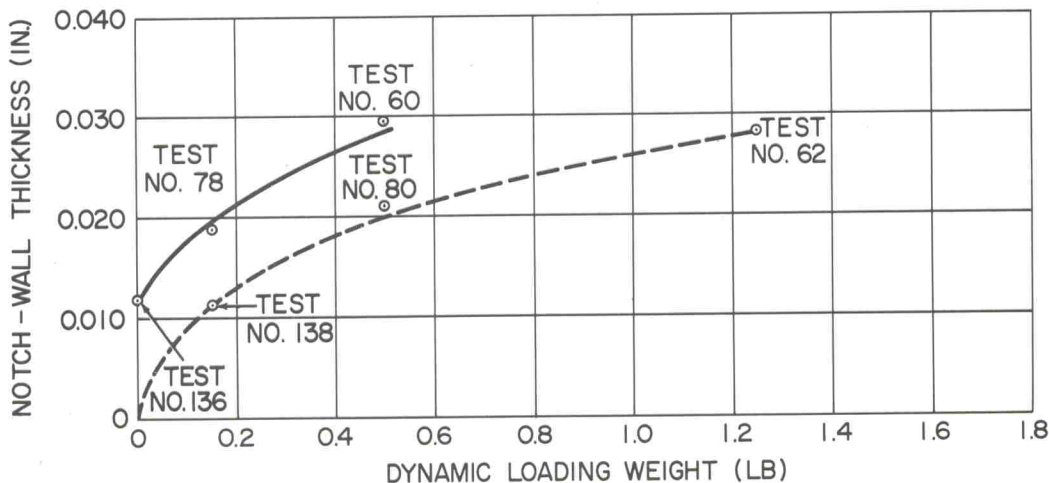
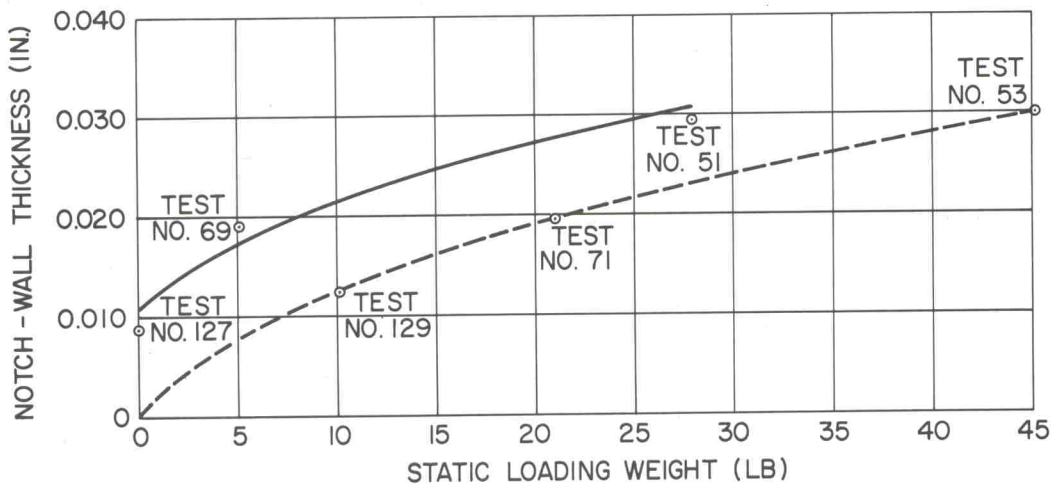


LEGEND:

— TEST PRESSURE = 45,000 PSIG
 - - - TEST PRESSURE = 0 PSIG



NOTES:

1. LOADING WEIGHTS APPLIED TO KNOCK-OFF TUBES AT POINT 2.00 INCHES FROM NOTCH
2. DYNAMIC LOADING WEIGHTS DROPPED FROM HEIGHT OF 6 INCHES (IMPACT VELOCITY \approx 68 IN./SEC)

FIG. 20 EFFECTS OF PRESSURE AND NOTCH-WALL THICKNESS ON FAILURE OF 3/8" O.D. (1/8" I.D.) TUBES, WITH 0.010-INCH CASEHARDENED DEPTH, SUBJECTED TO STATIC AND DYNAMIC LOADS

notch-wall thickness on the failure of 9/16-inch O.D. (3/16-inch I.D.) tubes, having zero and 0.005-inch casehardened depths and subjected to static and dynamic loads, are illustrated in Figures 21 and 22, respectively.

The last parameter to be evaluated in conjunction with the knock-off tube, rupture-load characteristics was the case-hardened depth. The effects of casehardening and notch-wall thickness on the failure of 3/8-inch O.D. (1/8-inch I.D.) tubes subjected to static and dynamic loads are shown in Figures 23 and 24, respectively.

The curves shown in the aforementioned figures clearly indicate that there is a definite correlation between the various parameters that affect the knock-off tube, rupture-load characteristics. This correlation is further discussed in the section Selection of Knock-Off Tube.