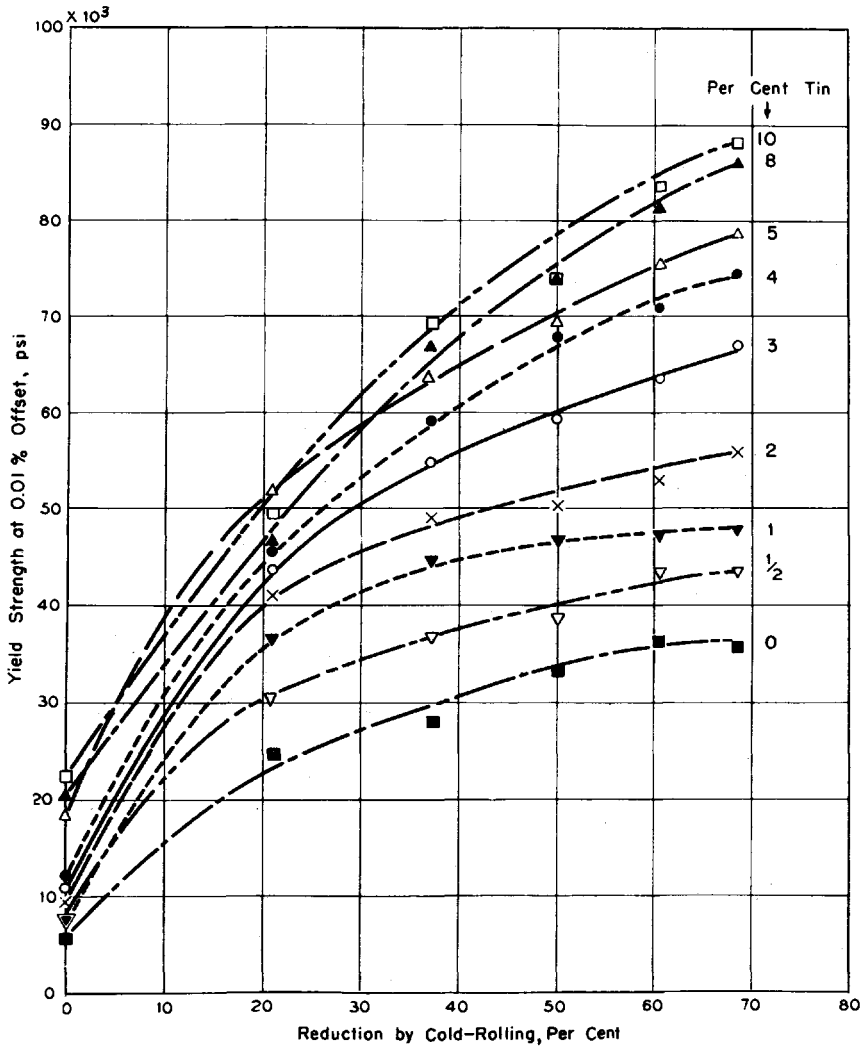


FIG. 59.—Effect of Variation in Tin Content on the Yield Strength at 0.01 per cent Offset of Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent.

Nominal ready-to-finish grain size—0.035 mm.

Nominal thickness—0.040 in.

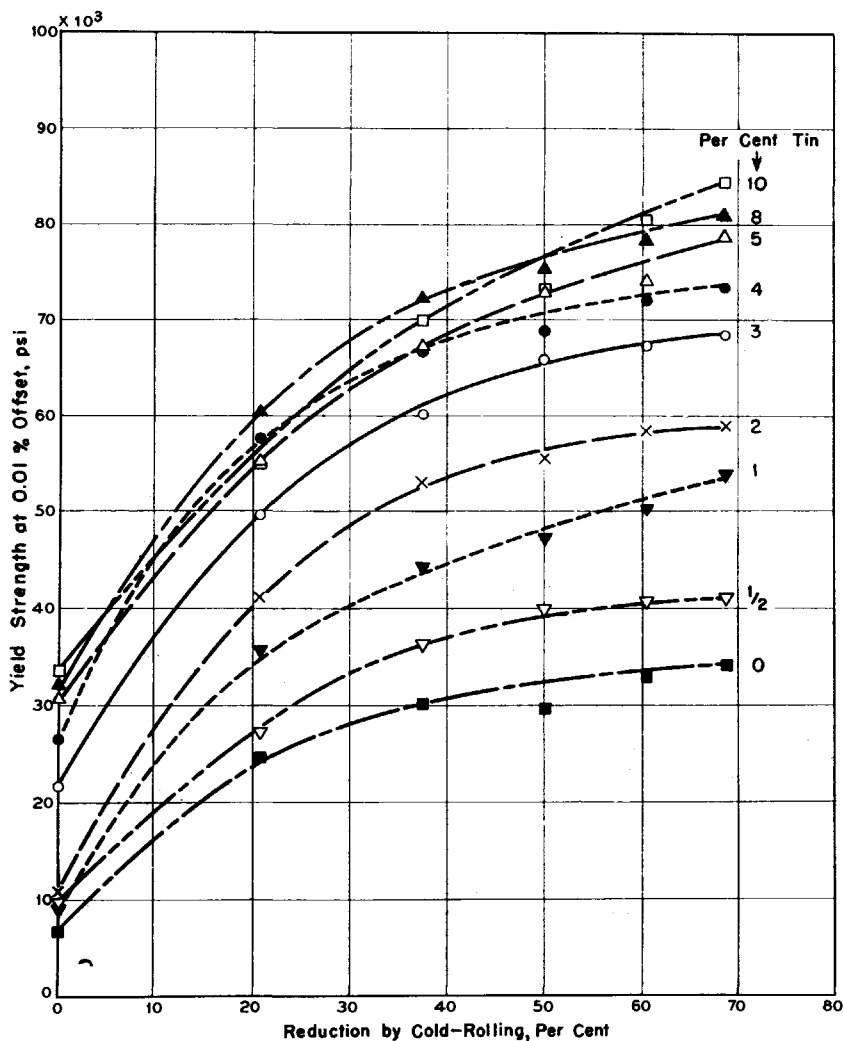


FIG. 60.—Effect of Variation in Tin Content on the Yield Strength at 0.01 per cent Offset of Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
 Nominal ready-to-finish grain size—0.015 mm.  
 Nominal thickness—0.040 in.

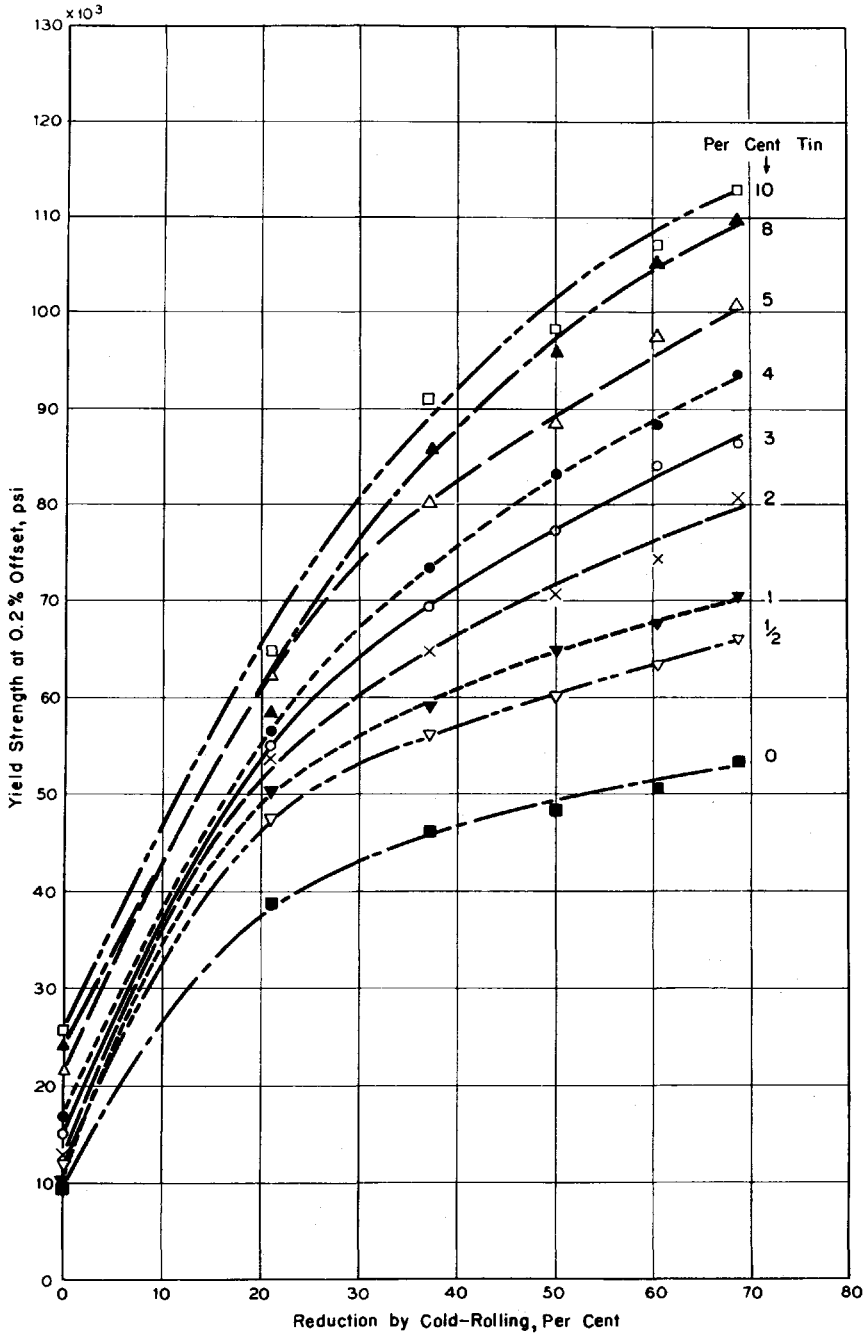


FIG. 61.—Effect of Variation in Tin Content on the Yield Strength at 0.2 per cent Offset of Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
 Nominal ready-to-finish grain size—0.035 mm.  
 Nominal thickness 0.040 in.

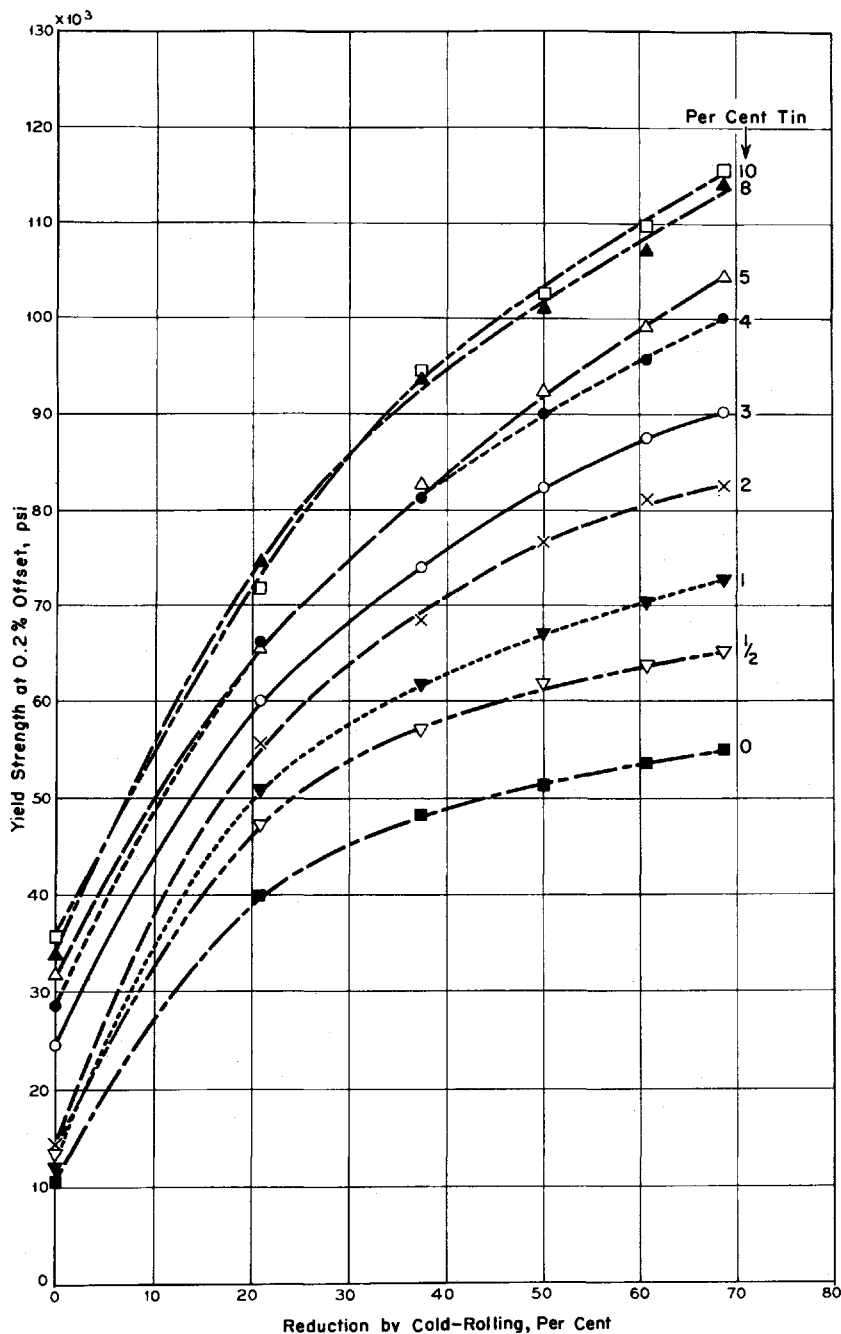


FIG. 62.—Effect of Variation in Tin Content on the Yield Strength at 0.2 per cent Offset of Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
 Nominal ready-to-finish grain size—0.015 mm.  
 Nominal thickness—0.040 in.

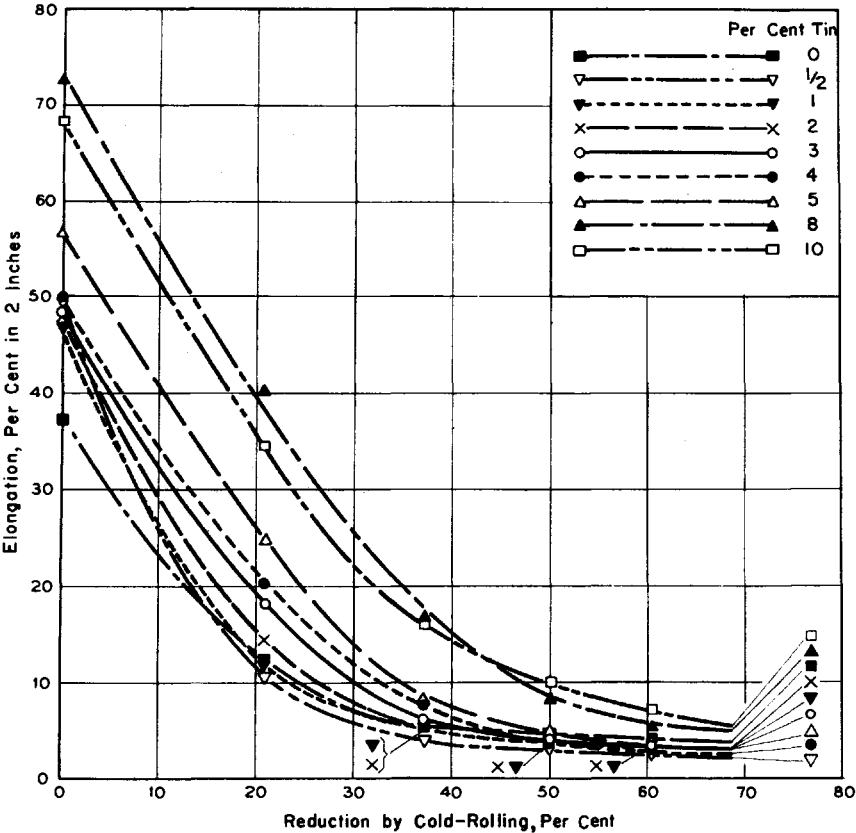


FIG. 63.—Effect of Variation in Tin Content on the Ductility of Phosphor Bronze Strip.  
Nominal phosphorus content—0.05 per cent  
Nominal ready-to-finish grain size—0.035 mm.  
Nominal thickness—0.040 in.



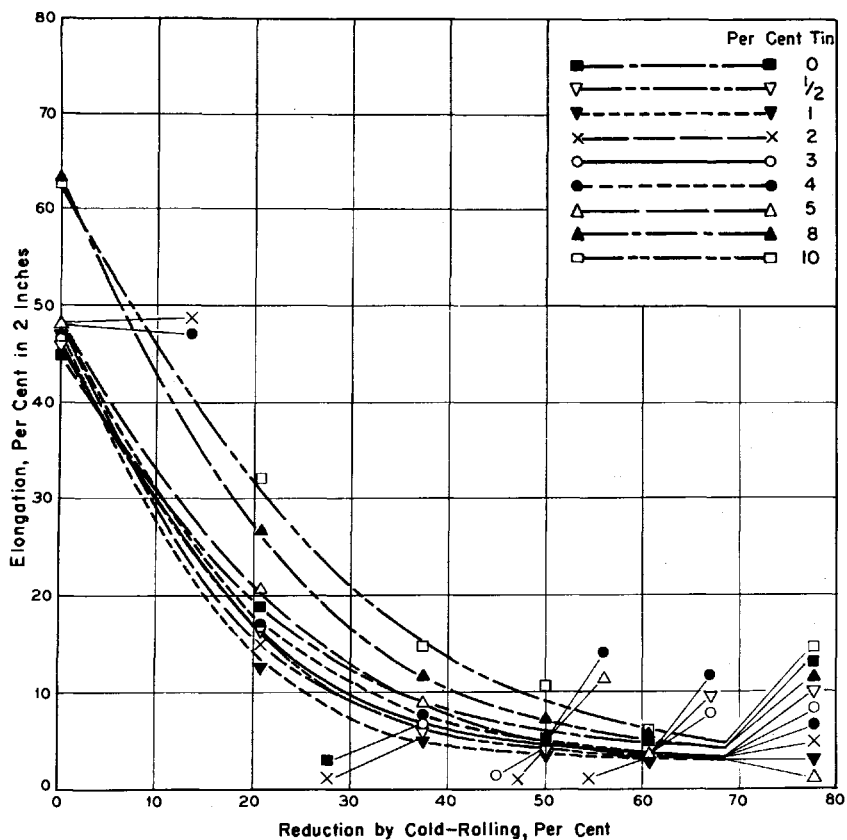


FIG. 64.—Effect of Variation in Tin Content on the Ductility of Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
 Nominal ready-to-finish grain size—0.015 mm.  
 Nominal thickness—0.040 in.

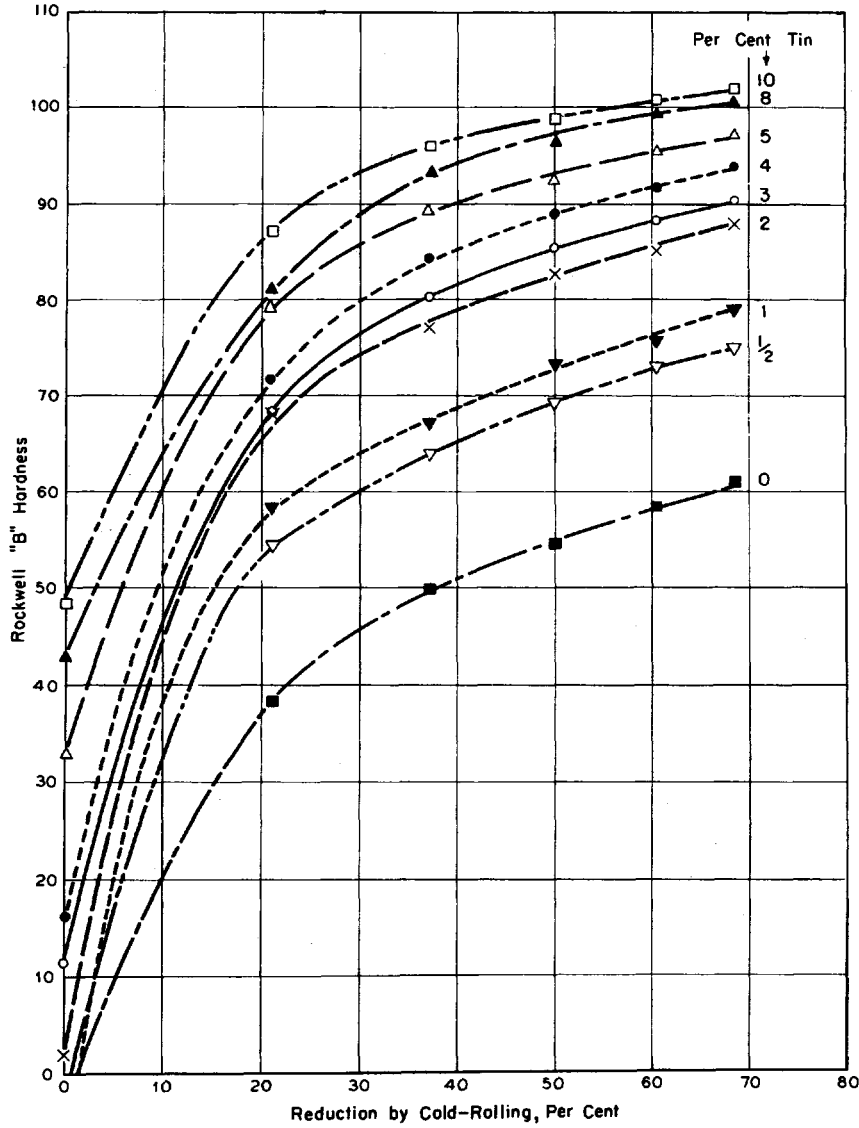


FIG. 65.—Effect of Variation in Tin Content on the Rockwell "B" Hardness of Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
Nominal ready-to-finish grain size—0.035 mm  
Nominal thickness—0.040 in.

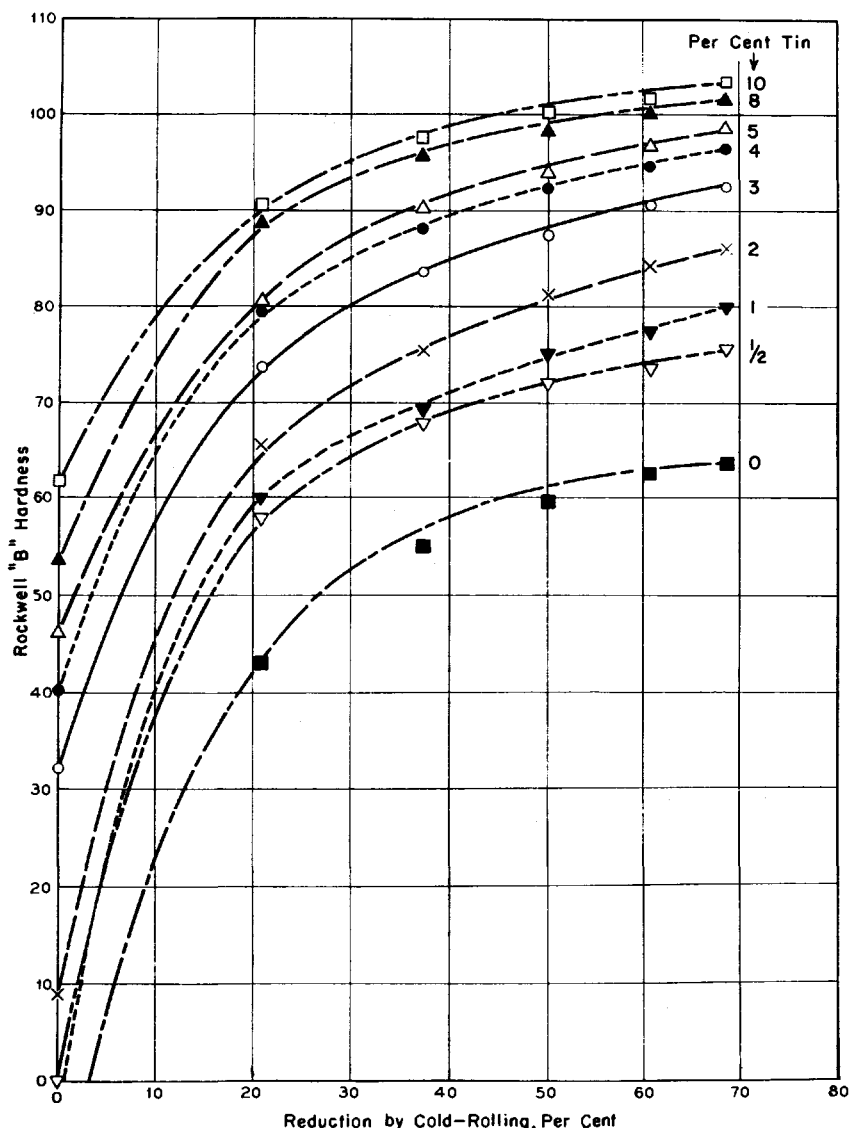


Fig. 66.—Effect of Variation in Tin Content on the Rockwell "B" Hardness of Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
Nominal ready-to-finish grain size—0.015 mm.  
Nominal thickness—0.040 in.

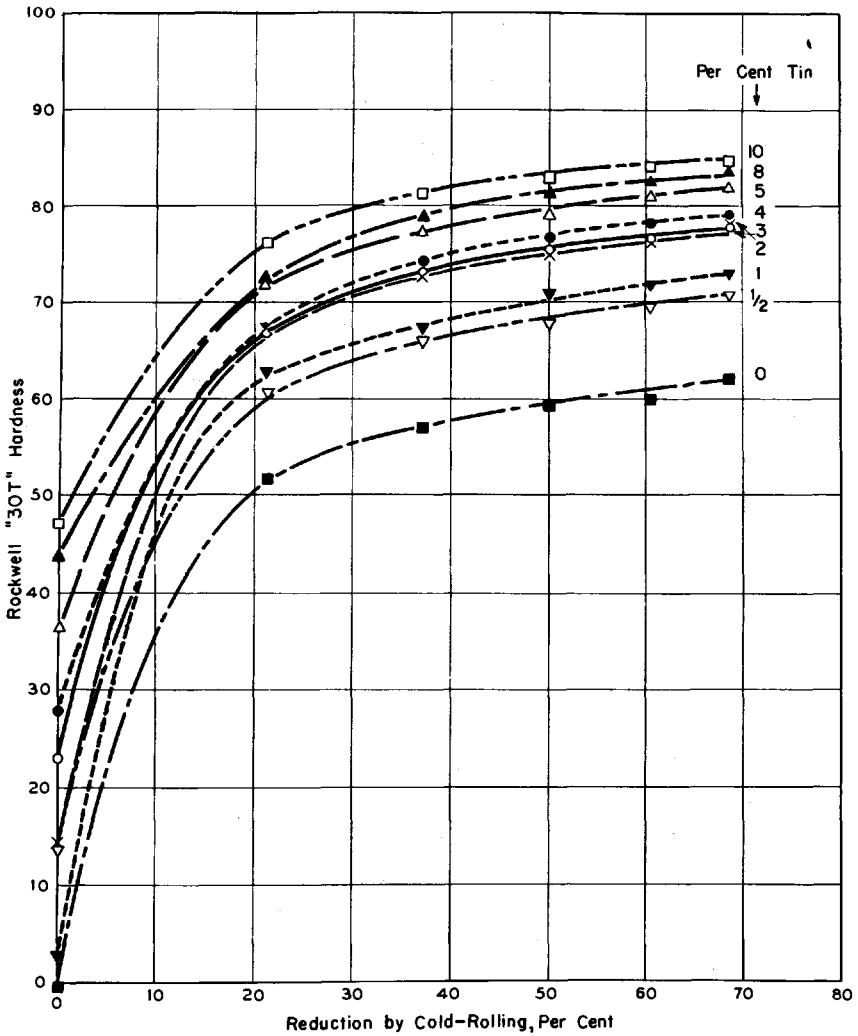


FIG. 67.—Effect of Variation in Tin Content on the Rockwell "30T" Hardness of Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
 Nominal ready-to-finish grain size—0.035 mm.  
 Nominal thickness—0.040 in.

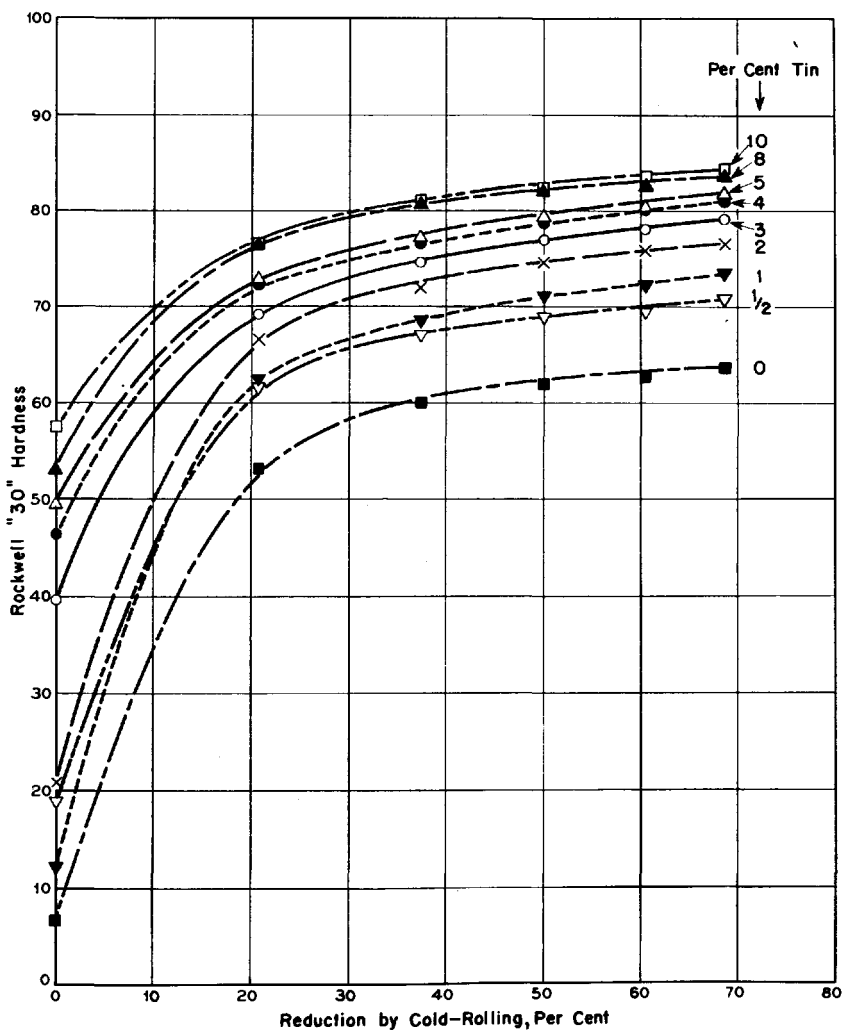


FIG. 68.—Effect of Variation in Tin Content on the Rockwell "30T" Hardness of Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
 Nominal ready-to-finish grain size—0.015 mm.  
 Nominal thickness—0.040 in.

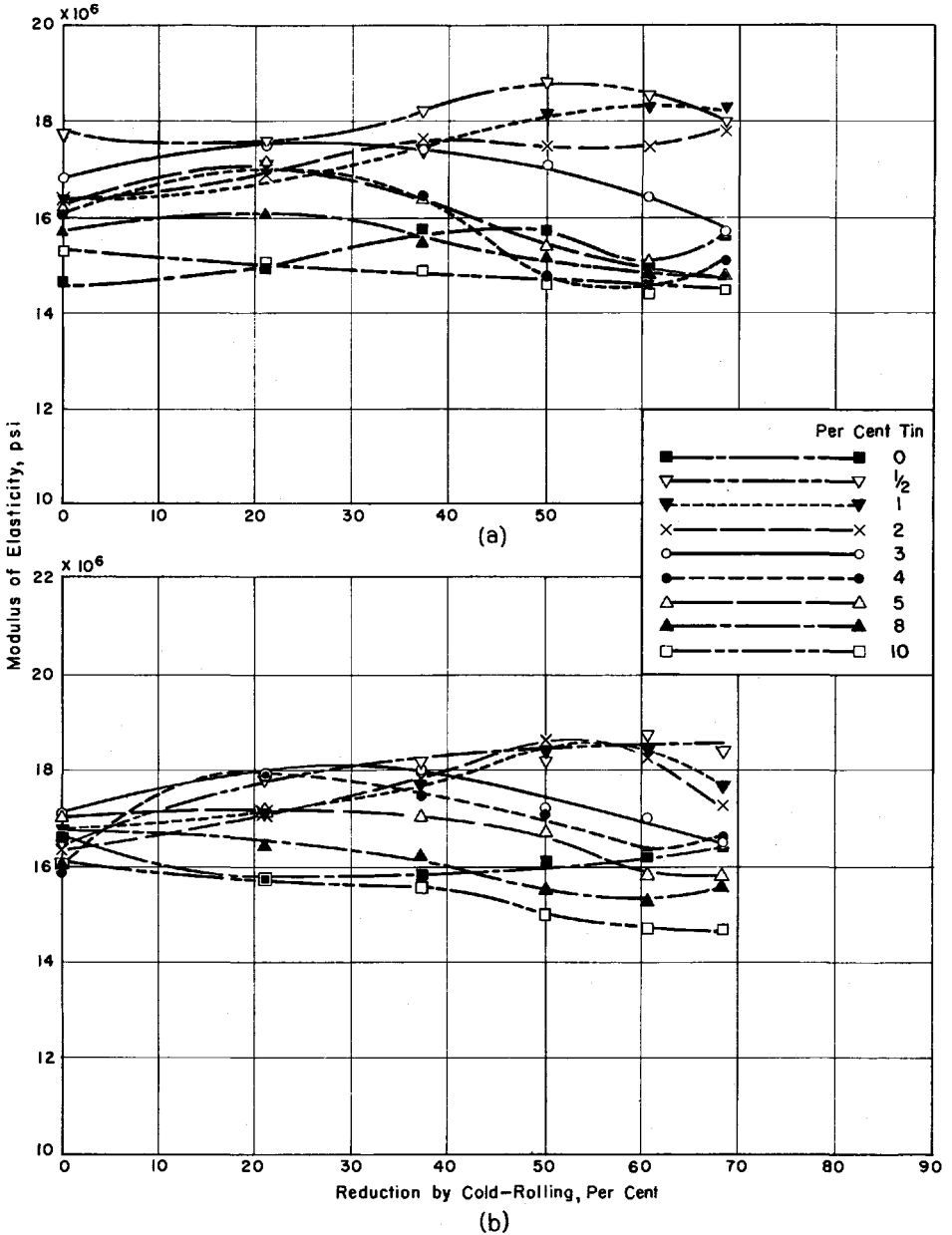


FIG. 69.—Effect of Variation in Tin Content on the Modulus of Elasticity of Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal thickness—0.040 in.

(a) Nominal ready-to-finish grain size—0.035 mm.

(b) Nominal ready-to-finish grain size—0.015 mm.

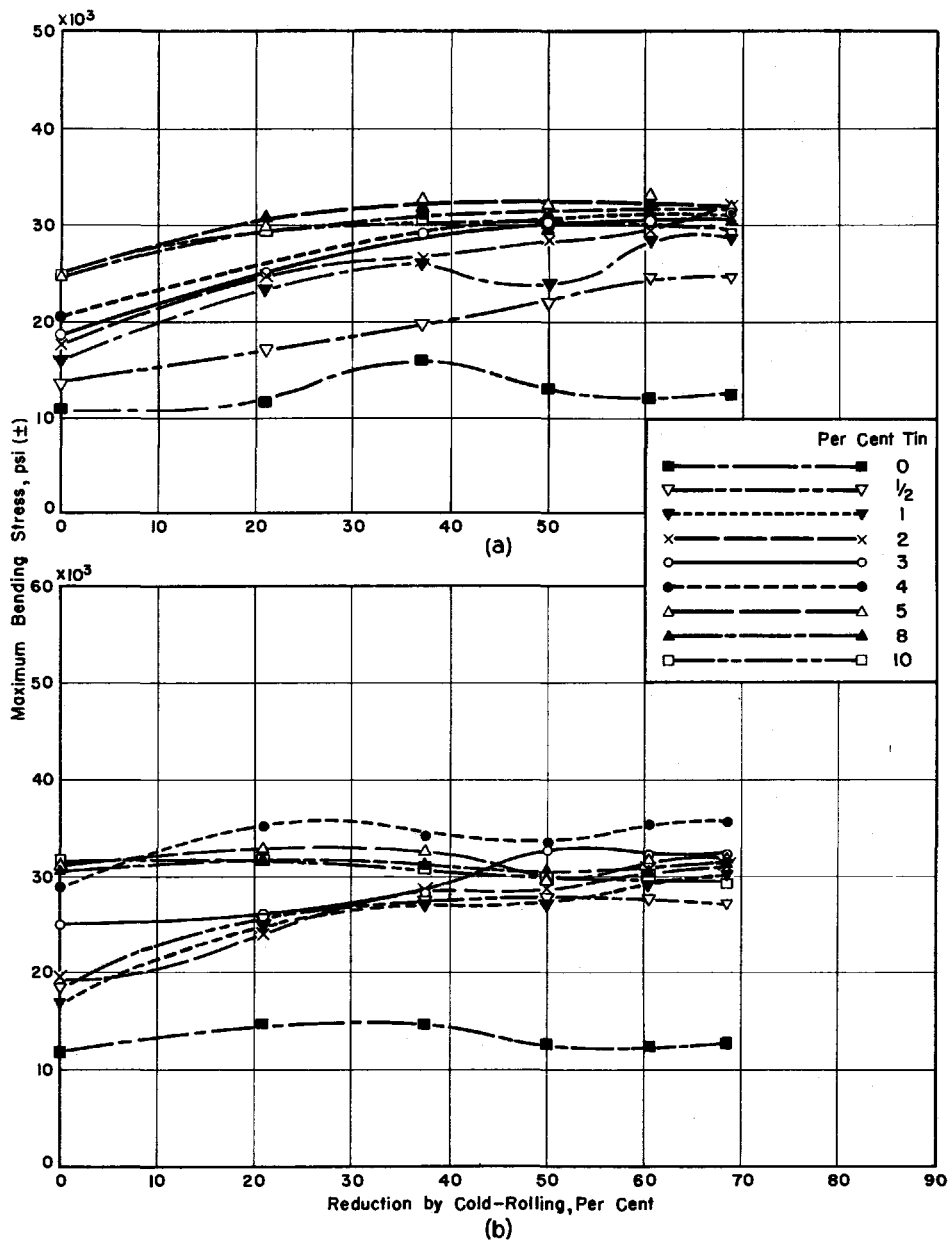


FIG. 70.—Effect of Variation in Tin Content on the Bending Fatigue Properties of Phosphor Bronze Strip at  $10^8$  Cycles of Reversed Stress.

Nominal phosphorus content—0.05 per cent

Nominal thickness—0.040 in.

(a) Nominal ready-to-finish grain size—0.035 mm.

(b) Nominal ready-to-finish grain size—0.015 mm.

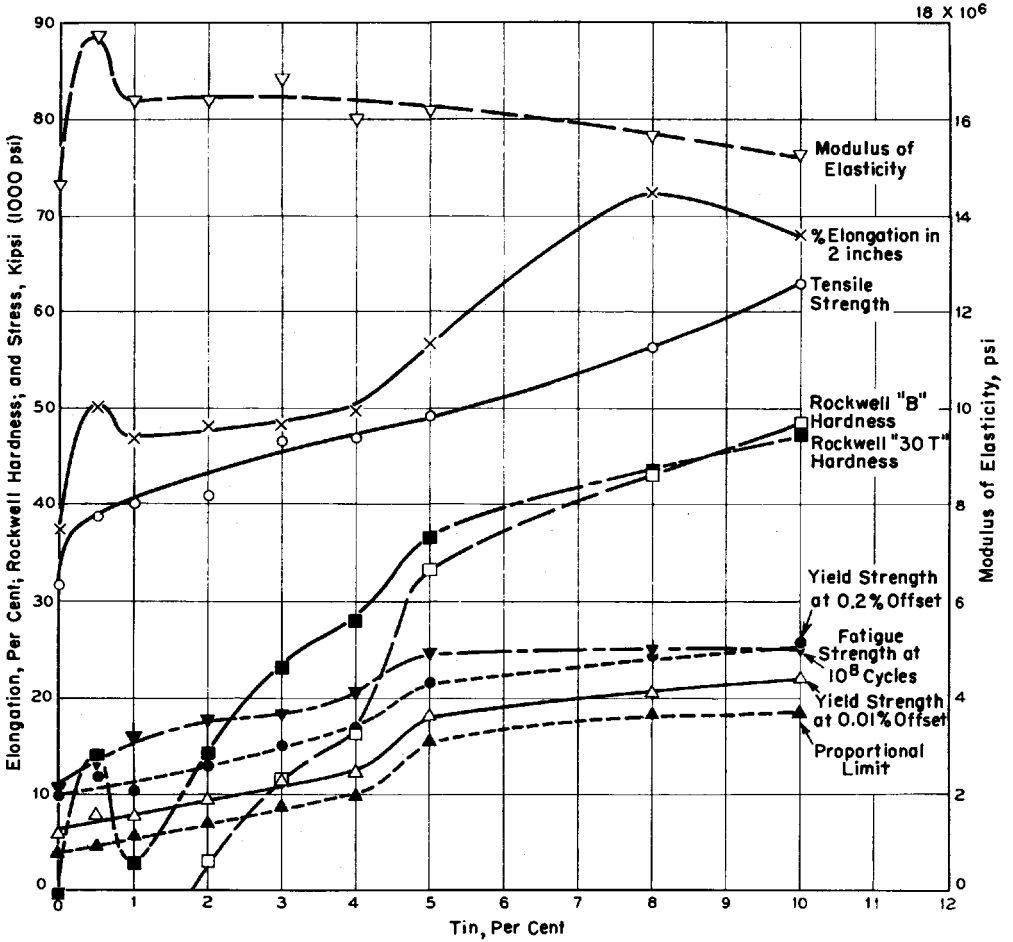


FIG. 71.—Mechanical Properties of Annealed Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
 Nominal ready-to-finish grain size—0.035 mm.  
 Nominal thickness—0.040 in.



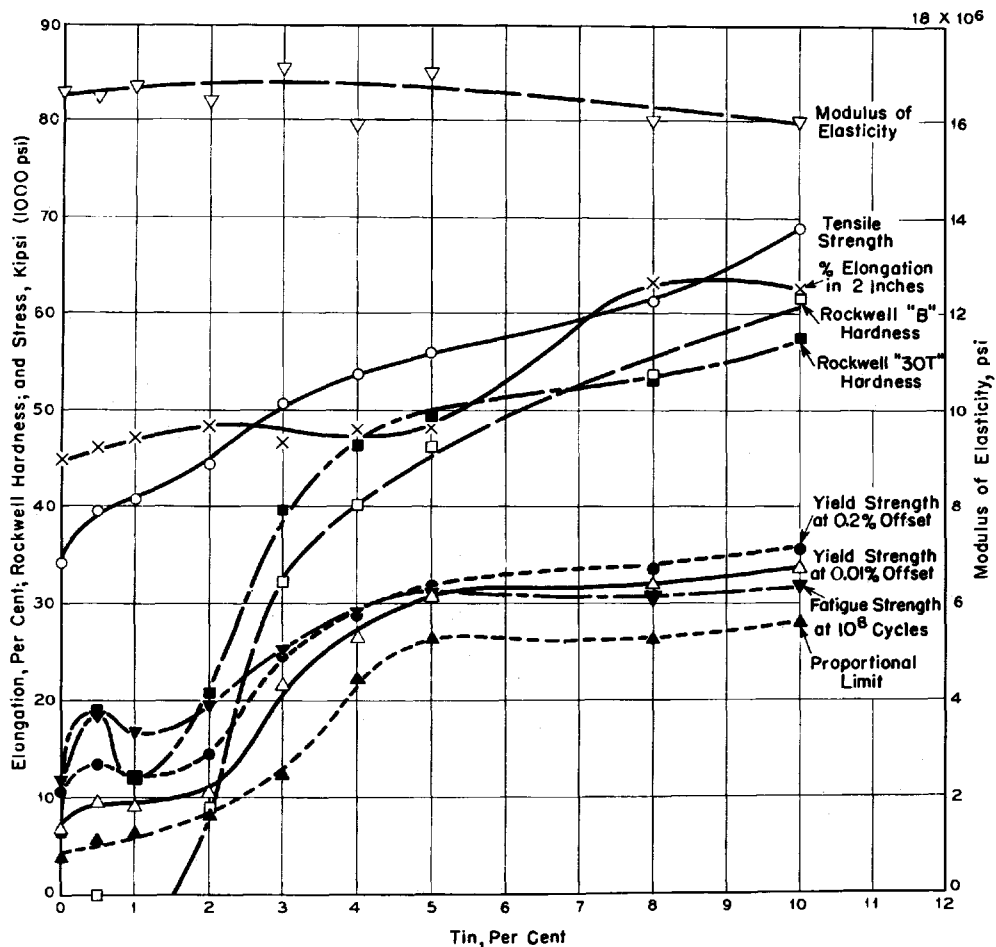


FIG. 72.—Mechanical Properties of Annealed Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
 Nominal ready-to-finish grain size—0.015 mm.  
 Nominal thickness—0.040 in.

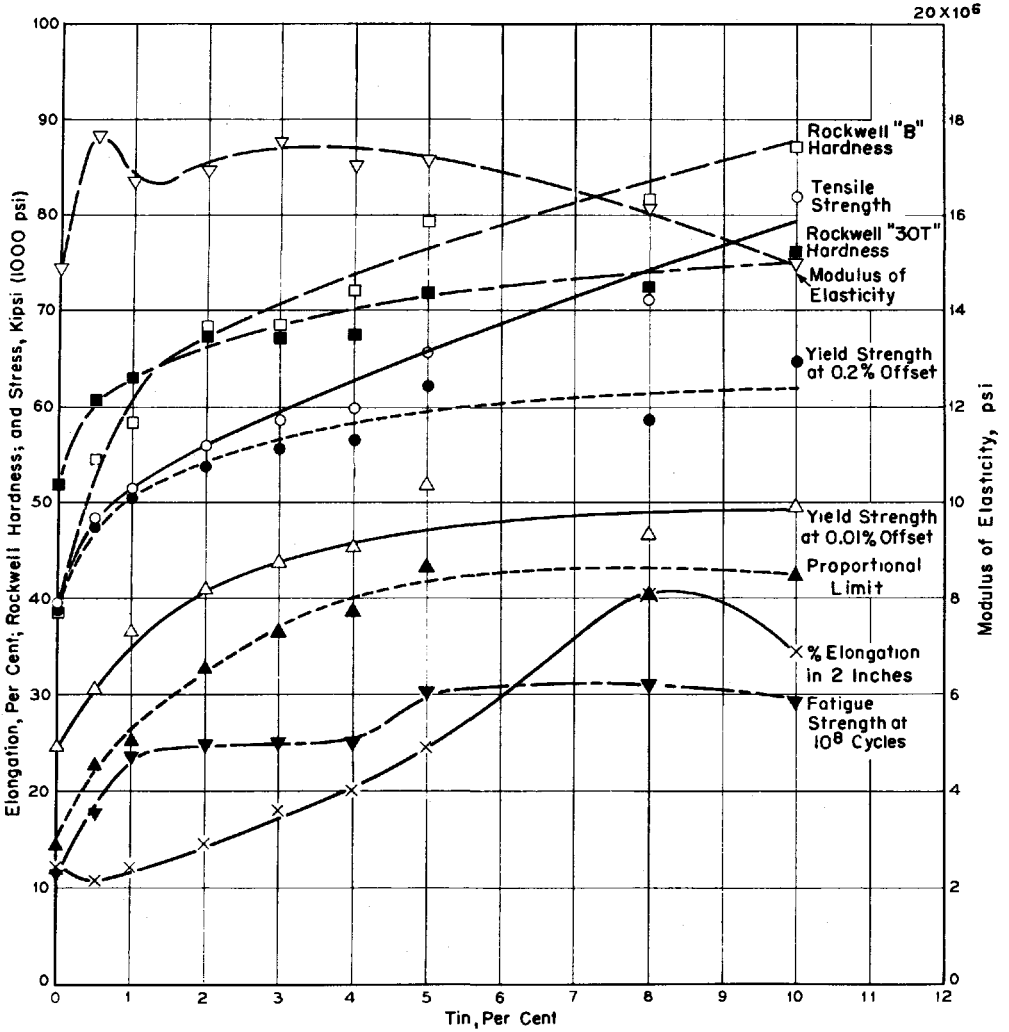


FIG. 73.—Mechanical Properties of Half-Hard Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
 Nominal ready-to-finish grain size—0.035 mm.  
 Nominal thickness—0.040 in.

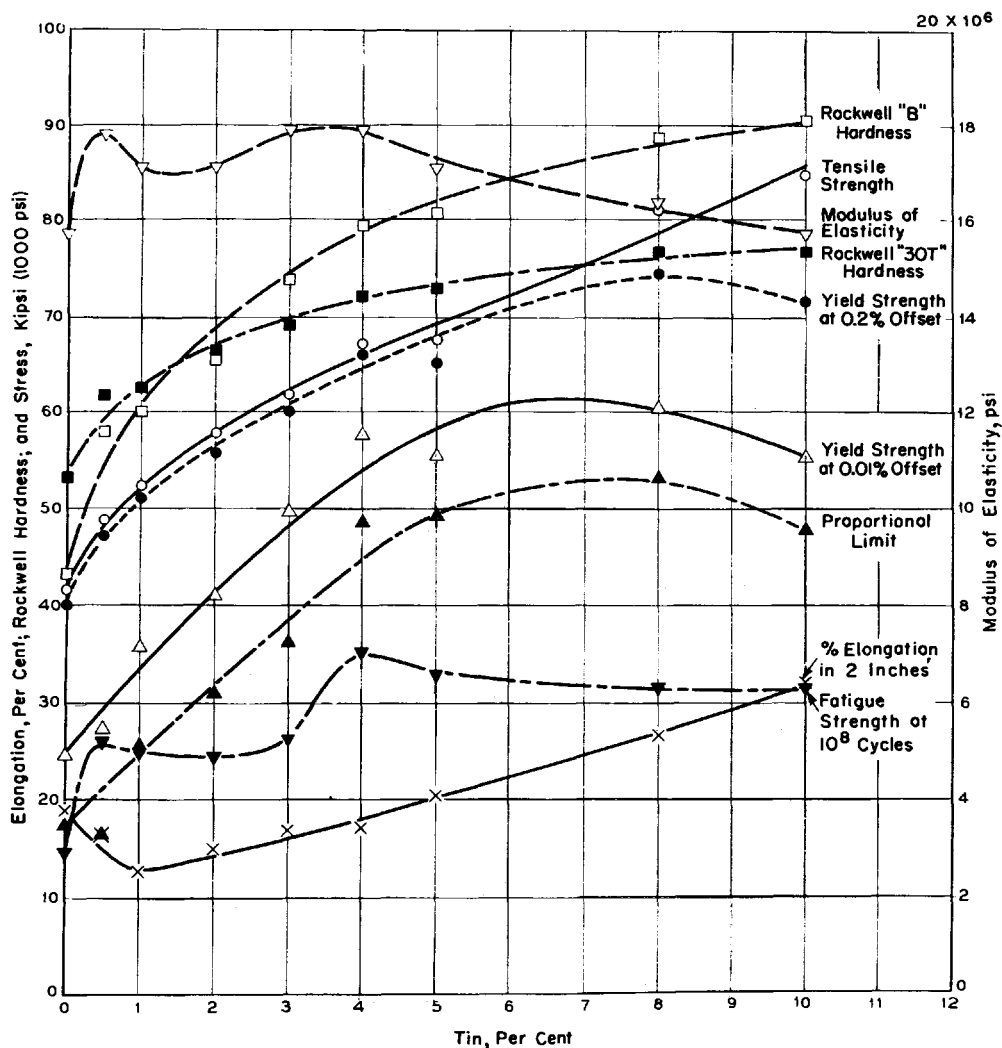


FIG. 74.—Mechanical Properties of Half-Hard Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
 Nominal ready-to-finish grain size—0.015 mm.  
 Nominal thickness—0.040 in.

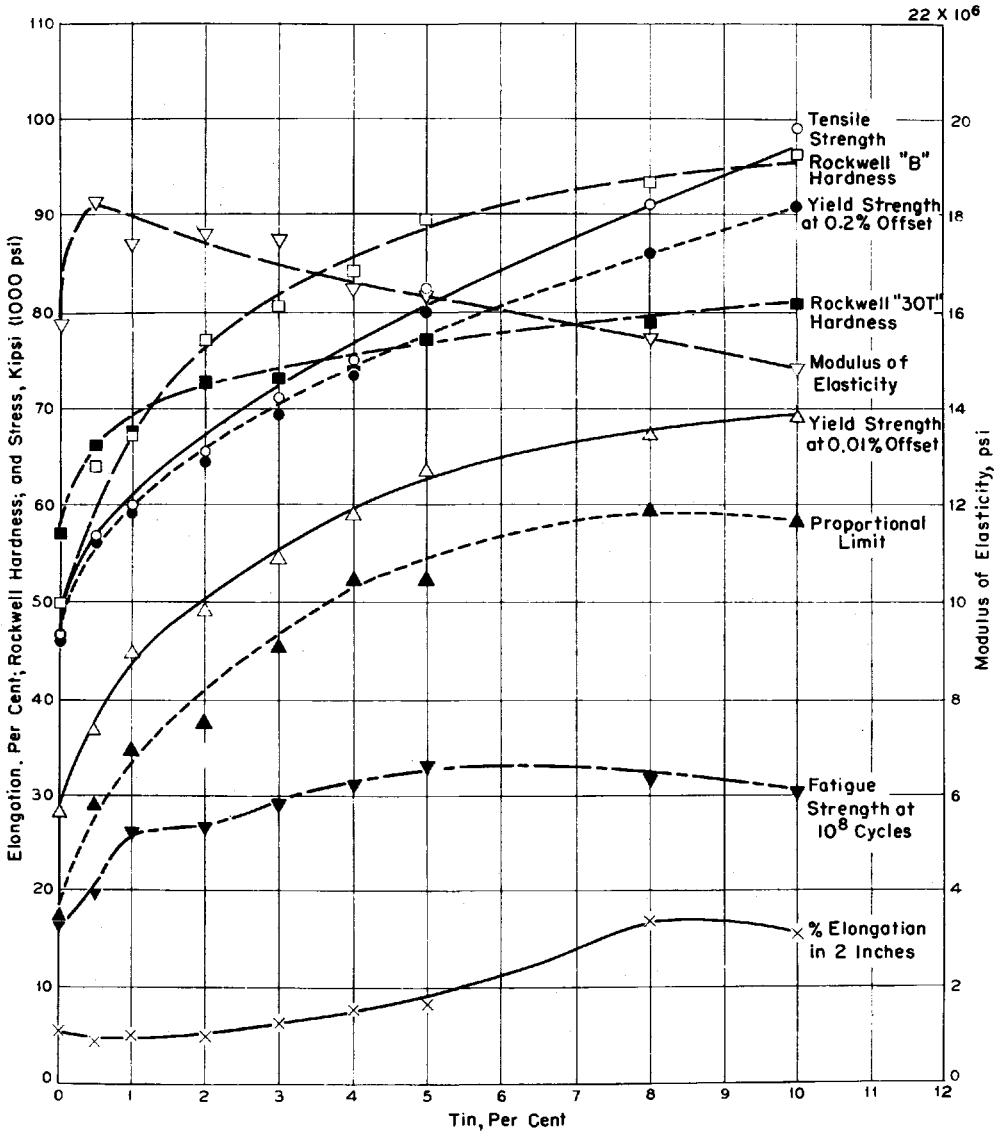


FIG. 75.—Mechanical Properties of Hard Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
 Nominal ready-to-finish grain size—0.035 mm.  
 Nominal thickness—0.040 in.

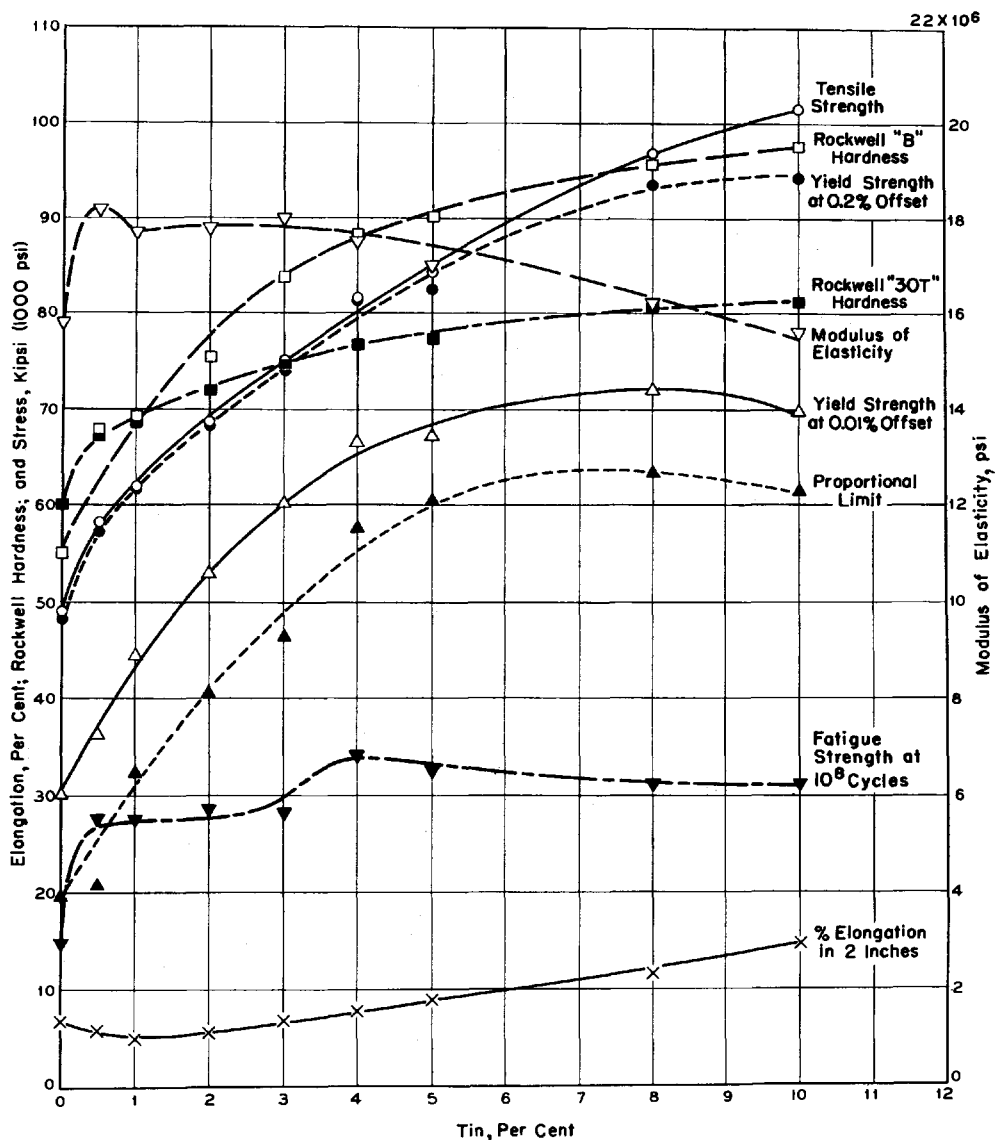


FIG. 76.—Mechanical Properties of Hard Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.015 mm.

Nominal thickness—0.040 in.

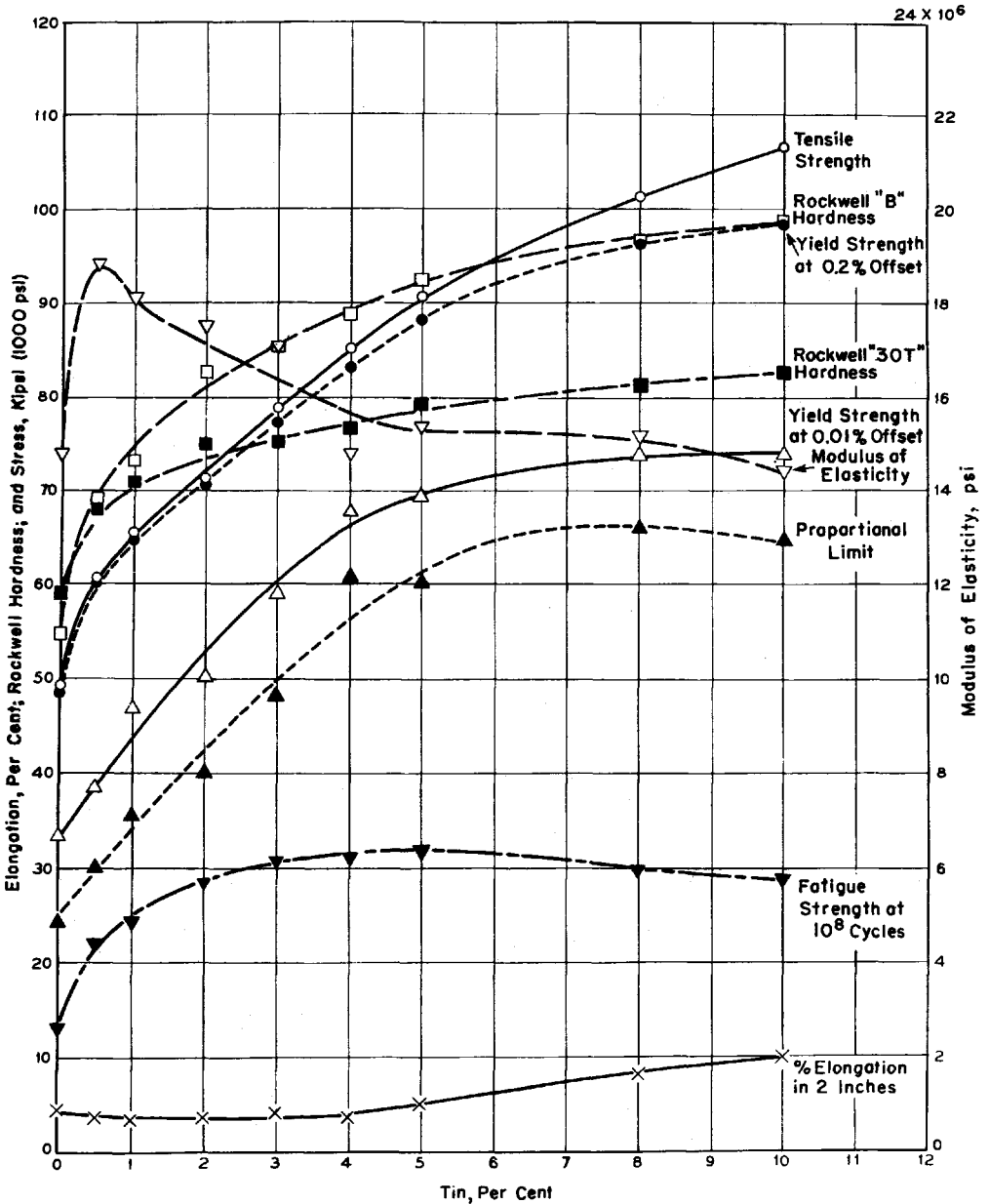


FIG. 77.—Mechanical Properties of Extra-Hard Phosphor Bronze Strip.  
Nominal phosphorus content—0.05 per cent  
Nominal ready-to-finish grain size—0.035 mm.  
Nominal thickness—0.040 in.

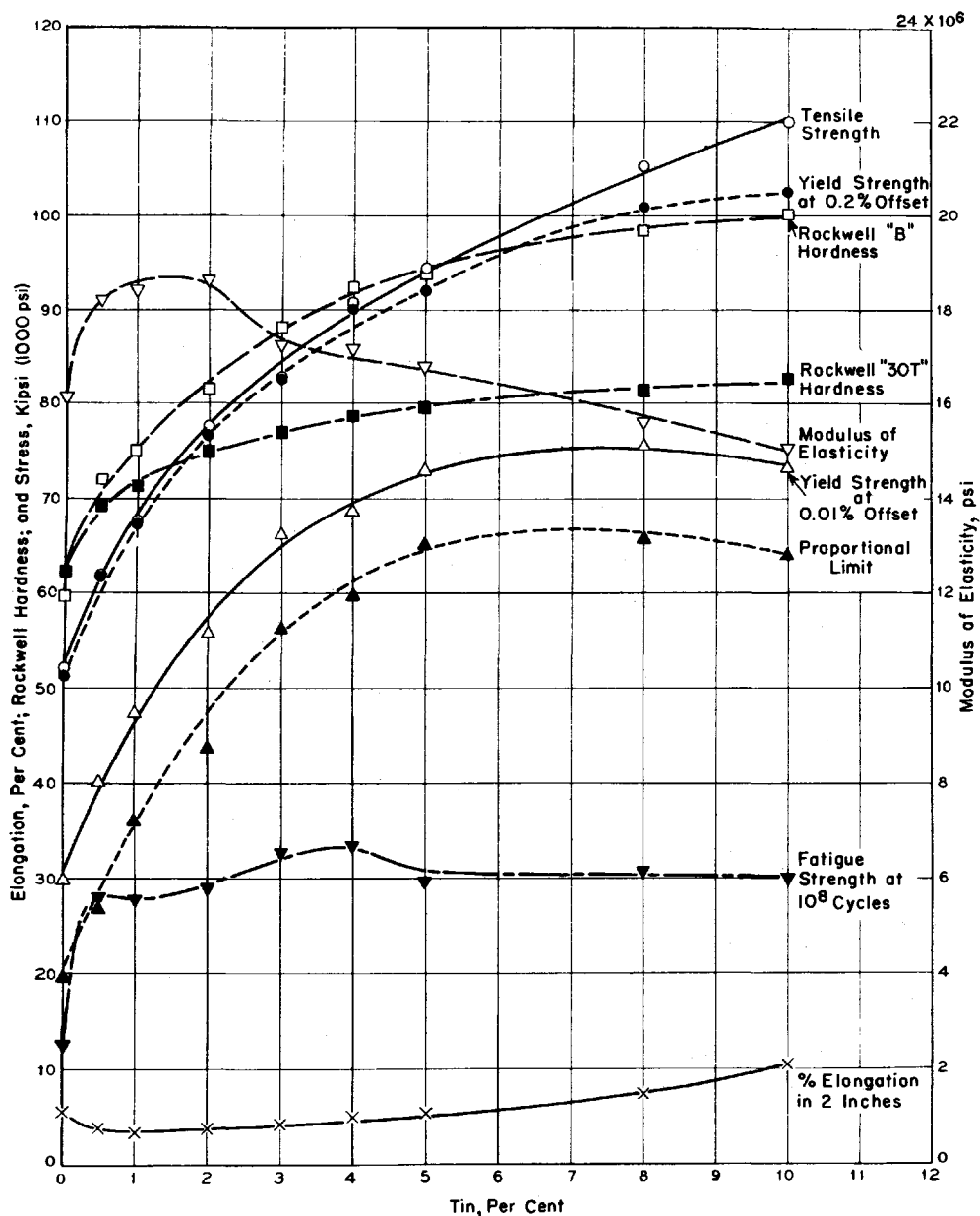


FIG. 78.—Mechanical Properties of Extra-Hard Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
 Nominal ready-to-finish grain size—0.015 mm.  
 Nominal thickness—0.040 in.

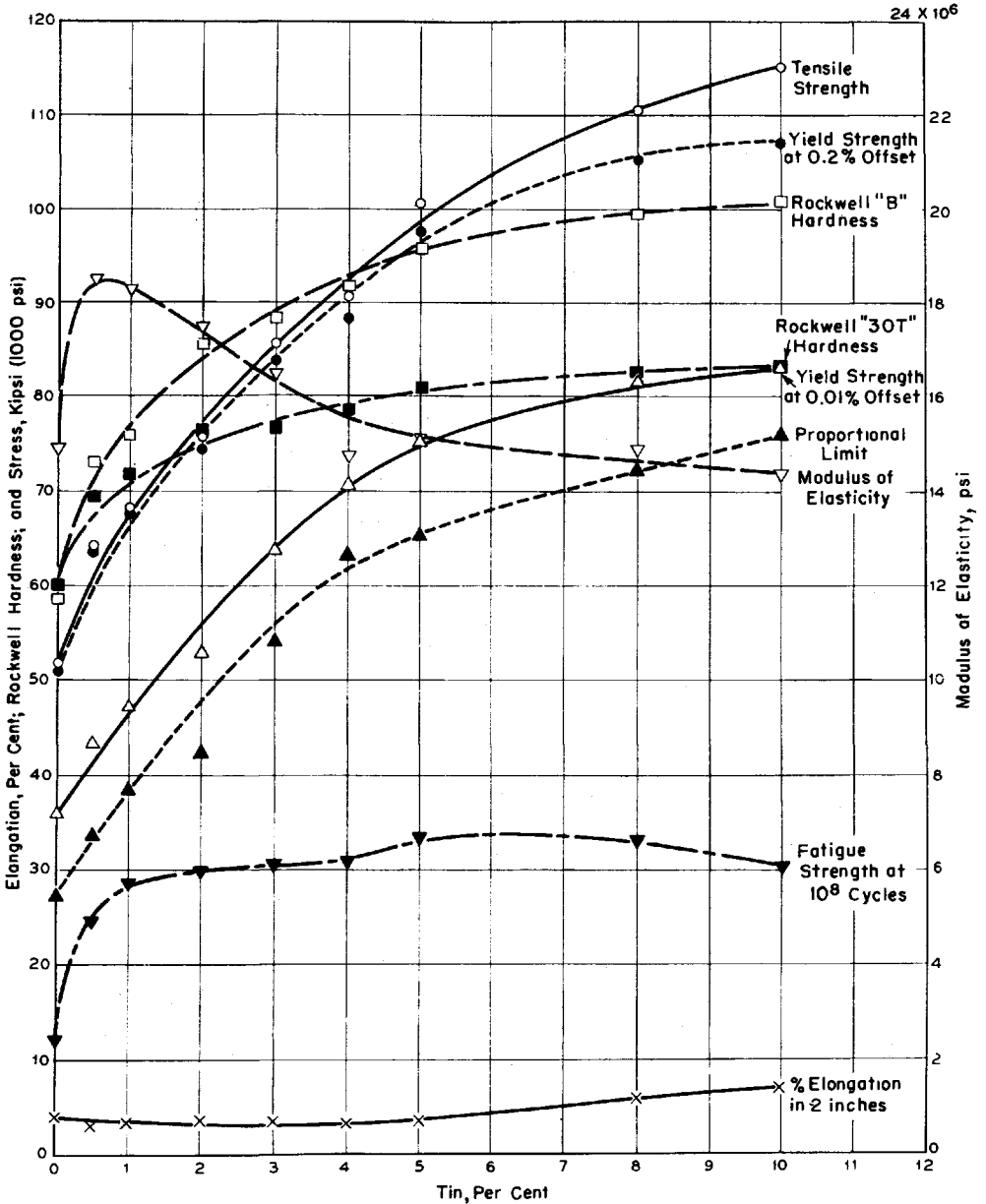


FIG. 79.—Mechanical Properties of Spring Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
 Nominal ready-to-finish grain size—0.035 mm.  
 Nominal thickness—0.040 in.



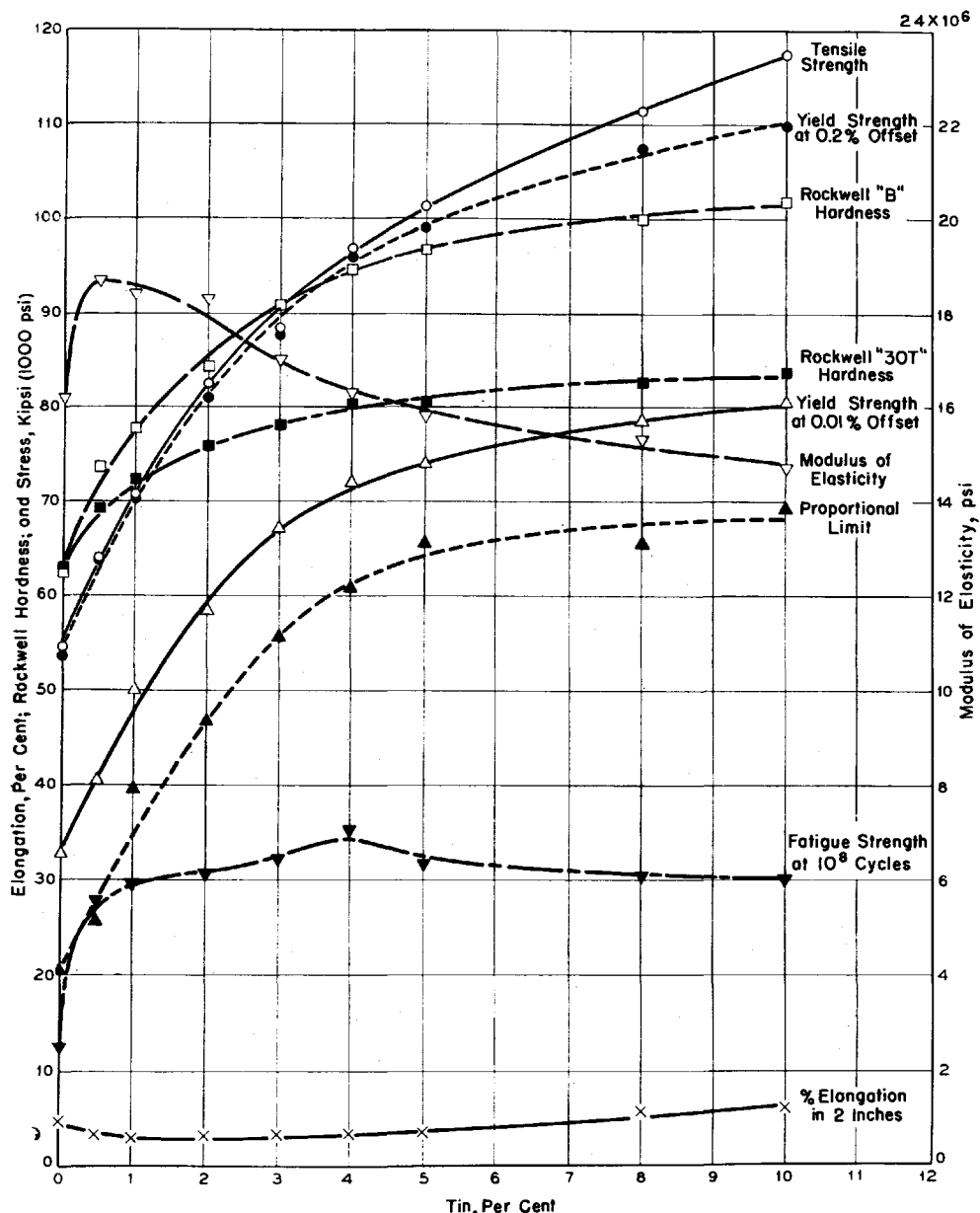


FIG. 80.—Mechanical Properties of Spring Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal ready-to-finish grain size—0.015 mm.

Nominal thickness—0.040 in.

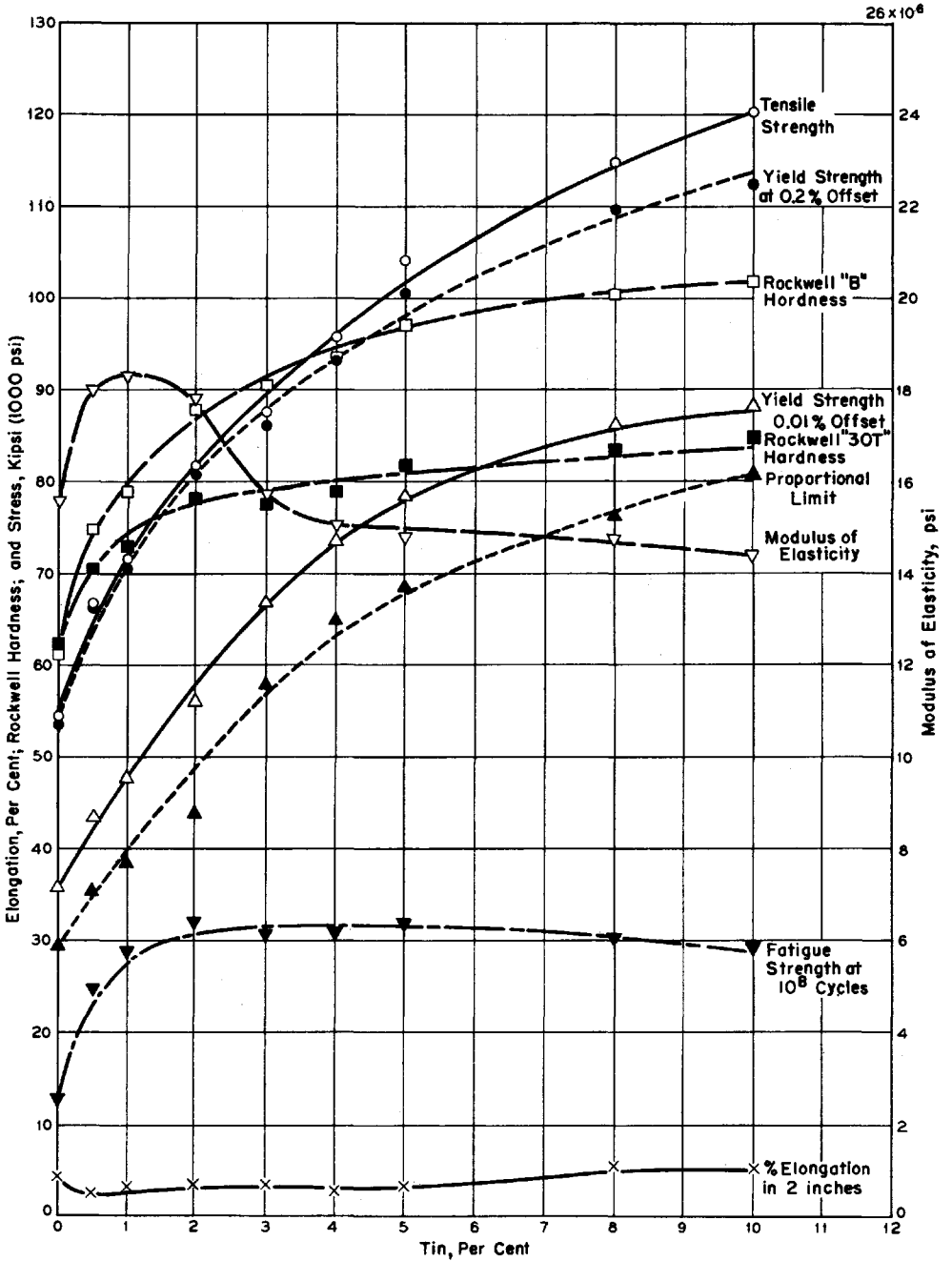


FIG. 81.—Mechanical Properties of Extra-Spring Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
Nominal ready-to-finish grain size—0.035 mm.  
Nominal thickness—0.040 in.

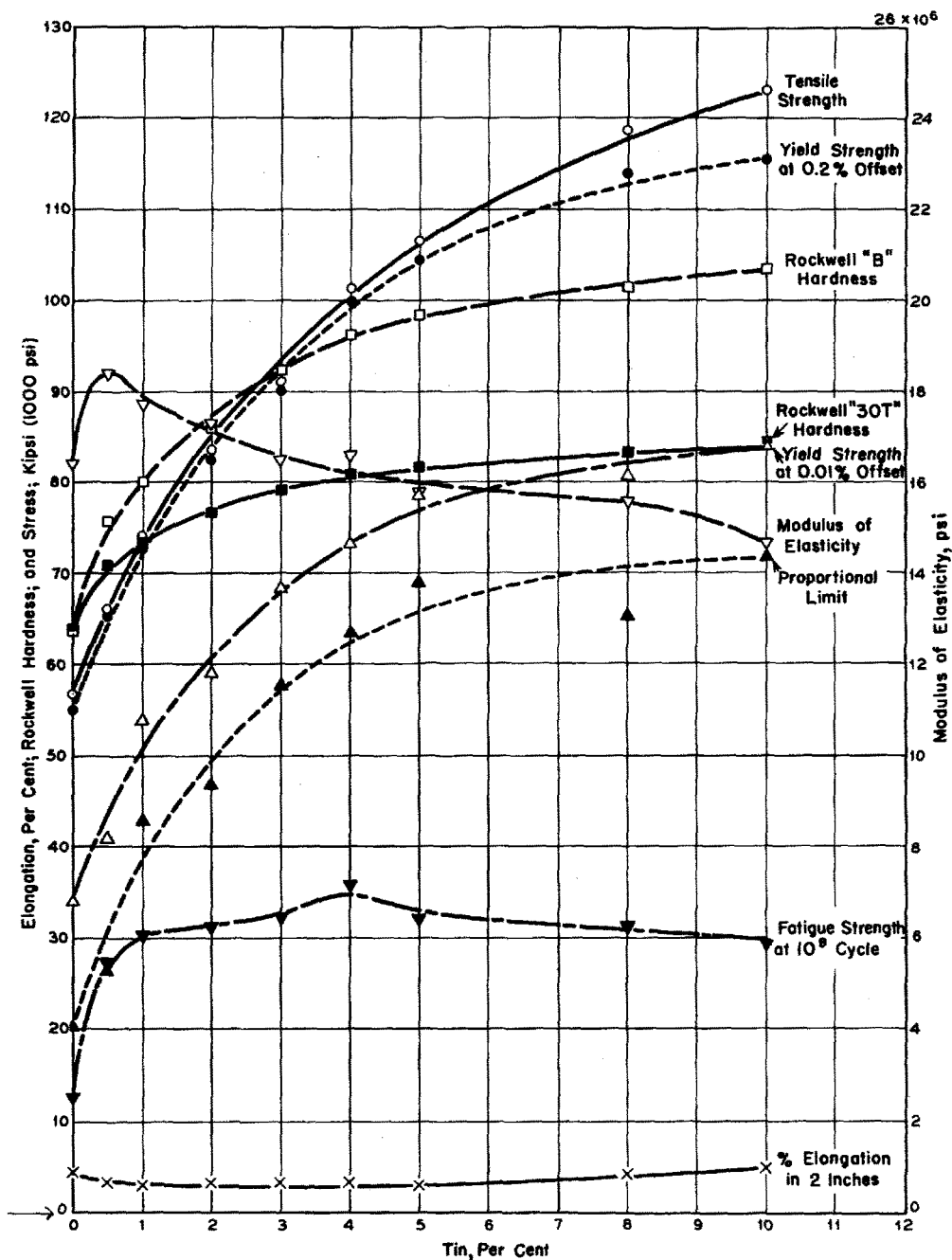


FIG. 82.—Mechanical Properties of Extra-Spring Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent  
 Nominal ready-to-finish grain size—0.015 mm.  
 Nominal thickness—0.040 in.

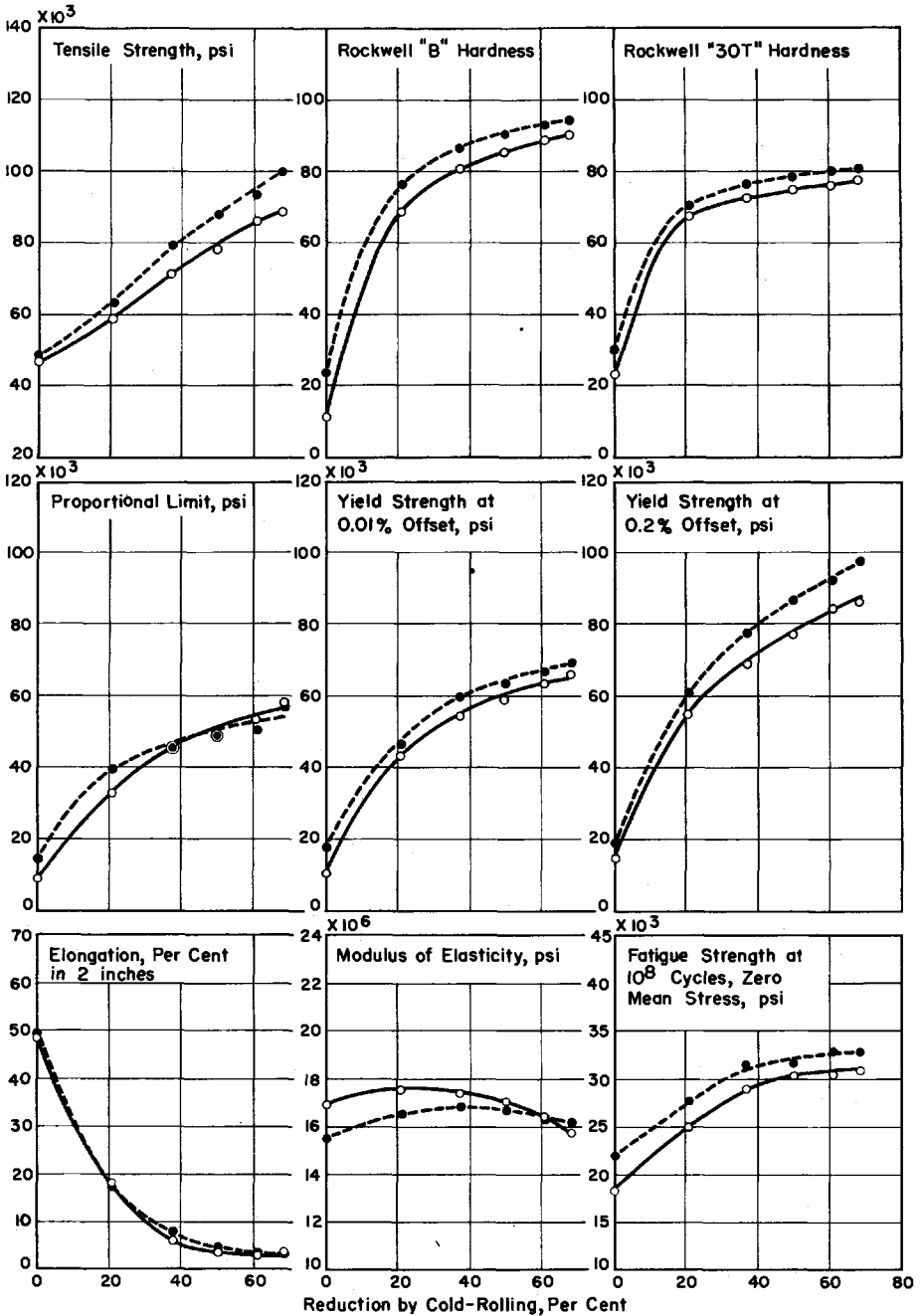


FIG. 83.—Effect of Phosphorus Content on the Mechanical Properties of 3 per cent Tin Phosphor Bronze Strip.

Nominal ready-to-finish grain size—0.035 mm.

Nominal thickness—0.040 in.

Nominal phosphorus content  $\left\{ \begin{array}{l} 0.05 \text{ per cent, } \bigcirc \text{—}\bigcirc \\ 0.40 \text{ per cent, } \bullet \text{---}\bullet \end{array} \right.$

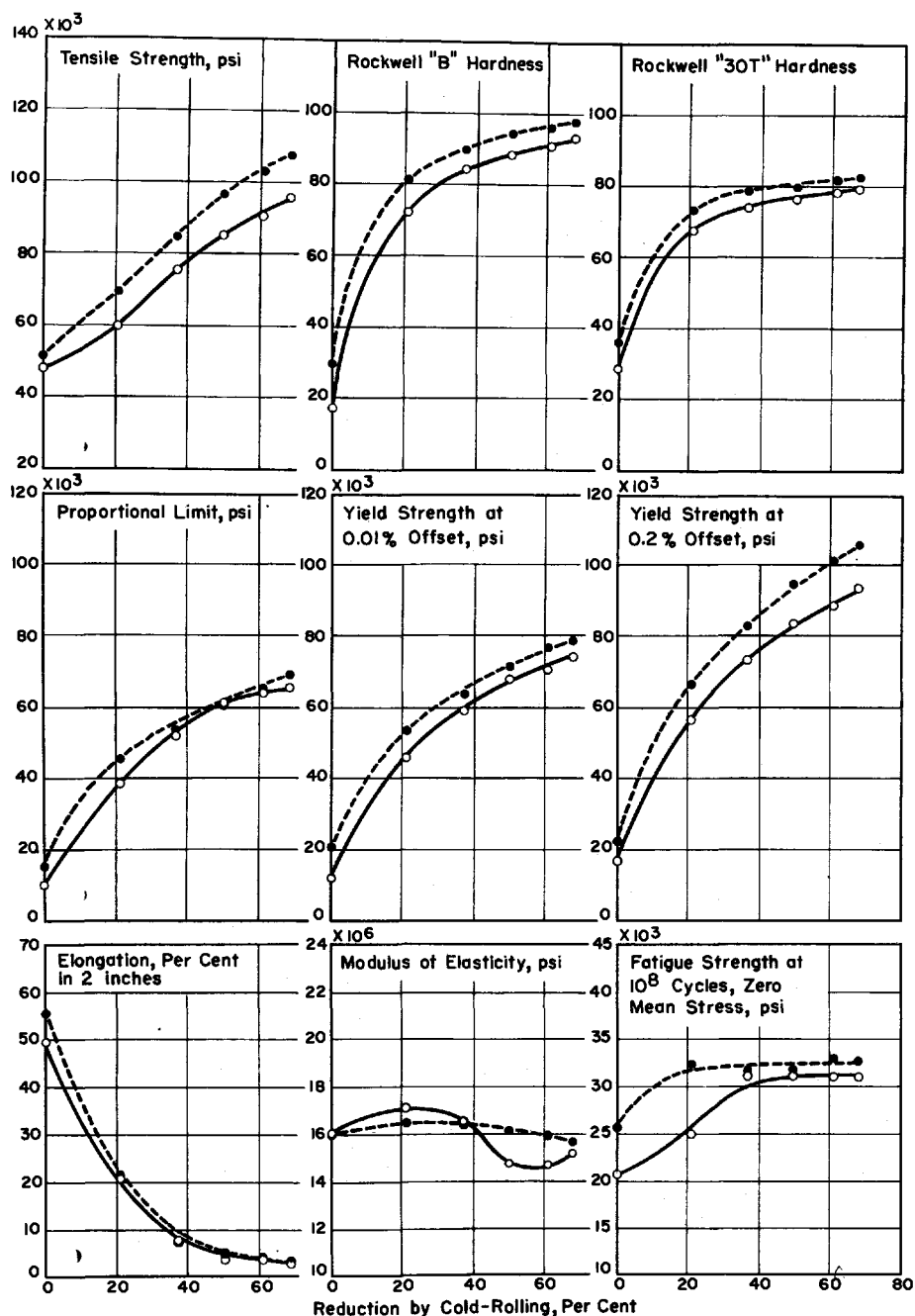


FIG. 84.—Effect of Phosphorus Content on the Mechanical Properties of 4 per cent Tin Phosphor Bronze Strip.

Nominal ready-to-finish grain size—0.035 mm.

Nominal thickness—0.040 in.

Nominal phosphorus content  $\begin{cases} 0.05 \text{ per cent, } \bigcirc \text{---} \bigcirc \\ 0.40 \text{ per cent, } \bullet \text{---} \bullet \end{cases}$



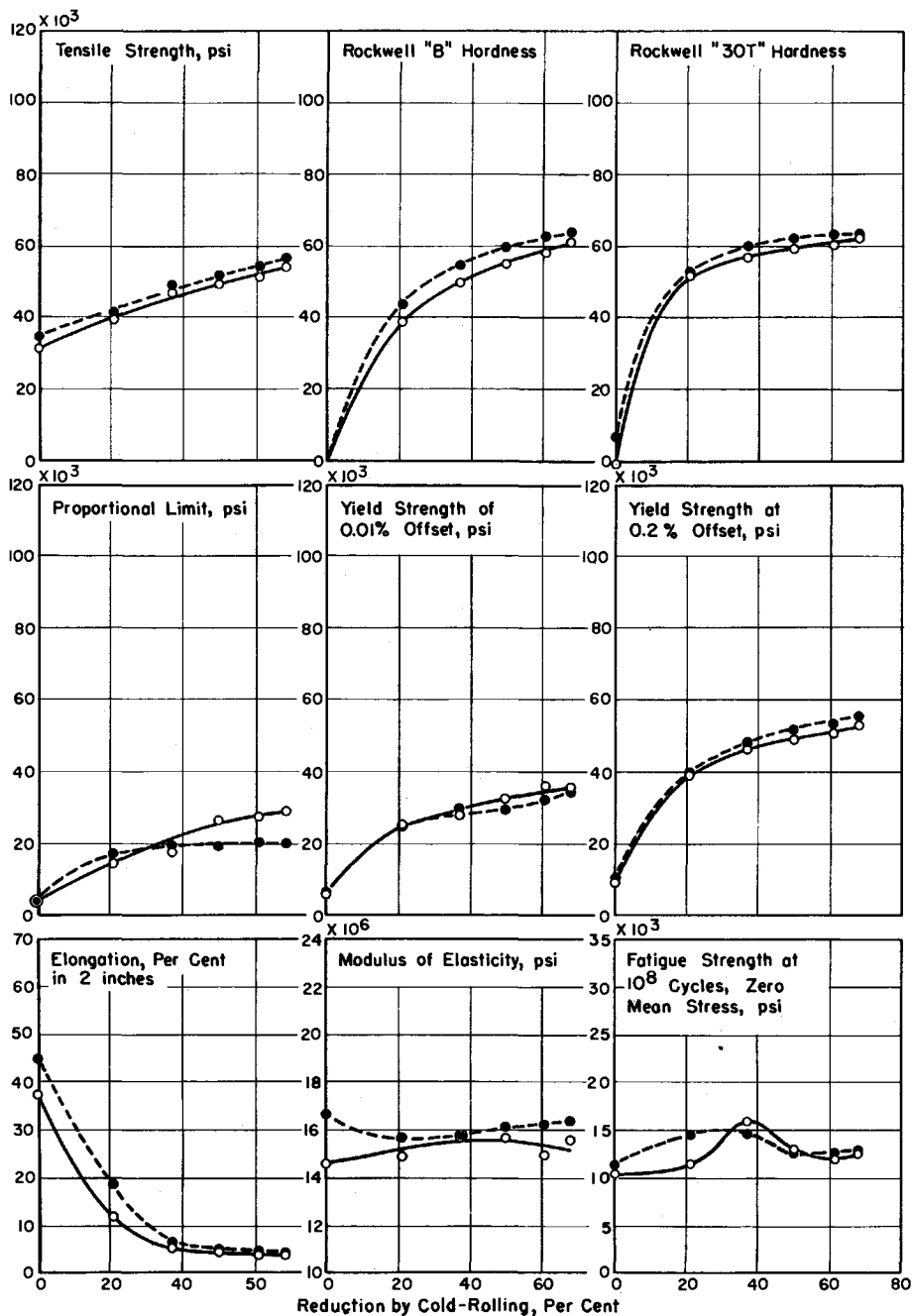


FIG. 86.—Effect of Grain Size on the Mechanical Properties of Electrolytic Tough Pitch Copper Strip.

Nominal ready-to-finish grain size—0.030 mm.

Nominal thickness—0.040 in.

○ — 0.015 mm, ● — 0.015 mm

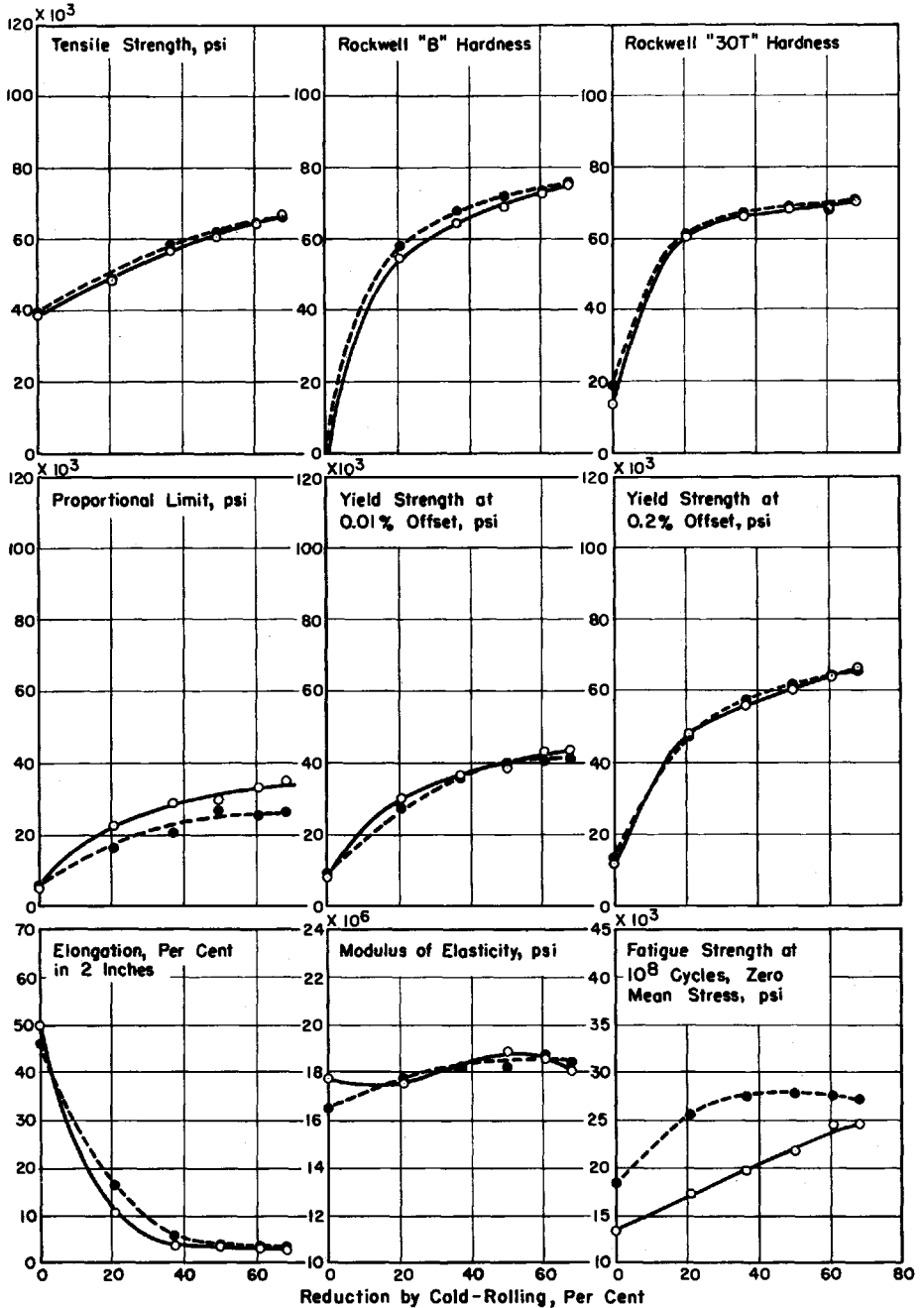


FIG. 87.—Effect of Grain Size on the Mechanical Properties of 0.5 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent

Nominal thickness—0.040 in.

Nominal ready-to-finish grain size  $\begin{cases} 0.035 \text{ mm, } \bigcirc\text{---}\bigcirc \\ 0.015 \text{ mm, } \bullet\text{---}\bullet \end{cases}$



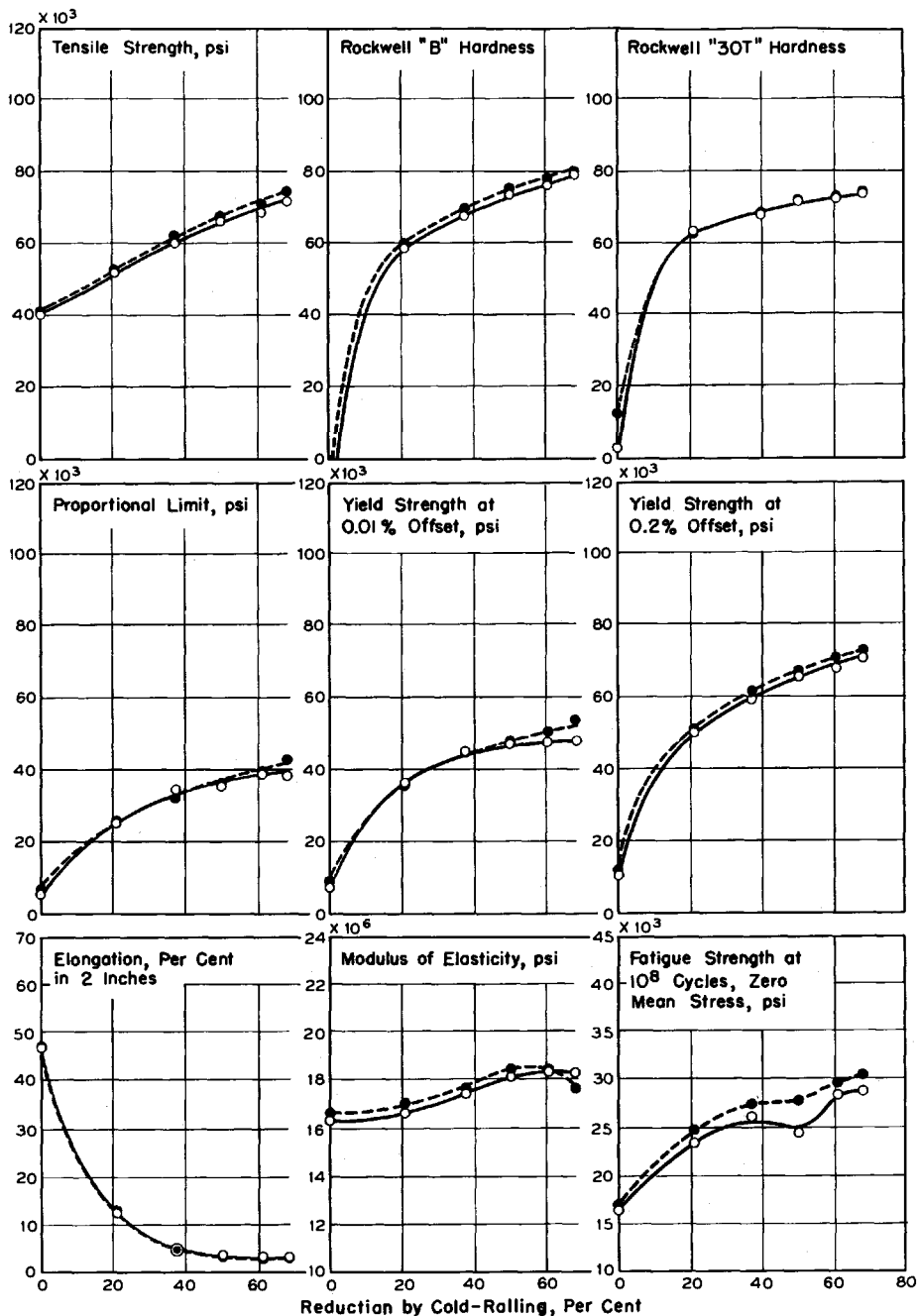


FIG. 88.—Effect of Grain Size on the Mechanical Properties of 1 per cent Tin Phosphor Bronze Strip.

Nominal phosphorous content—0.05 per cent.

Nominal thickness—0.040 in.

Nominal ready-to-finish grain size  $\begin{cases} 0.035 \text{ mm, } \bigcirc\text{---}\bigcirc \\ 0.015 \text{ mm, } \bullet\text{---}\bullet \end{cases}$

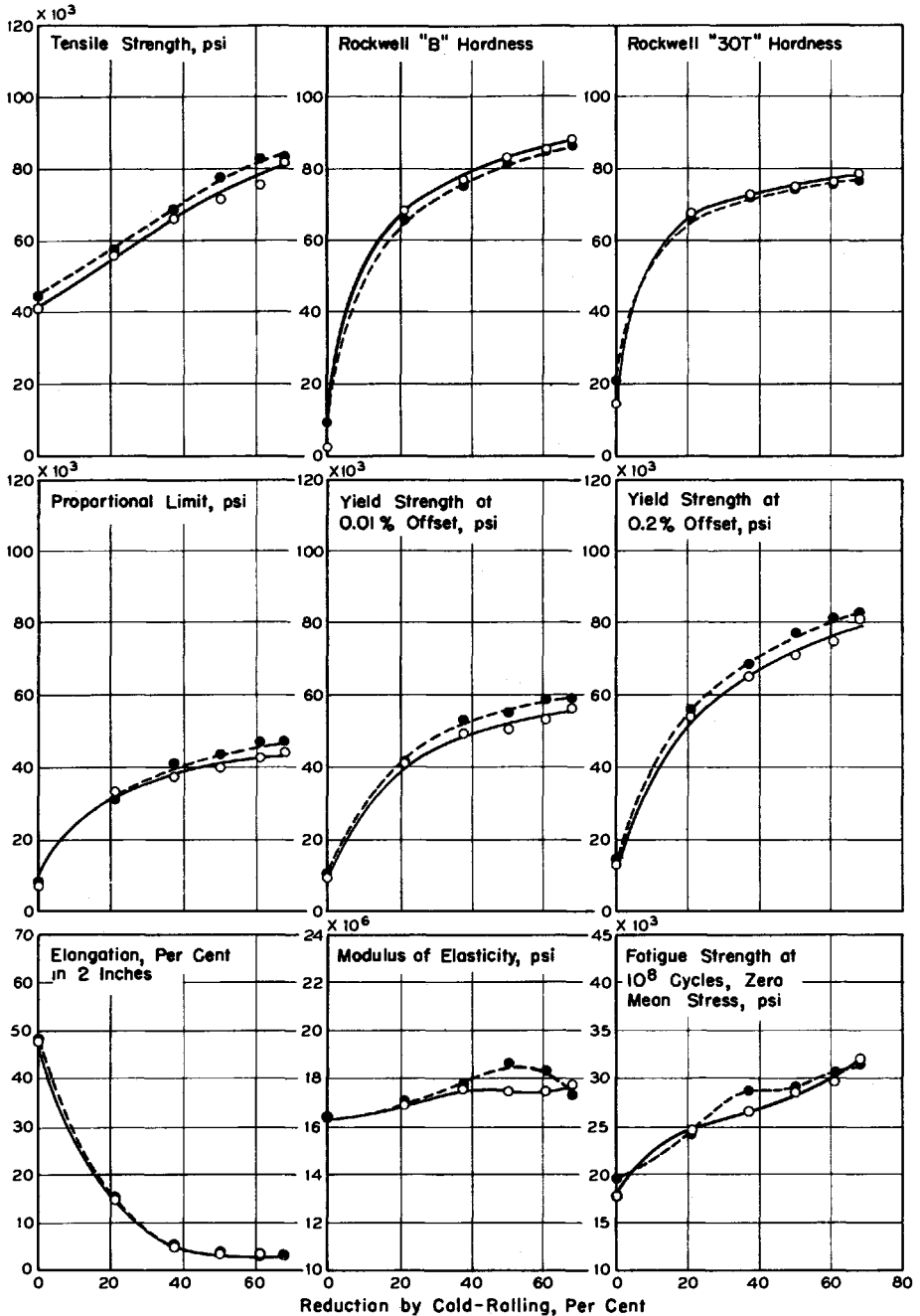


FIG. 89.—Effect of Grain Size on the Mechanical Properties of 2 per cent Tin Phosphor Bronze Strip.

Nominal phosphorous content—0.05 per cent.

Nominal thickness—0.040 in.

Nominal ready-to-finish grain size  $\begin{cases} 0.035 \text{ mm, } \bigcirc \text{---} \bigcirc \\ 0.015 \text{ mm, } \bullet \text{---} \bullet \end{cases}$

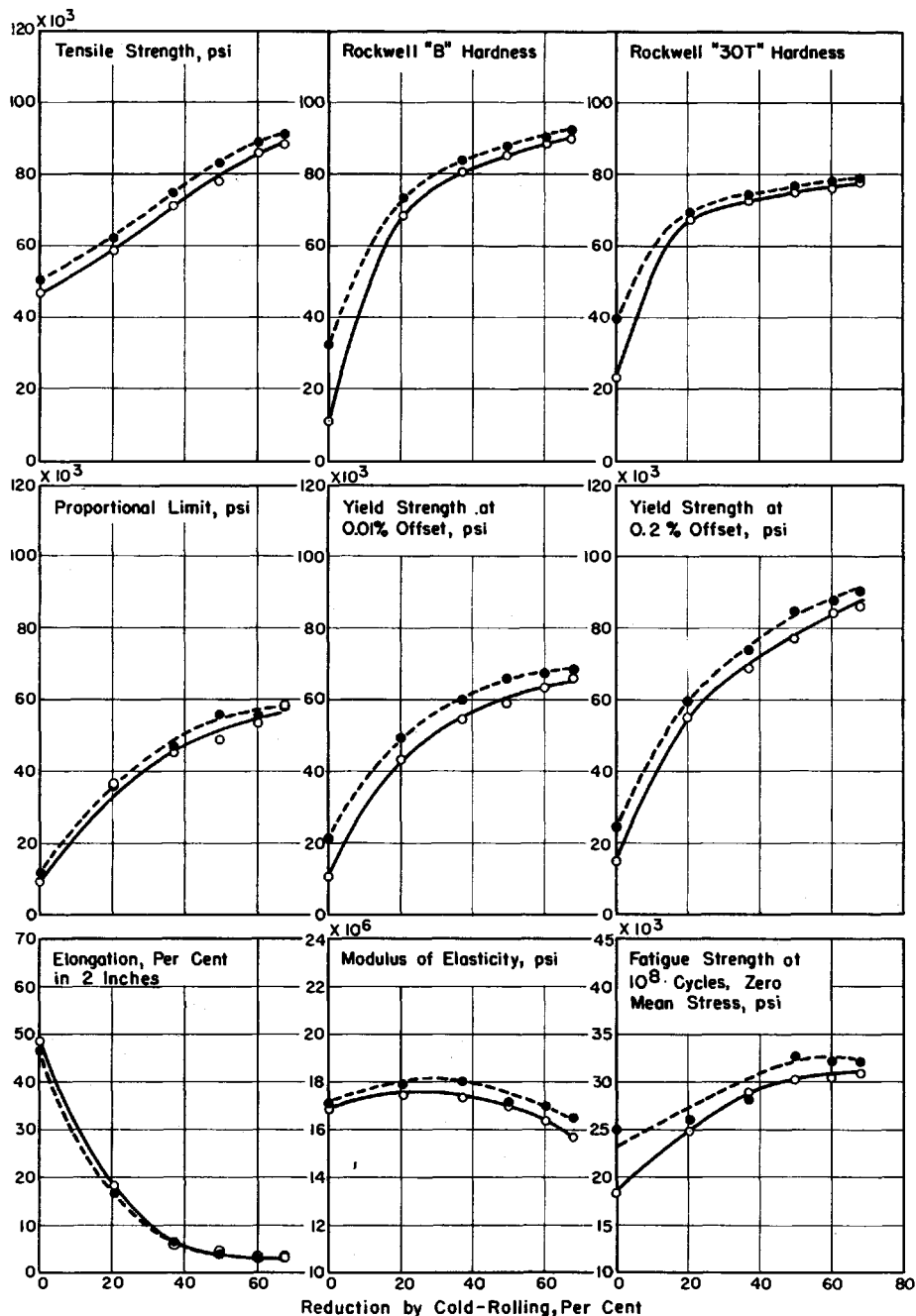


FIG. 90.—Effect of Grain Size on the Mechanical Properties of 3 per cent Tin Phosphor Bronze Strip.

Nominal phosphorous content—0.05 per cent.

Nominal thickness—0.040 in.

Nominal ready-to-finish grain size  $\begin{cases} 0.035 \text{ mm, } \bigcirc \\ 0.015 \text{ mm, } \bullet \end{cases}$

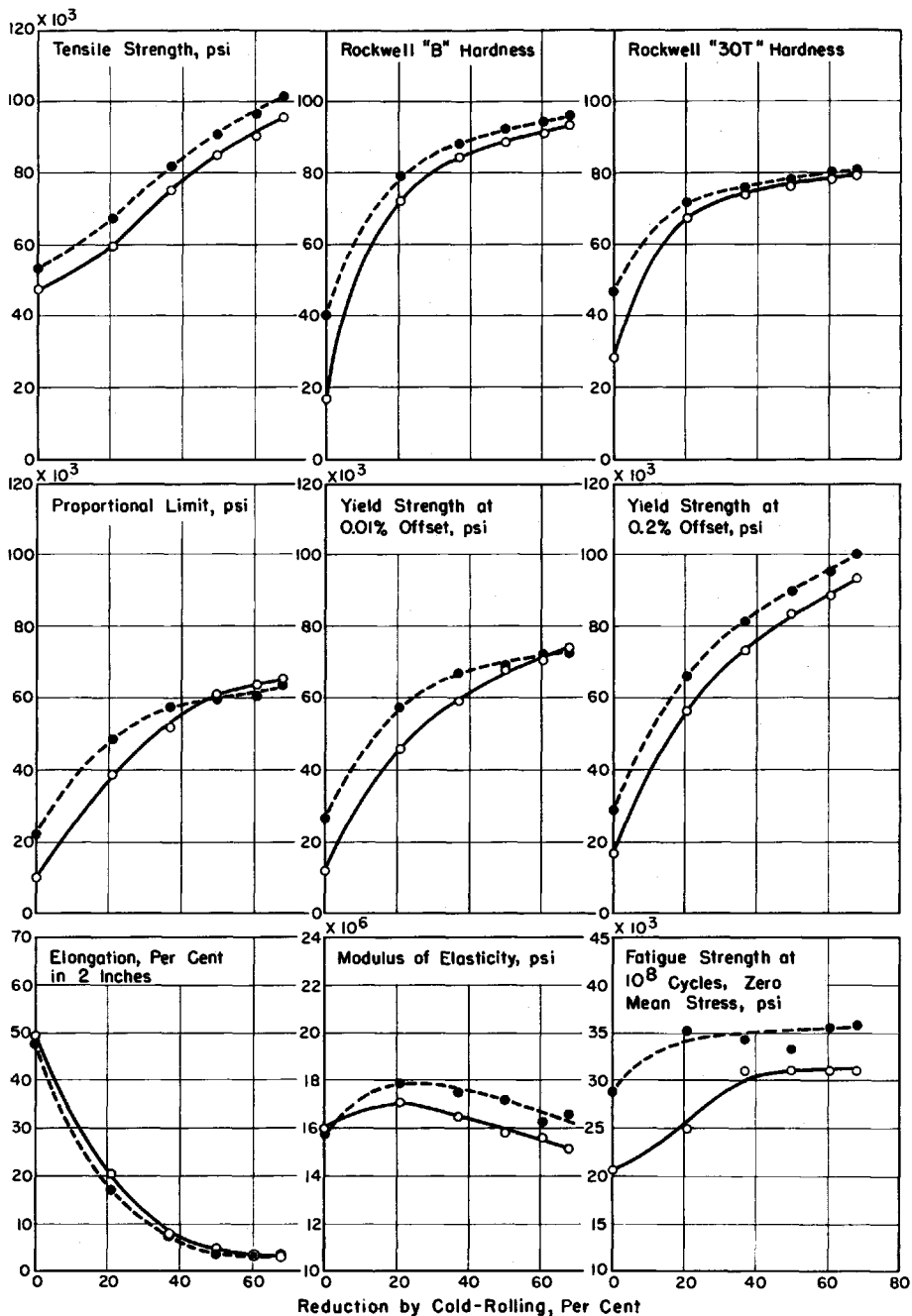


FIG. 91.—Effect of Grain Size on the Mechanical Properties of 4 per cent Tin Phosphor Bronze Strip.

Nominal phosphorous content—0.05 per cent.

Nominal thickness—0.040 in.

Nominal ready-to-finish grain size  $\begin{cases} 0.035 \text{ mm, } \bigcirc \\ 0.015 \text{ mm, } \bullet \end{cases}$

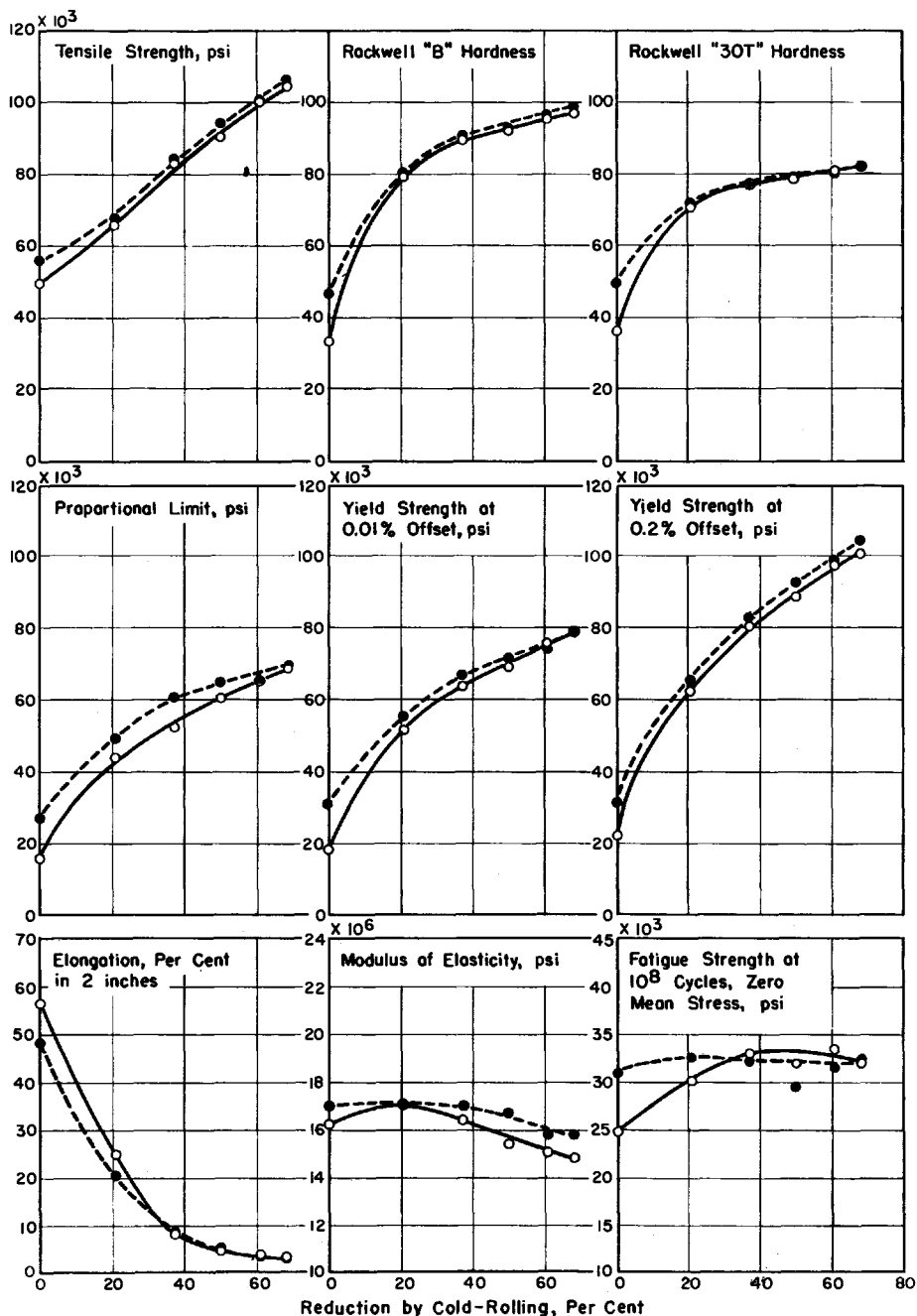


FIG. 92.—Effect of Grain Size on the Mechanical Properties of 5 per cent Tin Phosphor Bronze Strip.

Nominal phosphorous content—0.05 per cent.

Nominal thickness—0.040 in.

Nominal ready-to-finish grain size  $\begin{cases} 0.035 \text{ mm, } \bigcirc \\ 0.015 \text{ mm, } \bullet \end{cases}$

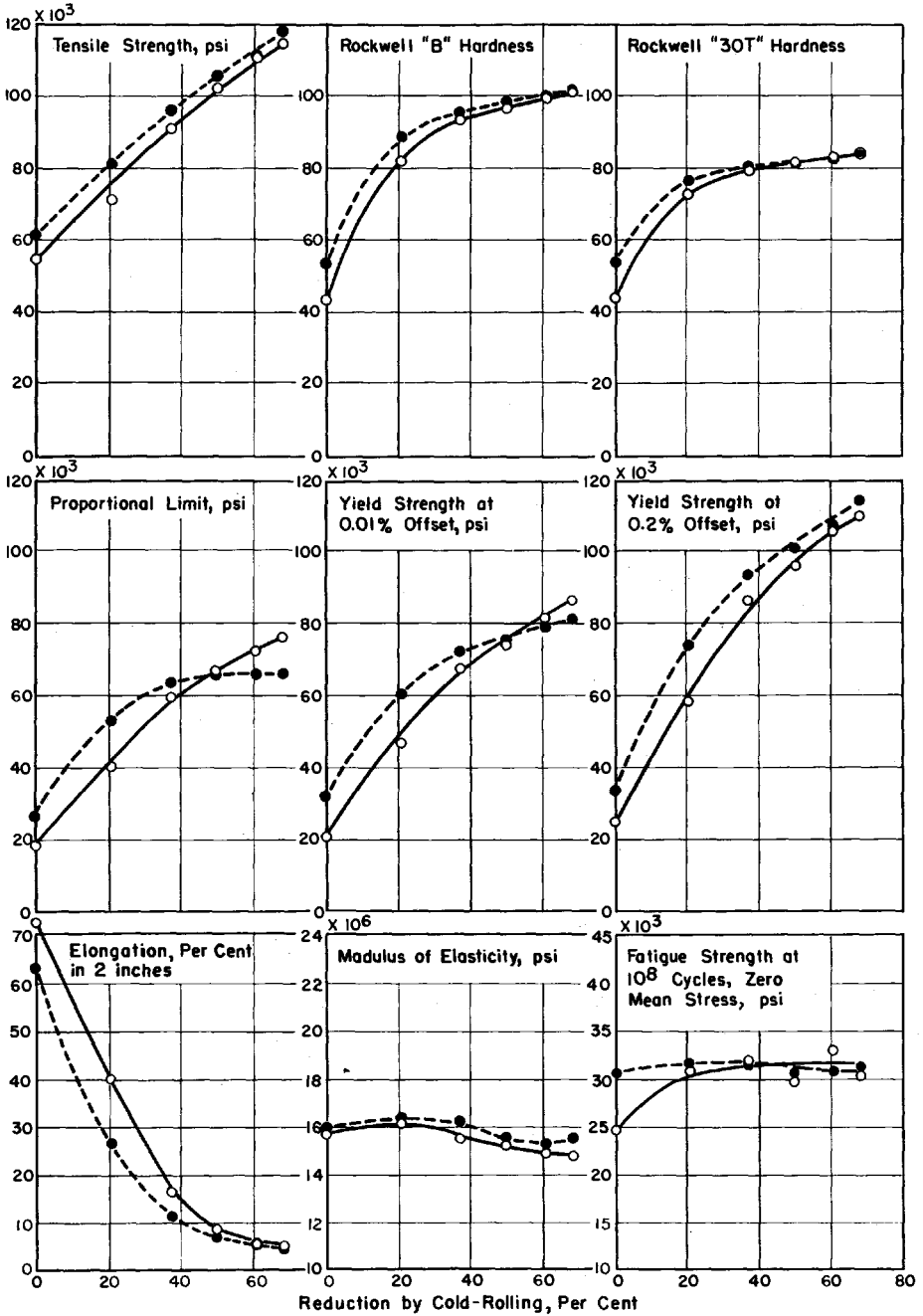


FIG. 93.—Effect of Grain Size on the Mechanical Properties of 8 per cent Tin Phosphor Bronze Strip.

Nominal phosphorous content—0.05 per cent.

Nominal thickness—0.040 in.

Nominal ready-to-finish grain size  $\begin{cases} 0.035 \text{ mm, } \bigcirc \\ 0.015 \text{ mm, } \bullet \end{cases}$

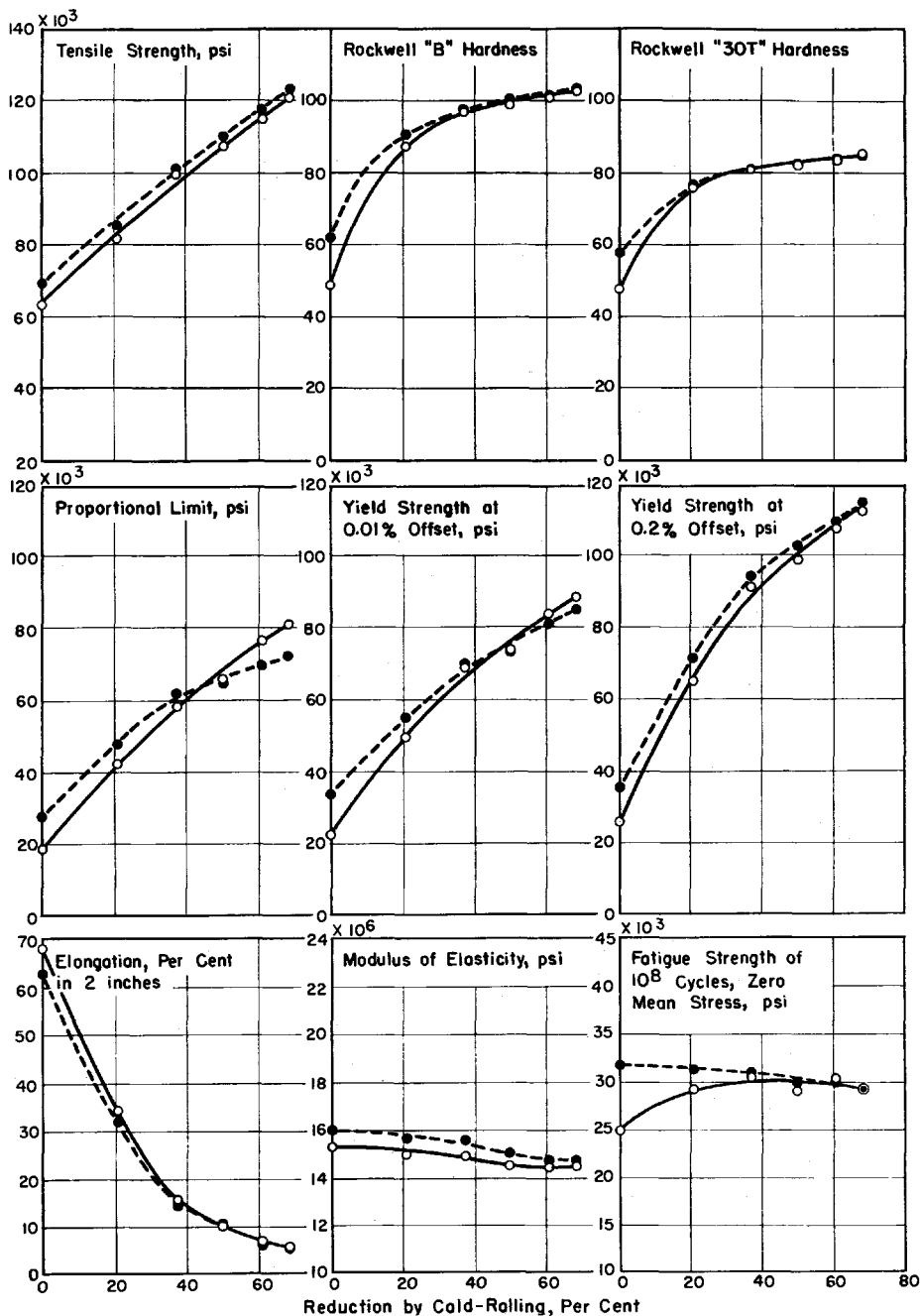


FIG. 94.—Effect of Grain Size on the Mechanical Properties of 10 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.05 per cent.

Nominal thickness—0.040 in.

Nominal ready-to-finish grain size  $\begin{cases} 0.035 \text{ mm, } \bigcirc \\ 0.010 \text{ mm, } \bullet \end{cases}$

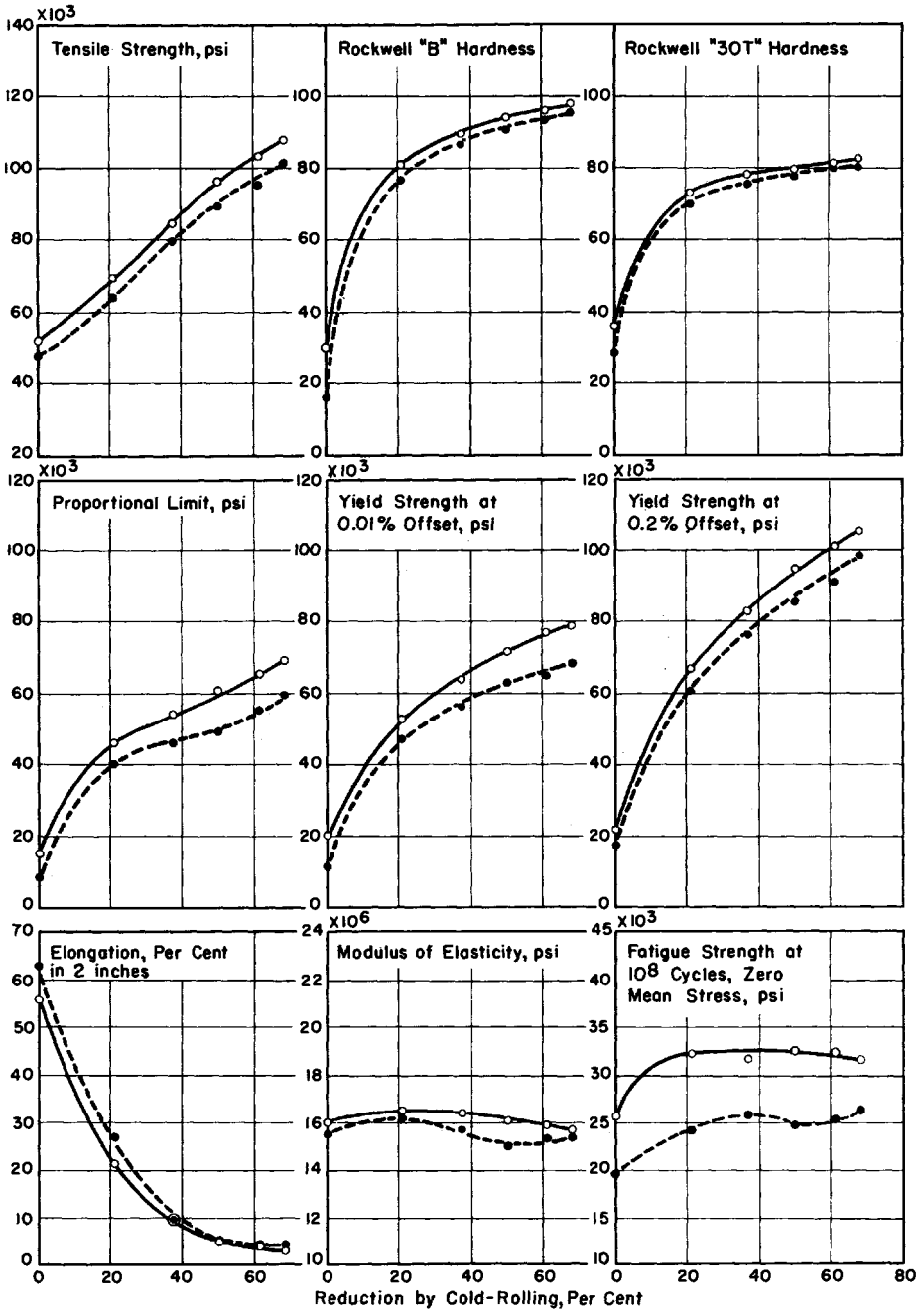


FIG. 95.—Effect of Grain Size on the Mechanical Properties of 4 per cent Tin Phosphor Bronze Strip.

Nominal phosphorus content—0.40 per cent.  
 Nominal thickness, 0.040 in.  
 Nominal ready-to-finish grain size  $\begin{cases} 0.035 \text{ mm, } \bigcirc \\ 0.075 \text{ mm, } \bullet \end{cases}$