$$
\begin{aligned}
x_2 =& x_1 + \Delta x_{fr} \frac{p_1 - p_0}{p_1}\,, \\
p_{y2} =& p_{y1} + y_1 \frac{\Delta y_{fr} - \Delta y_{fra} y_1^2}{p_1^2}\,, \\
z_2 =& z_1 + \frac{\Delta x_{fr} p_{x1} + (\Delta y_{fr} - \Delta y_{fra} y_1^2/2) y_1^2/(2p_1)}{p_1}\,, \\
\text{where } \Delta x_{fr} \equiv& \frac{\texttt{F1}^2}{24\rho_b}\,, \\
\Delta y_{fr} \equiv& \frac{\texttt{F1}}{6\rho_b^2}\,, \\
\Delta y_{fra} \equiv& \frac{2}{3}\frac{1}{\texttt{F1}\rho_b^2}\,, \\
\rho_b \equiv& \frac{L'}{\texttt{ANGLE} + \texttt{K0}}\,, \\
L' \equiv& \texttt{L} - \frac{(\texttt{ANGLE F1})^2}{24\texttt{L}} \\
& \times \frac{\sin((\texttt{ANGLE}(1 - \texttt{E1} - \texttt{E2}) - \texttt{AE1} - \texttt{AE2})/2)}{\sin(\texttt{ANGLE}/2)}\,.
\end{aligned}
\tag{95}
$$