Mazhar Khan

Senior OT Engineer · Level 2 Automation, MES & Operational Technology

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PROFESSIONAL SUMMARY

Senior OT Engineer with 16+ years of experience in the steel and manufacturing industries, specialising in Level 2 automation, MES and OT/IT integration. Proven record in real-time process automation, PLC and OPC integration (Siemens, ABB), MES–ERP–PLM interfaces and high-availability production support. Strong in C#/.NET, SQL Server and Oracle, with hands-on experience of PSI Metals MES, OT infrastructure and incident resolution in 24/7 environments.

CORE SKILLS

Automation & Level 2: OPC DA/UA, TCP/IP, Industrial Ethernet, SCADA interfaces, RFID, real-time process control, production tracking, process models & setpoints, alarm & event handling

MES & Manufacturing: PSI Metals, Semitic IT, custom MES, ISA-95 / IEC 62264, MES–ERP–PLM interfaces, production planning, order & material tracking, quality, traceability, KPI/OEE reporting, LIMS

Data & Integration: XML, XSD/XSLT, JSON, REST, SOAP/WCF, MSMQ, RabbitMQ, EDI/file interfaces, SFTP

Programming: C#, .NET Framework / .NET, WCF, WPF, WinForms, ASP.NET, ASP.NET Core, Blazor, LINQ, Entity Framework, Windows services, PowerShell

Databases: MS SQL Server, Oracle Database, Oracle PL/SQL, ODP.NET, T-SQL, stored procedures, query tuning, data modelling

Reporting & Productivity: BIRT, SSRS, Excel VSTO add-ins, Excel project reports, Microsoft Power Automate

OT Infrastructure: Windows Server, Active Directory, VMware vSphere, Hyper-V, backup & recovery, OT cybersecurity basics, ZPL & Zebra label printers, 24/7 production support

Practices: Agile, TDD, Source control: GitHub, Git, TFS, SVN, CI/CD, UML, technical documentation

PROFESSIONAL EXPERIENCE

Senior OT Engineer – ArcelorMittal Calvert, Alabama, USA — Nov 2025 – Present

- Lead OT support for plant-floor automation, Level 2 systems and MES integrations in a 24/7 steel production environment.
- Ensure availability, performance and reliability of Level 2 / MES applications and their PLC, OPC and TCP/IP interfaces.
- Administer and secure OT infrastructure, including Windows Server, industrial networks and shop-floor devices.
- Lead root-cause analysis and rapid resolution of production-impacting incidents to minimise downtime.
- Plan and execute upgrades, migrations and commissioning with minimal production impact.
- Partner with operations, maintenance, IT and vendors to deliver OT/IT integration solutions.
- Support OT cybersecurity, change management, backup and disaster-recovery procedures; produce documentation and mentor engineers.

MES – IT Technical Architect – ArcelorMittal, Luxembourg — 2023 – 2025

- Defined the MES architecture aligned with the PSI Metals solution, from requirements to technical design.
- Worked with business stakeholders to translate production processes into system requirements.
- Designed interfaces and data models for MES–ERP–PLM integration.
- Led MES deployments and provided technical guidance to project and support teams.
- Evaluated system performance and recommended improvements to stability and scalability.

Level 2 Automation Engineer / MES Engineer – ArcelorMittal, Jubail 2013 – 2022

- Developed, deployed and supported Level 2 automation systems and MES for continuous production.
- Integrated with Siemens and ABB PLCs over OPC and serial protocols for real-time process control.
- Migrated legacy applications to modern .NET platforms, improving maintainability.
- Designed SQL Server / Oracle databases, stored procedures and communication services.
- Led release management using TFS and established development best practices.

Automation Level 2 Consultant – Tata Steel, Jamshedpur 2013 – 2022

- Designed and implemented L2 automation and SCADA integration.
- Developed user interfaces with HTML5, AngularJS and Bootstrap.
- Built REST APIs and SQL-based backends for real-time applications.
- Worked in Agile teams with TDD-based quality assurance.

EDUCATION

Master of Computer Applications (MCA) 2010
Bachelor of Computer Applications (BCA) 2005

CERTIFICATIONS & TRAINING – PSIMETALS ACADEMY (BERLIN)

- **PSImetals Certified (Associate):** Quality Planner (Dec 2023) · Business Logic Developer (Dec 2023) · Production & Quality Operator (Mar 2024)
- **Training:** Quality Planner Associate Course (28 h) · Business Logic Developer Course (32 h) · Production & Quality Operator Associate (40 h) · Standard Introduction Logistics (14 h, Sep 2024) · Printer Output Service – POS Introduction (7 h, Aug 2025)

LANGUAGES

English · Hindi · Urdu · Arabic