NOMENCLATURE

a_1, a_2, a_3 . . . displacement coefficients defined in two-dimensional analysis, in, in, dimenionless

a_5, a_6 . . . . . displacement coefficients defined in one-dimensional analysis, in, dimensionless

a_7 . . . . displacement coefficient defined in rigid-anvil analysis, dimensionless

b . . . . characteristic measure of wafer material strain hardening, psi

D . . . . initial wafer diameter, in

$\dot{E}'$ . . . . . . deviator strain rate tensor, $\sec^{-1}$

E'' . . . . spherical strain tensor, in/in

f . . . . coefficient of friction

F . . . . applied compressive force, lbs

G . . . . shearing modulus of wafer material, psi

$2h_c$ . . . . . . wafer height measured along axis of revolution, in

$2h_o$ . . . . . . original wafer centerline height, in

H . . . . initial wafer height, in

n . . . . characteristic curvature of plastic strain hardening of wafer material in one-dimensional analysis

P_1 . . . . constraining pressure attributed to radial constraints, psi

P_c . . . . constraining pressure at mid-meridian plane, psi

r, θ, z . . . . . radial, circumferential, and tangential coordinates, in, rad, in

R_o . . . . initial wafer radius, in

R . . . . current wafer radius, in