



NORTH CAROLINA DEPARTMENT OF LABOR

No. 33-3

OSH DIVISION

Date: 10/2009

OSHNC INDUSTRIAL DATA REPORT

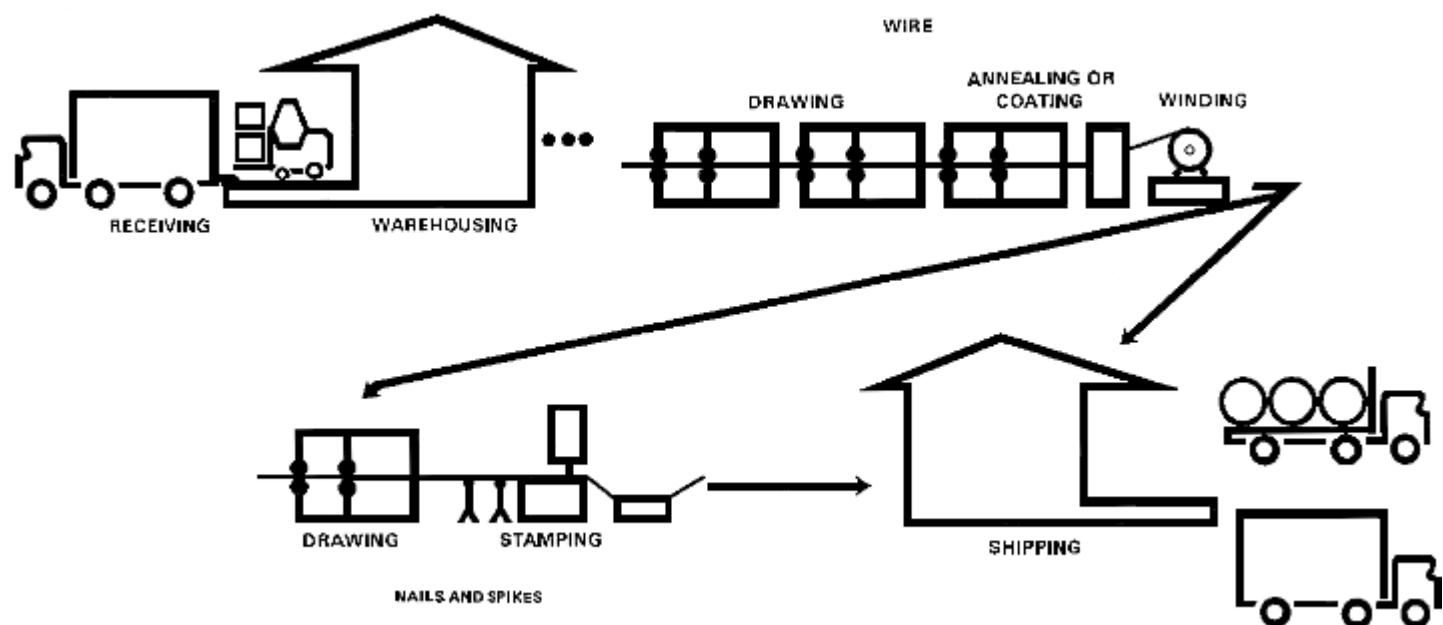
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Industry: Primary Metal Industry

Sub-Group: Steel Wire Drawing and Steel Nails and Spike

SIC: 3315NAICS: 331222 and 332618

PROCESS DESCRIPTION: Initially metal is preformed on a swage block which shapes material for the drawing operation. Wire is formed by a series of drawing machines which draw and size the swaged material through a series of dies. These dies decrease the wire diameter by elongation of the material until it is of desired size and finish. Final processes may include annealing, pickling in acid solutions and coating with plastic or insulation according to end use. Nails and spikes are a continuation of the above process. The material is then fed into an automatic stamping machine where the head is formed by an upsetting hammer and cut to desired length. The point is formed in the process.

PROCESS FLOW:

 <p>NCDOL N.C. Department of Labor</p>	NORTH CAROLINA DEPARTMENT OF LABOR		No. 33-3
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Hazards Analysis

Major Hazards			Other Hazards		
Location	Item	Hazard	Location	Item	Hazard
Warehouse	Heavy containers Powered Industrial Trucks	Sprains and hernias from manual lifting Carbon Monoxide, accidents	Manufacturing	Combustible materials Machinery Mechanical power transmission apparatus Gaseous chemical by-products	Fire Hearing loss Amputations and crushed limbs Explosion (by static electricity)
Manufacturing	Metal particles Wires Hot metals Acids and lubricants Acids s	Injuries to face, eyes Punctures and cuts Burns Skin irritation and burns Respiratory problems from inhalation	Throughout	Housekeeping	Slips, trips and falls

Key OSHNC Standards

Reference	29 CFR 1910 — General Industry Standards
ANSI B30.6	Overhead and underhung hoists
Subpart D	Walking and working surfaces
Subpart E	Means of egress
Subpart I	Personal protective equipment

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Subpart O	Machinery and machine guarding	
Subpart S	Electrical	
1910.94	Ventilation	
1910.95	Occupational noise exposure	
1910.122-.126	Dipping and coating operations	
1910.151	Eyewash and emergency showers	
1910.176	Material handling	
1910.178	Powered industrial trucks	
1910.1000	Air contaminants	
1910.1200	Hazard Communication	
Inspection Analysis		
Material is received from steel mills in hot rolled form (bar stock). Inspection must cover receiving docks and material handling apparatus. The storage areas must be inspected to ascertain if proper stacking, height limitations and etc. are met. Manufacturing areas must be checked for machinery layout, machine guarding of nip points, transmission apparatus and backlash guarding. Personal protective equipment must be suitable for environment. Materials handling equipment throughout plant, shipping and storage areas must be adequate and in good order.		
Other Pertinent Comments:		