8D Scan Pro

8D Assessment Report

12/10/2026

Sample Plastics Ltd. (fictitious)

62/100 — **Major Rework Required**

BASE DATA

Supplier	Sample Plastics Ltd. (fictitious)
Complaint number	Q-2026-0147
Claimed part	Connector housing PA66 GF30, part number 4711-002
Defect	Latch on the housing broken, connector does not lock.
Complaint date	06/10/2026
Reviewed file	8D_Q-2026-0147_connector_housing.pdf
Review date	12/10/2026

KEY METRICS

Root cause quality 50/100

Corrective action robustness 60/100

Containment quality 75/100

Prevention 45/100

Closure readiness 40/100

ROOT CAUSE EVIDENCE

Supported by evidence

The dryer log shows an extended drying time in the affected period. Reproduction or a comparison of defective and good parts is missing, and alternatives are not ruled out with data.

- No: Effectiveness proven in D6
- No: Alternative causes ruled out with data
- No: Remaining uncertainty stated
- No: Detection root cause explained

DETAILED SCORE PER DISCIPLINE

D1 Team · Weight 5% **80/100**

The team is cross-functional with production, quality and toolmaking; team leader and roles are named.

Missing for a full score:

- Add the customer contact or the customer's supplier quality engineer to the team.

D2 Problem Description · Weight 10% **70/100**

Defect, location found, quantity and batch are clearly described. The description stays with the detection and does not anticipate the root cause.

Missing for a full score:

- Attach photos of a defective and a good part.
- State the deviation from the drawing or specification (characteristic, nominal value).

D3 Containment · Weight 15% **75/100**

Blocking, sorting with results and a marked clean point are documented and implemented promptly.

Missing for a full score:

- Include parts in transit and at other customer plants in the containment.
- Attach the sorting work instruction.

D4 Root Cause Analysis · Weight 25% **55/100**

The root cause "over-dried granulate" is plausible and supported by the dryer log, but not reproduced. Alternatives are only called "excluded". Why the defect was not detected remains open.

Missing for a full score:

- Compare residual moisture or impact strength of defective and good parts.
- Rule out latch tool wear, weld line and melt temperature with measurement data.
- Analyse the detection root cause: why did the outgoing inspection not catch the broken latch?
- Question "operator set it wrong" further: why was a wrong setting possible?

D5 Corrective Actions · Weight 20% **65/100**

Locking the dryer parameters is a technical action, which is good. Training alone is weak. There is no action on detection.

Missing for a full score:

- Add a detection action, e.g. a latch or insertion force check in the outgoing inspection.
- Name owners and due dates for each action.

D6 Validation · Weight 5% **40/100**

The only evidence given is that no complaint has been received for one week. That is not a robust proof of effectiveness.

Missing for a full score:

- Attach a measurement series for insertion force or residual moisture across several batches after the change.
- Define the period and acceptance criterion for effectiveness.

D7 Prevention · Weight 15% **50/100**

The FMEA is to be updated but has not been yet. Transfer to other dryers and lines is missing.

Missing for a full score:

- Attach the updated FMEA and control plan with dates.
- Transfer lessons learned to other dryers and similar PA66 parts.

D8 Closure · Weight 5% **70/100**

The team is recognised and closure is planned.

Missing for a full score:

- Date the closure only after proven effectiveness and with customer approval.

STRENGTHS

- Defect, quantity and affected batch are clearly described in D2.
- Containment with sorting results and a clean point was implemented quickly.
- Locking the dryer parameters is a technical corrective action.

WEAKNESSES

- Operator training is presented as the main action but only works organisationally.
- Alternative causes are only stated as "excluded" without data or tests proving that exclusion.
- The root cause was not reproduced, but the report does not openly state the remaining uncertainty.
- Without reproduction the root cause is only probable until D6 proves the corrective actions are effective.

MAJOR GAPS

- D6 contains no data-based proof of effectiveness.
- The FMEA is only announced, not updated.

MISSING INFORMATION

- Photos of defective and good parts
- Residual moisture or material test results for the defective parts
- Owners and due dates of the actions

CRITICAL FINDINGS

- The detection root cause is missing: the report does not explain why the defect was not detected before shipment.

IMPROVEMENT RECOMMENDATIONS

- Compare defective and good parts for residual moisture or impact strength to prove the root cause.
- Introduce a latch function check in the outgoing inspection and add it as a detection action.
- Prove effectiveness with measurement data across at least three batches before closing the 8D.