



## INSTEEL INDUSTRIES, INC.

### Job Description

**Job Title:** Metallurgical Engineer  
**Department:** 447 - Concrete Products Business Unit  
**Location:** Insteel Wire Products, Gallatin, TN  
**Reports To:** Director of Manufacturing  
**FLSA Status:** Exempt

#### SUMMARY

Corporate metallurgical specialist; manages complex projects related to reducing scrap, material defects and standardizing operating procedures within any current and/or future Insteel facility.

**ESSENTIAL DUTIES AND RESPONSIBILITIES** include the following. Other duties may be assigned.

Manages complex projects in developing and implementing methods and programs to ensure company products meet specifications and designs standards relating to efficiency and quality: **(50%)**

- Uses a team approach and primarily assumes the role of a facilitator. Performs actual experiments when needed.
- Reviews current practices and process, develops new manufacturing practices and processes. Included but not limited to raw material specifications, die line-ups, lube consumption and selection.
- Identifies opportunities for continuous improvement.
- Implements and uses statistical methods.
- Develops process control systems to be used on the manufacturing floor and for incoming raw material.
- Oversees Cleaning House and Environmental/Waste Water at TNS plant.

Conducts product and process research projects aimed at improving product quality, reducing production costs and increasing yields. **(30%)**

Corporate Technical representative for all material claims; can also include representing the company on finished good related issues. Travel 20% of time. **(20%)**

#### SUPERVISORY RESPONSIBILITIES

No direct responsibilities; however, will provide direction to work teams on specific projects.

**QUALIFICATIONS** To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

**EDUCATION and/or EXPERIENCE** The education requirements and experience requirement listed here indicate the minimum basic educational knowledge and the time required by a normal qualified person to perform the job duties of the position.

Extensive professional, technical or administrative training (Bachelor's Degree); broad knowledge of a general technical field such as Metallurgical Engineering; and minimum 8 years work-related experience; or an equivalent combination of education and work-related experience. A background in steel making, wire drawing, resistance welding, straight and cut, stranding and stress relieving is preferred.

#### COMPLEXITY OF DUTIES

Duties require considerable judgment to work independently toward general results, to devise new or modify and adapt existing methods, techniques and procedures to meet new or unusual requirements and to make related decisions guided by precedent and with the limits of established policies.

#### CONFIDENTIAL DATA

Works with confidential data of major importance which, if disclosed, may be detrimental to the company's interest.

## **CERTIFICATES, LICENSES, REGISTRATIONS**

None

**PHYSICAL DEMANDS** The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to walk and move around; use hands to feel, touch, grasp or grip tools, objects, or handles; talk or hear (normal or corrected). The employee is frequently required to bend, stoop, kneel, crouch or crawl; stand; sit; perform repetitive movements. The employee is occasionally required to reach overhead with hands and arms; stretch; climb or balance; rotate body from and sitting and standing position; taste or smell; and lift, carry, push, or pull up to 100 pounds, with mechanical assistance as needed. Vision requirements of this job include constant observation, near acuity, far acuity, depth perception, distinguish colors, peripheral vision, dim or bright lights, and frequent change of focus. The use of mechanical controls includes buttons, knobs, levers, cranks, and pedals.

## **EQUIPMENT USED**

While performing the duties of this job, the employee is frequently required to use hand tools; calculator; testing devices such as lab equipment for testing of metal samples; measuring devices such as micrometers and calipers; and a computer. The employee is occasionally required to use vehicles/heavy equipment such as lift trucks (forklifts) and cranes; machinery such as wire drawing machines; routine office equipment such as telephone, fax, copier, printer, etc.; and typewriter.

**WORK ENVIRONMENT** The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. The employee is responsible for minimizing accidents within the facility and for following established safety policies and procedures during performance of this job.

Somewhat undesirable working conditions. While performing the duties of this job, the employee is frequently exposed to moderate noise, dust, and dirt. The employee is occasionally exposed to heat (non-weather); cold (non-weather); wet or humid conditions; slippery floors, ramps, etc.; vibration; outside weather; moving or dangerous machinery; electrical shock hazard; work at heights (ie. ladder/platform, etc.); chemicals (toxic/caustic); vapors, odors, fumes, gases; and oil, grease, solvents. Occasional travel is required.

## **REQUIRED PROTECTIVE CLOTHING/DEVICES**

While performing the duties of this job, the employee is regularly required to wear earplugs, safety goggles/glasses, and safety shoes. The employee is occasionally required to wear aprons, masks, and gloves.