$$\begin{split} x_2 = & x_1 + \varDelta x_{fr} \frac{p_1 - p_0}{p_1} \,, \\ p_{y2} = & p_{y1} + y_1 \frac{\varDelta y_{fr} - \varDelta y_{fra} y_1^2}{p_1^2} \,, \\ z_2 = & z_1 + \frac{\varDelta x_{fr} p_{x1} + (\varDelta y_{fr} - \varDelta y_{fra} y_1^2/2) y_1^2/(2p_1)}{p_1} \,, \\ \text{where } \varDelta x_{fr} \equiv & \frac{\text{F}\,1^2}{24\rho_b} \,, \\ \varDelta y_{fr} \equiv & \frac{\text{F}\,1}{6\rho_b^2} \,, \\ \varDelta y_{fra} \equiv & \frac{2}{3} \frac{1}{\text{F}\,1\rho_b^2} \,, \\ \rho_b \equiv & \frac{L'}{\text{ANGLE} + \text{K0}} \,, \\ L' \equiv & \text{L} - \frac{(\text{ANGLE}\,\text{F}\,1)^2}{24\text{L}} \\ & \times \frac{\sin((\text{ANGLE}(1 - \text{E}\,1 - \text{E}\,2) - \text{AE}\,1 - \text{AE}\,2)/2)}{\sin(\text{ANGLE}/2)} \,. \end{split}$$