

ASIM KUMAR SAHU

🌐 Kolkata, India

✉ aksahu.designs@gmail.com

PROFESSIONAL SUMMARY

Mechanical Engineer and Design Consultant with 35+ years of experience in industrial equipment design, large-scale project execution, and engineering systems procurement. Recognized for delivering end-to-end solutions - from concept through commissioning - across manufacturing, research, and industrial design sectors. Known for improving operational efficiency, reducing costs, and ensuring on-time, on-budget project delivery. Provides advisory and consultancy services for organizations seeking flexible, project-based, or part-time engineering leadership.

EDUCATION

IIT KHARAGPUR, West Bengal, India

Bachelor of Technology (Hons.) in Mechanical Engineering

All India Rank of 444 in IIT JEE
May 1980

HIGH IMPACT PROJECTS

- Undertook design change of blast furnace charging system to avoid premature failure and saved INR 50 million/yr
- Introduced waste heat recovery system in SAIL plants to recover 1.6 GCal/hr energy to utilize in-process
- Utilized an idle levelling equipment in the product line to improve quality which attracted new customers for that technology
- Conducted research on sinter manufacturing process and generated a benefit of INR 220 million/yr through improvement in plant
- Designed and implemented systems for recycling of various waste materials under a zero-waste management program

SOFTWARE TOOLS

- AutoCAD (2D and 3D CAD)
- Autodesk Inventor (3D CAD)
- MS Office Word, Excel & PowerPoint

EXPERIENCE

LECHLER INDIA, Kolkata, India (Part-Time)

Technical Advisor, Design & Engineering

Apr 2020 – Jun 2025

- Designed spray-headers using AutoCAD and prepared 3D design on Inventor for sales promotion
- Designed header-mounting structure using AutoCAD and Inventor
- Achieved quickest structure design turnaround-time for prestigious Government of India project
- Achieved quickest structure design turnaround-time for sanitization system for commercial vehicles and work force

EARTH TEKNIKS, Kolkata, India (Part-Time)

Mechanical Engineering Design Consultant

Sep 2017 – Mar 2020

- Designed and developed sector-gate for TISCO and received repeat order for other machines
- Designed and developed compaction-roller for TISCO and received repeat order from other units

STEEL AUTHORITY OF INDIA LTD, Ranchi, India (Retired)

Deputy General Manager & Head of Group (Agglomeration)

Jan 1981 – Aug 2017

- Led and managed a team of engineers and scientists in various steel and iron-making processes
- Handled projects in the area of design of steel plant equipment
- Handled projects in Maintenance of R&D facility and Administrative Building (ISPAT Bhawan) of SAIL in Ranchi
- Handled projects in various phases of planning, designing, commissioning and inspection
- Actively participated in conducting national and international seminars
- Published 22 papers in national and international journals and registered 9 patents

BURN STANDARD COMPANY LTD, Kolkata, India

Design Engineer

Aug 1981 – Dec 1981

- Designed Tram Car for operation in Kolkata and designed Wagon Body for Indian Railways
- Designed Ash Handling Plant for Tarapur Thermal Power Station

AWARDS & ACHIEVEMENTS

- Best Paper Award for "Use of magnetically treated water for improvement of sinter plant productivity", 2015.
- Awarded Fellowship by Institution of Engineers (India), 2011.
- Best Engineer's Award for "Design development of a two-bell charging system for blast furnace", 1986.

INTERNATIONAL PUBLICATIONS & PATENTS

- **Publication:** Sahu, Asim Kumar (1st Author), *Development of Lance Clamping Device for BOF at Rourkela Steel Plant of SAIL*. Association for Iron & Steel Technology, 186 Thorn Hill Road, Warrendale, PA, 15086, USA, 2007.
- **Patent:** Sahu, Asim Kumar (Co-Inventor), *Process and an apparatus for removal of silicon, manganese, carbon and sulfur in a single reaction vessel*. US Patent Number 6063157, issued May 16, 2000.