

$$\mathbf{W} = \frac{W_0(x_1\mathbf{H})^2 - K_W W_0 Z + W_0 Z \cdot x_1\mathbf{H} \cdot fun}{K_W Z - (x_1\mathbf{H})^2},$$

$$fun = x_2 - x_3 \frac{x_4 x_1 \mathbf{H} + 2x_4 K_2}{(x_1 \mathbf{H})^2 + x_4 x_1 \mathbf{H} + x_4 K_2} - \frac{B_T}{1 + \frac{x_1 \mathbf{H}}{K_B}} - P_T \frac{K_{1p} K_{2p} x_1 \mathbf{H} + 2K_{1p} K_{2p} K_{3p} - (x_1 \mathbf{H})^3}{(x_1 \mathbf{H})^3 + K_{1p} (x_1 \mathbf{H})^2 + K_{1p} K_{2p} x_1 \mathbf{H} + K_{1p} K_{2p} K_{3p}} -$$

$$\frac{\frac{S_{iT}}{1 + \frac{x_1 \mathbf{H}}{K_{SI}}}}{1 + \frac{x_1 \mathbf{H}}{K_{SI}}} + \frac{\frac{S_T}{1 + \frac{K_{SZ}}{x_1 \mathbf{H}}}}{1 + \frac{K_{SZ}}{x_1 \mathbf{H}}} + \frac{\frac{F_T}{1 + \frac{K_F}{x_1 \mathbf{H}}}}{1 + \frac{K_F}{x_1 \mathbf{H}}}$$