

# Environmental Stress Cracking Resistance (ESCR)

Environmental stress cracking resistance (ESCR) testing is done by mounting molded flex bars on curved brass bars. The brass bars impart strains on the parts up to 4000 psi, or 1.1% strain. We also have varying strain Bergen jigs, which can show specific strains where failure occurs based on where the cracking or crazing begins.

After the samples are mounted, a conditioning specific fluid is applied to the surface of the part. These fluids range from solvents, medical disinfectants, or epoxies.

The parts remain on the brass bars for 24 hours, after which they are removed and examined for failure. Post-ESCR mechanical testing is possible, but not common.

