

The unstiffened shell was optimized by GENOPT with Mode 1,2,3,and 4 axisymmetric imperfections.

STAGS linear buckling mode 2, pcr= 1.7220 x 460 psi

⊙x -35.84

STAGS 10-deg, model with 410 elements gets 1,7661 x 460 psi

Θ y -13.14

Mode 2 axisymmetric linear buckling of perfect shell from STAGS, 10-degree model, 480 elements

Fig. 114 STAGS prediction of linear bifurcation buckling of the 4-mode-optimized unstiffened, imperfect equivalent ellipsoidal shell. This STAGS mode is analogous to the linear buckling mode predicted by BIGBOSOR4 called "mode 2" in the GENOPT jargon. Compare with Fig. 99 (BIGBOSOR4 model) and Fig. 105 (360-degree STAGS model). 480 finite elements are used in this refined STAGS model.