

$$DPU_{scrap} = DPU_{pred} * Scrap\ rate$$

$$DPU_{rework} = DPU_{pred} - DPU_{scrap}$$

$$Yield_{pred} = e^{-DPU_{pred}} * 100$$

$$\begin{aligned} \text{Sigma}_{pred} = & [(\text{SQRT}(\text{LN}(1 / (\text{dpmo}_{pred} / 1000000)^2)) - (2.515517 + \\ & 0.802853 * \\ & (\text{SQRT}(\text{LN}(1 / (\text{dpmo}_{pred} / 1000000)^2))) + 0.010328 * \\ & (\text{SQRT}(\text{LN}(1 / \\ & (\text{dpmo}_{pred} / 1000000)^2))))^2) / (1 + 1.432788 * (\text{SQRT}(\text{LN}(1 / \\ & (\text{dpmo}_{pred} / 1000000)^2))) + 0.189269 * (\text{SQRT}(\text{LN}(1 / \\ & (\text{dpmo}_{pred} / \\ & 1000000)^2))))^2 + 0.001308 * (\text{SQRT}(\text{LN}(1 / (\text{dpmo}_{pred} / \\ & 1000000)^2))))^3] + 1.5 \end{aligned}$$

Mean Dpmo and Feature Factors Method

$$DPU_{avg} = (\text{Total Opportunities} * \text{DPMO Mean}) / 1,000,000$$

$$\begin{aligned} K_{dpu} = & \text{Product and/or sum of Non-Rated Feature Characteristic} \\ & \text{DPMO Factors (K}_{factor}) \\ & = K_{factor1} * K_{factor2} + K_{factor3} \dots K_{factorn} \end{aligned}$$

$$DPU_{pred} = K_{dpu} * DPU_{avg}$$

$$\text{dpmo}_{pred} = DPU_{pred} * 1,000,000 / \text{Total Opportunities}$$

$$Yield_{pred} = e^{-DPU_{pred}} * 100$$

$$\begin{aligned} \text{Sigma}_{pred} = & [(\text{SQRT}(\text{LN}(1 / (\text{dpmo}_{pred} / 1000000)^2)) - (2.515517 + \\ & 0.802853 * \\ & (\text{SQRT}(\text{LN}(1 / (\text{dpmo}_{pred} / 1000000)^2))) + 0.010328 * \\ & (\text{SQRT}(\text{LN}(1 / \\ & (\text{dpmo}_{pred} / \\ & 1000000)^2))))^2) / (1 + 1.432788 * (\text{SQRT}(\text{LN}(1 / \\ & (\text{dpmo}_{pred} / \\ & 1000000)^2))) + 0.189269 * (\text{SQRT}(\text{LN}(1 / \\ & (\text{dpmo}_{pred} / \\ & 1000000)^2))))^2 + 0.001308 * (\text{SQRT}(\text{LN}(1 / (\text{dpmo}_{pred} / \\ & 1000000)^2))))^3] + 1.5 \end{aligned}$$