

SUGGESTIONS FOR FURTHER WORK

There is considerable scope for further work on this topic, since only very general rules exist regarding which of the theories available (if any) is applicable to a given case of complex loading.

Thus the present experiments could be repeated for some of the common Aluminum alloys, also Copper and Bronze.

Also a much higher internal pressure could be used together with testpieces having a greater wall thickness, thus introducing a third principal stress value.

A higher internal pressure with the existing testpieces would give more points in the first quadrant of the  $\frac{\sigma_1}{\sigma_e}$  vs.  $\frac{\sigma_2}{\sigma_e}$  graph, which is highly desirable since the various theories diverge more and more in this direction, enabling the appropriate one to be seen more clearly.

A further extension of the tests which would bring the conditions more in line with actual working conditions would be the addition of cyclic loading and possibly a small furnace for experiments at elevated temperatures.