Jamshad Jamshidian

Materials & metallurgical engineer · Isfahan, Iran

JamshadJamshidian@gmail.com | +98 913 288 9653

On the hot-strip line and in the metallurgy lab, my work starts with a question. What can we change in the process to make better steel?

Professional experience

Head of Production Process Research

Mobarakeh Steel · Research & Innovation · 2017 – Mar/Apr 2026

Led research across steelmaking, rolling and coated products. Worked with Isfahan University of Technology and research centres to define questions, evaluate projects and translate results into technical recommendations.

Research & Development Engineer

Mobarakeh Steel · R&D · 2008 – 2017

Investigated rolling defects using experiments, simulation, optical microscopy, SEM and XRD. Contributed to work on API steels, banding and coated-product technology.

Production Engineer

Mobarakeh Steel · Hot Strip Mill · 2001 – 2008

Supported hot-rolling operations and analysed product defects. Contributed to the line automation upgrade and the implementation of total productive maintenance (TPM).

Senior Process Coordination Engineer

Khuzestan Steel · Steelmaking · 2000 – 2001

Coordinated steelmaking and continuous casting, overseeing the steelmaking site and its auxiliary units during shifts.

Shift Engineer

Khuzestan Steel · Continuous Casting · 1999 – 2000

Supervised production and controlled metallurgical parameters in the continuous casting of billets, blooms and other semi-finished products.

Forging Die Design Engineer

Iran Zob, Isfahan · Technical Office · 1998 – 1999

Designed forging dies in the technical office, beginning my professional work in metal forming.

Selected research

Inside the bands of API steel

Developing production know-how for API X60 and X70 steels and investigating the factors behind microstructural banding during hot rolling.

Tracing coil breaks

A production defect at Saba Steel became the subject of my master's thesis and a series of scientific presentations.

Testing steel at forming temperatures

Managing the development of a laboratory hot torsion and compression rig to determine processing parameters for new products.

Education

MSc in Materials Identification and Selection

Sahand University of Technology, Tabriz · 2013–2015. Thesis on the parameters affecting coil breaks at Saba Steel.

BSc in Materials Engineering, Metal Forming

Shiraz University · 1991–1995. Project on severe banding in hot-rolled API steels.

International training

Siemens · Germany

Hot-rolling process engineering at the Siemens R&D centre as part of the hot-strip mill automation upgrade · September–November 2007.

Techint · Genoa, Italy

Tunnel furnace training for the Mobarakeh hot-rolling project · December 2003.

Nippon Steel

Training with technical office specialists in problem-solving, continuous improvement and equipment effectiveness.

Professional credentials & auditing

Grade One Mining Engineering Licence

Industrial and operational supervision of metal smelting and refining · Ministry of Industry, Mine and Trade · November 2023.

Occupational safety and water efficiency

ISO 45001 lead auditor training, QM Academy, August 2025. Introductory ISO 46001:2019 training, SGS Iran, June 2023.

Management systems and organisational excellence

Internal auditing across ISO 30401, 50001, 46001, 14001, 45001, 9001 and 10015. IRAN AWARD assessment, EFQM 2020 submissions, strategy and quality objectives.

Technical tools & languages

Materials characterisation

Optical microscopy, scanning electron microscopy, X-ray diffraction, simulation and technical data analysis.

Software

MATLAB, AutoCAD, Primavera, MS Project and Microsoft Office.

English

Professional proficiency.

Papers & presentations

Boron and the severity of coil-break defects in Saba Steel products

J. Jamshidian · ICMSMM-23, Osaka, 6 June 2023 · Unpublished conference presentation.

Improving the corrosion resistance and formability of galvanised steel sheets through coating modification

M. R. Toroghinejad, F. Ashrafizadeh and J. Jamshidian · Journal of Materials Engineering and Performance, vol. 25, no. 1, pp. 281–288, 2016.

Modelling the effect of chemical composition on fracture-related sheet defects at Saba Steel

J. Jamshidian, Kh. Allafi and M. R. Toroghinejad · Steel Symposium, Iranian year 1394.

Roll failures in a continuous annealing furnace and their prevention

G. Dini, S. M. Monir Vaghefi and J. Jamshidian · Steel Symposium, Iranian year 1391.

Roughing-stand reduction and the transition from sticking to sliding friction

J. Jamshidian and Sh. Abbasi · Steel Symposium, Iranian year 1390.

Biting speed, friction and final stock shape in hot rolling

J. Jamshidian and M. M. Moshksar · Steel Symposium, Iranian year 1383.