

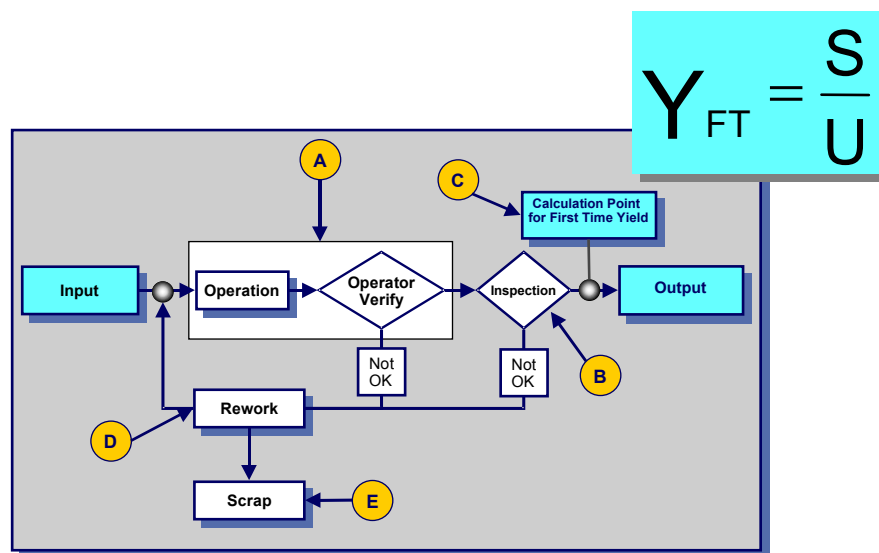
Yield – First Time

Purpose

To calculate the ratio of the number of units accepted to the total number of units inspected. This calculation of process performance represents the classical view of Yield.

Anatomy

Yield - First Time



Yield1st_001

Reference: *The Vision of Six Sigma: A Roadmap for Breakthrough Ch. 14*

Terminology

- A. Process Operation Step including operator self-check/verification
- B. Process Inspection/Test/Verification Step
- C. Point at which Y_{FT} is calculated, considering the number of units tested (U) and the number of units that pass inspection (S)
- D. Process Rework Step
- E. Scrap

Major Considerations

Calculation of Process Yield using First Time Yield formula does not reflect the true process effectiveness. It often leads to an overvalued calculation of the true Yield, and has no practical meaning other than the ratio of successes over units tested. First Time Yield should not be used in practice. Y_{FT} does not take into account the "Hidden Factory".



Application Cookbook

1. Count the number of units inspected or tested (U)
2. Count the number of units that pass the inspection/test requirements (S)
3. Apply the formula Y_{FT} , expressing the result as a percentage