

variation from time to time, also the construction of general curves for the extension of the test pieces, with stress-strain co-ordinates. A typical

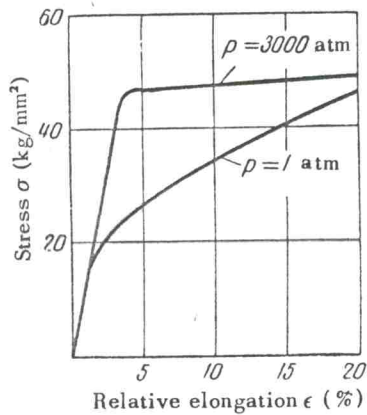


FIG. 4. Relationship of stress to deformation during tension in a test-piece of hardened beryllium bronze under all-round hydrostatic pressure.

oscillogram, taken during 20 per cent extension of hardened beryllium bronze under a pressure of 3000 kg/cm² is given in Fig. 3. From the results of the tests the first part of the curve for the extension of beryllium bronze, hardened at 800°C in water, has been constructed (Fig. 4). As is evident from the diagram, hydrostatic pressure markedly increases the limits of flow. Nevertheless, the growth of stress with an increase of strain at a pressure of 3000 kg/cm² proceeds notably more slowly than at atmospheric pressure.

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