Step-by-Step Configuration (Functional)

STEP 1: Create Master Inspection Characteristics (MICs)

MICs define **WHAT is inspected**.

Transaction Code: QS21

For Quantitative MIC (Length):

1. Enter **Plant**
2. Enter MIC Name → MIC_LEN
3. Choose **Quantitative**
4. Maintain:
   - Target value: 100
   - Lower limit: 99
   - Upper limit: 101
5. Save.

Repeat for qualitative:

MIC: MIC_SURF → set type as **Qualitative** and define catalog (OK / Not OK).

. **Types of MICs**

Type	Description	Example
Quantitative	Numeric values	Length, Weight
Qualitative	Yes/No or codes	Surface OK / Not OK

Example MICs used in this project:

MIC Code	Description	Type
MIC_LEN	Shaft Length (mm)	Quantitative
MIC_SURF	Surface Finish	Qualitative

STEP 2: Create Sampling Procedure

Sampling procedure defines **HOW MANY samples are inspected**.

Transaction Code: QDV1

- Enter Sampling Procedure → SP10
- Description → *10% Sampling*
- Sampling Type → **Fixed Percentage [We can select the sampling type as per our requirement]**
- Enter → 10 %
- Minimum sample size → 1
- Save.

Result:

- Lot quantity: 100 → Inspect 10 pieces
- Lot quantity: 50 → Inspect 5 pieces

STEP 3: Create Inspection Plan

Inspection plan combines:

- Operations
- MICs
- Sampling rules
- Inspection instructions

Transaction Code: QP01

- Enter:
  - Material: FG-1001
  - Plant
  - Usage: **5 (Goods Receipt/Production)**
- Create an operation (e.g., 0010 — Inspection)
- Go to **Characteristics Assignment**

 Add:

- MIC_LEN
- MIC_SURF

 Assign **Sampling Procedure SP10**

 Save.

STEP 4: Assign Inspection Type to Material

T-Code: MM02

1. Go to **Quality Management view**
2. Activate:
   - **Inspection Type 04** (In-Process inspection) or
   - **Inspection Type 01** (GR for PO)
3. Save.

Execution Process

1. Production order is confirmed
2. SAP automatically creates an **Inspection Lot**
3. Sampling quantity is calculated
4. Results are recorded using **QE51N**
5. System validates results against MIC limits
6. Usage Decision is made in **QA11**