

eqellperf.stiffened.opm: meridional stress (psi) in isogrid "layer"

PA= 1.0: applied external pressure = PA x 460 = 460 psi

step 9, layer 1, sigma1 at inner fiber of the isogrid "layer"

Equivalent isogrid-stiffened ellipsoidal shell optimized with zero imperfection

NOTE: Use a factor, 49.51, to get the maximum stress in isogrid member

Θ x -35.84

Θ y -13.14

Θ z 35.63

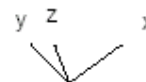


Fig. 125 STAGS prediction of the **inner fiber meridional stress sigma1 (psi) in the isogrid "layer"** of the optimized **"perfect" isogrid-stiffened** equivalent ellipsoidal shell subjected to the external design pressure, $p = 460$ psi. Compare with the BIGBOSOR4 prediction of STFMXS in Segment 1 in Table 71. The highest stress here is at the pole. Multiply the "sigma1" values listed in the key by the factor 49.51 to get actual stress.