

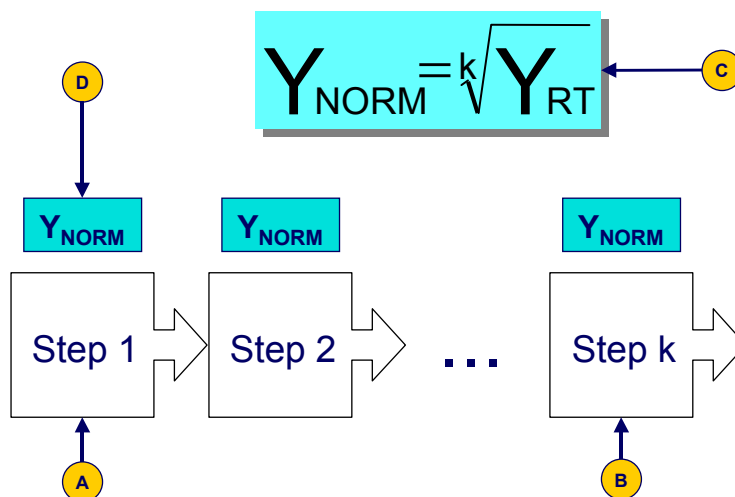
Yield - Normalized

Purpose

To assign a single yield value to each step in a process when production of the output (product, service, etc.) involves more than one step. The Normalized Yield represents an equalized yield for each process step, in that each step is assigned the same yield value.

Anatomy

Yield - Normalized



YieldNor_001

Reference: *The Vision of Six Sigma: A Roadmap for Breakthrough Ch. 14 & 19*

Terminology

- A. Typical process step
- B. Number of process steps (k)
- C. Rolled Throughput Yield
- D. Normalized Yield assigned to each step

Major Considerations

Normalized Yield is most commonly used to assign a yield value to each step in a process, when the individual Throughput Yields at each step are not known.

Normalized Yield can also be used when performing Metrics Flow Down calculations, when individual process step yields are not known, or to assign equalized yield values to each process step, even when individual Y_{TPs} are known.

Application Cookbook

1. Determine the Rolled Throughput Yield of the process Y_{RT} , either from the multiplication of the individual step Throughput Yields, or from the formula $Y_{RT} = e^{-TDPU}$.
2. Determine the number of process steps (k)
3. Calculate Y_{NORM} as the kth root of Y_{RT} .