Arora Iron & Steel Rolling Mills (P) Ltd

8D Corrective Action Report

Doc no. A/R&D/Met.Lab/CAR/F003
Origin Date: 01/03/2023

Corrective Action Form

Customer Name:	**SSB ENGINEERS PVT LTD**	**Supplier Name:**	**Arora Iron & Steel Rolling Mills Pvt Ltd.**
Complaint:	SURFACE DEFECT	**Complaint Date**	10-02-2025
TDC no.	DANA Spec. Q.F. 1001 - R3, Dated-14.06.24	**Submission Date:**	17-02-2025
Heat NO.	A33266	**Contact Name**	Mr. B. D. Chawla (HOD-QA) Prateek Sharma(Marketing)
Grade	40CrMo4	**Phone:**	Mr. B. D. Chawla - 9914503980 Mr. Prateek Sharma - 9899948804
Size	80 mm dia	**E-mail:**	bdchawla@arorairon.com prateeksharma@arorairon.com

Step 1 - D1 Establish the Corrective Action Team

Team Champion:	Mr. B. D. Chawla	**Team:**	Mr. Ravi Shekhar
Phone:	9914503980		Mr. Dinesh Singla
E-mail:	bdchawla@arorairon.com		Mr. Ravi Kumar Singh

Start Date:	Target Completion Date:	Actual Completion Date:	Responsible Person:
15-Feb-25	22-Feb-25	15-Feb-25	Mr. B.D. Chawla

Step 2 - D2 Problem Identification

1) AISRM has supplied as rolled material to **M/S-SSB ENGINEERS**. Heat No.-A33266, Size- 80 mm Ø, Grade- 40CrMo4, Quantity- 33.760 MT.

2) Customer has observed surface defect in forged sample.

Start Date:	Target Completion Date:	Actual Completion Date:	Responsible Person:
15-Feb-25	22-Feb-25	15-Feb-25	Mr. Dinesh Singla

Step 3 - D3 Containment Action & Short Term Corrective Action

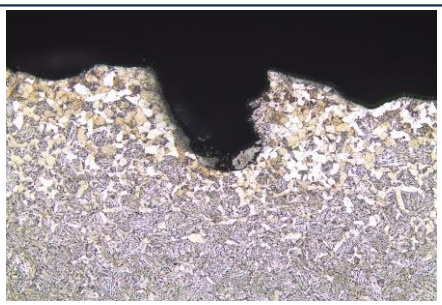
1) 01 defective sample received through courier on dated 15.02.2025 for metallurgical analysis as shown below in photograph.

Start Date:	Target Completion Date:	Actual Completion Date:	Responsible Person:
15-Feb-25	22-Feb-25	15-Feb-25	Mr. Harnek Singh

Step 4 - D4 Define and Verify Root Cause

1) Samples chemistry checked and matching with supplied heat number-A33266.

MICROSCOPIC ANALYSIS



Observation:-

1. Micro structure :- Pearlite + Ferrite + Bainite
2. Decarb :- No decarb observed around the defect location
3. Depth of defect :- 0.35 mm approx(after forging)
4. Nature of defect :- Scratch Line

Conclusion:-

1. We have conducted our microanalysis and observed that the defect appears to be scratch line with scale, which were generated during the hot rolling process and opened during forging. However, we are taking further action to address this.

Start Date:	Target Completion Date:	Actual Completion Date:	Responsible Person:
15-Feb-25	22-Feb-25	15-Feb-25	Mr. B. D. Chawla

Step 5 - D5 Implement Corrective Action			
1) Samples shown to all concerned inspection team for awareness of defect at customer's end.			
2) Re-inspection will be carried out after grinding of bars to avoid mission of such defect.			
3) To avoid rolling scratch line, we are working on modification of rolling table/conveyor of rolling mill.			
Start Date:	**Target Completion Date:**	**Actual Completion Date:**	**Responsible Person:**
15-Feb-25	22-Feb-25	16-Feb-25	Mr. B. D. Chawla
Step 6 - D6 Verify Corrective Action / Long Term Corrective Action			
1) Implemented corrective action will be verified in next supply.			
Start Date:	**Target Completion Date:**	**Actual Completion Date:**	**Responsible Person:**
15-Feb-25	22-Feb-25	16-Feb-25	Mr. B. D. Chawla
Step 7 - D7 Prevent Recurrence (Lessons Learned)			
NA			
Start Date:	**Target Completion Date:**	**Actual Completion Date:**	**Responsible Person:**
15-Feb-25	22-Feb-25	16-Feb-25	Mr. B. D. Chawla
Step 8 - D8 Team Recognition / Management Feedback			
NA			
Start Date:	**Target Completion Date:**	**Actual Completion Date:**	**Responsible Person:**
03-Feb-25	09-Feb-25	16-Feb-25	Mr. B. D. Chawla