

Worked example (fictional): complete 8D report, BR-4410 thin coating

FICTIONAL EXAMPLE – for illustration only. Companies, parts, people and data are invented. Replace everything with your own verified facts.

Fictional case used throughout the pack: Example Metal s.r.o. supplies powder-coated bracket BR-4410 to Example Auto GmbH.

D0 – Preparation and emergency response

8D required by customer SCAR-EX-0042. Lot 2611 and all stock blocked 2026-09-14, 16:00, by QM.

D1 – Team

Name	Function	Role	Contact
Jana Novak	Quality engineer	8D leader	j.novak@example.com
Petr Hora	Coating line lead	Member	p.hora@example.com
Eva Malá	Maintenance	Member	e.mala@example.com
Tomas Kral	Process engineer	Member	t.kral@example.com

D2 – Problem description

Bracket BR-4410, suspect window lots 2609–2611 (powder grade F2 from 2026-09-07). NOK found only in lot 2611: 46 of 1,200 parts at customer incoming 2026-09-14, coating 38–52 µm on upper flange (spec 60–90 µm). Lots 2609–2610: 0 NOK in 2,400 re-checked. All NOK from the top hanger row of line 2 (fictional data).

D3 – Containment actions

Sort to SI-EX-4410-01. Clean point: from lot 2613 (interim per-batch cleaning started 2026-09-16).

Location	Qty checked	Qty NOK	Method	Date / owner
Warehouse	2,400	0	Thickness, 3 points	09-15 / Novak
In transit	600	3	Thickness, 3 points	09-15 / sort service
Customer site	1,154	0	Thickness, 3 points	09-16 / sort service

D4 – Root cause

See 5 Whys and fishbone examples.

Cause	Type	How verified	Result
Nozzle cleaned per week, not per powder batch	Occurrence	Active test with clean vs blocked nozzle	Blocked nozzle: top-row 41–50 µm on 5/5 panels; clean nozzle: 68–79 µm on 5/5 panels (fictional data)
Sampling covers middle row only	Escape	Re-measure retained parts by row	All 49 NOK parts (46 customer + 3 in transit) were top-row parts

D5 – Permanent corrective actions

Action	Cause	Owner	Due	Trial / criterion
Interim nozzle cleaning per batch from lot 2613 (2026-09-16); permanent: flow alarm + cleaning step in MP-12 rev D (09-22)	Occurrence	Malá	09-16 / 09-22	Trial lots 2613–2615: all rows 60–90 µm (fictional)
Sample top, middle, bottom row	Escape	Novak	09-19	5 of 5 known-bad top-row parts detected in trial (fictional)

D6 – Implementation and verification of effectiveness

Implemented: D5 interim: per-batch nozzle cleaning from lot 2613 (2026-09-16); trial lots 2613–2615 all rows 60–90 µm (trial lots are not D6 evidence). Permanent: flow alarm + cleaning step in MP-12 rev D, effective 2026-09-22; 3-row sampling 2026-09-19. D6 lots 2618–2627 produced 2026-09-23 to 10-06. Criterion set in advance: 10 consecutive production lots after the 09-22 permanent fix, 3 parts per row (9 per lot), all 60–90 µm, measured in-plant while the sort was active. Result: lots 2618–2627, 90/90 readings in spec, min 64 µm (fictional data); in-plant 3-row check detected 0 NOK. Sort SI-EX-4410-01 ended 2026-10-07 after the 10-lot result, released by QM.

D7 – Prevent recurrence

Document / area	Old rev.	New rev.	Date	Owner
Maintenance plan MP-12: flow alarm + cleaning step, effective 2026-09-22	C	D	09-22	Malá
PFMEA coating line	5	6	10-02	Kral
Control plan CP-4410	D	E	10-02	Novak
Change procedure QP-07 (maintenance/sampling review)	2	3	10-06	QM
Read-across lines 1 and 3	–	done	10-06	Hora

D8 – Closure and team recognition

D6 and D7 complete. Total NOK 49 (46 customer, 3 in transit), all scrapped; 0 in warehouse and at customer re-sort. Closure proposed 2026-10-09 by J. Novak; customer decision pending. Team thanked at plant meeting 2026-10-10.

Reviewer tip: Every number in D3–D8 matches across sections. A reviewer checks that first.