Salesforce Implementation Report: Aerometalix

# 1. Introduction

Aerometalix, a forward-thinking organization, has strategically adopted Salesforce to enhance its business growth and streamline operational workflows. This transition aims to:  
- Centralize data management  
- Improve data security  
- Automate critical business processes  
- Create a seamless and intuitive user interface for stakeholders

# 2. Objectives

- Data Centralization: Create a unified and easily accessible data repository.  
- Enhanced Security: Implement role-based access control.  
- Process Automation: Improve accuracy and operational efficiency through automation.

# 3. Salesforce Data Model

## Steel\_Production\_\_c – Tracks steel manufacturing process

Fields:  
- Name (Auto Number)  
- Production\_Batch\_ID\_\_c (Text)  
- Alloy\_Type\_\_c (Picklist)  
- Manufacturing\_Process\_\_c (Picklist)  
- Production\_Quantity\_\_c (Number)  
- Production\_Date\_\_c (Date)  
- Quality\_Check\_Status\_\_c (Picklist)  
- Energy\_Consumption\_\_c (Number)  
- Carbon\_Emission\_Level\_\_c (Number)  
- Plant\_Location\_\_c (Lookup → Plant\_\_c)

## AeroMetallix\_Plant\_\_c – Manufacturing Plants

Fields:  
- Name (Text)  
- Location\_\_c (Text)  
- Capacity\_\_c (Number)  
- Monthly\_Carbon\_Emissions\_\_c (Number)  
- Plant\_Manager\_\_c (Lookup → User)

## AeroMetallix\_Order\_\_c – Customer Orders

Fields:  
- Order\_Number\_\_c (Auto Number)  
- Account\_\_c (Lookup → Account)  
- Order\_Date\_\_c (Date)  
- Delivery\_Date\_\_c (Date)  
- Status\_\_c (Picklist)  
- Total\_Amount\_\_c (Currency)  
- Related\_Steel\_Production\_\_c (Master-Detail → Steel\_Production\_\_c)

## AeroMetallix\_Quality\_Inspection\_\_c – Quality Inspections

Fields:  
- Inspection\_ID\_\_c (Auto Number)  
- Steel\_Production\_\_c (Lookup → Steel\_Production\_\_c)  
- Inspection\_Date\_\_c (Date)  
- Inspector\_\_c (Lookup → User)  
- Test\_Result\_\_c (Picklist)  
- Notes\_\_c (Long Text Area)

# 4. Roles Hierarchy

Roles:  
- CEO  
 - Production Engineer  
 - Quality Inspector  
 - Plant Manager

# 5. Profiles & Users

Profile: Platform 1 (Based on Standard Platform User)  
  
Users:  
- John Production Engineer (Role: Production Engineer, Profile: Platform 1)  
- Mike Quality Inspector (Role: Quality Inspector, Profile: Platform 1)  
- Albert Plant Manager (Role: Plant Manager, Profile: Platform 1)

# 6. Permission Sets

Production Engineer Permission Set: Custom access to production-related data  
Quality Inspector: View Steel\_Production\_\_c, Edit Quality\_Inspection\_\_c  
Plant Manager: Full access to Plant\_\_c and Steel\_Production\_\_c

# 7. Org-Wide Defaults (OWD)

Account: Private – Only owners can view  
Steel\_Production\_\_c: Private – Visible to assigned plant users  
AeroMetallix\_Plant\_\_c: Public Read-Only – All users can view but not edit

# 8. Sharing Rules

Production Access:  
- Shared With: Production Engineer  
- Records Owned By: CEO  
- Access Level: Read Only  
  
Additional Rules:  
- Quality Inspectors get read access to Steel\_Production\_\_c  
- Plant Managers get read access to Steel\_Production\_\_c related to their orders

# 9. Automation Plan

Using Flow:  
- Auto-create Quality Inspection when Steel\_Production\_\_c is created  
- Auto-update Test\_Result\_\_c to 'Pass' when inspection is updated  
  
Using Apex Trigger:  
- When Steel\_Production\_\_c is updated to Pending, insert related Quality Inspection  
- Ensure test class achieves 100% code coverage  
  
Batch Apex:  
- Update AeroMetallix\_Plant records older than 30 days  
  
Scheduled Apex:  
- Cancel Orders in 'Processing' status older than 60 days

# 10. Conclusion

The Salesforce integration plan for Aerometalix establishes a solid foundation for digital transformation. Through effective data modeling, security measures, automation flows, and batch processing, Aerometalix is poised to improve operational transparency, quality assurance, and production efficiency while supporting long-term scalability and regulatory compliance.