

Acceptance Sampling - Step 4: Randomly Select the Sample

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Once the sample size is determined, the sample must be selected randomly to ensure it represents the entire lot.

Methods of random selection include:

- Random number generator
- Systematic sampling (e.g., every nth item)
- Physical randomization (e.g., mix and draw)

Example:

From a lot of 5,000 LED bulbs, the sampling plan calls for a sample of 200 bulbs.

Method: Systematic Sampling

- Divide 5,000 by 200 = 25
- Choose a random starting point (e.g., item #13)
- Select every 25th bulb thereafter (13, 38, 63, ...) until 200 bulbs are selected

This method ensures that the sample is evenly spread and unbiased.