

Industrial Solutions – Steel Making and Metals Processing

EN Engineering's Industrial Solutions team is a client-focused, full-service engineering consulting firm that performs fully integrated, as well as discipline specific, projects and services. Our technical professionals have had long careers in the steel industry and decades of experience across many disciplines, including metallurgy, 3D scanning, pipe stress analysis, pipe flow analysis, structural engineering, and on-site staffing. In addition, they work closely with steel manufacturers throughout the United States. Their expertise ensures they hit the ground running and provide practical help from day one. Our steel making and metals processing solutions are customized, engineered, and delivered with a focus on exceeding expectations and building long-term relationships with our clients.

Areas of Expertise

- Coke Plant
- Blast Furnace
- BOF
- Degas
- LMF
- Casting
- Hot Strip
- Galvanizing
- Boilers
- Water Treatment

Disciplines

- Subsurface evaluation
- Foundations
- Structural
- Buildings
- Piping
- Pumps
- Fans
- Ductwork and baghouse
- Machinery/Gearing
- Hydraulics
- Transfer cars
- Cranes
- Stacks
- Electrical power HV and LV distribution
- Controls
- Pressure vessel design and remaining life
- Piping stress analyses
- Finite element analyses
- Multiple CADD and 3D modeling software programs
- STADD structural analysis software
- Aspen HYSYS, heat exchanger design and rating, in-plant cost estimator



Services Overview

- Cooling tower evaluations
- Backdraft stack bracing upgrades
- Charge floor evaluations
- BOF girder repairs
- Crane runway inspections
- Zinc pig lifting devices
- Slab transfer table investigations
- Steam line redesigns
- Survey boundaries
- Oxygen analyzers at boiler house
- Hot blast main structural investigations
- Turboblower repairs assistance
- Casthouse column evaluations
- Caster hydraulics upgrades
- Blast furnace walkways and platforms
- LMF PLC upgrades
- Goggle valve and BMS controls upgrades
- Slag pit wall repairs
- Transfer car pit wall repairs
- Caster steam chamber inspections
- BOF hoods scope of repairs
- Bischoff scrubber 3D models
- Galvanizing furnace roll evaluations
- Galvanneal crane inspections
- BOF scrubber flare stack designs
- Tuyere water booster pumps



- Caster torch HMI replacements
- Segment support/foundation evaluations
- Design of vessel lift encoder apparatus
- Turboblower functional description and manuals
- Caster turret ladle hydraulics upgrades
- Galvanizing furnace panel monitoring systems
- Galvanizing operations and maintenance consulting
- Flux baghouse system designs
- Venturi scrubber conceptual studies
- Waste gas stack inspections
- Waste gas pre-heater tunnel extensions
- Galvanizing furnace panel monitoring systems