



NORTH CAROLINA DEPARTMENT OF LABOR

No. 20-6

OSH DIVISION

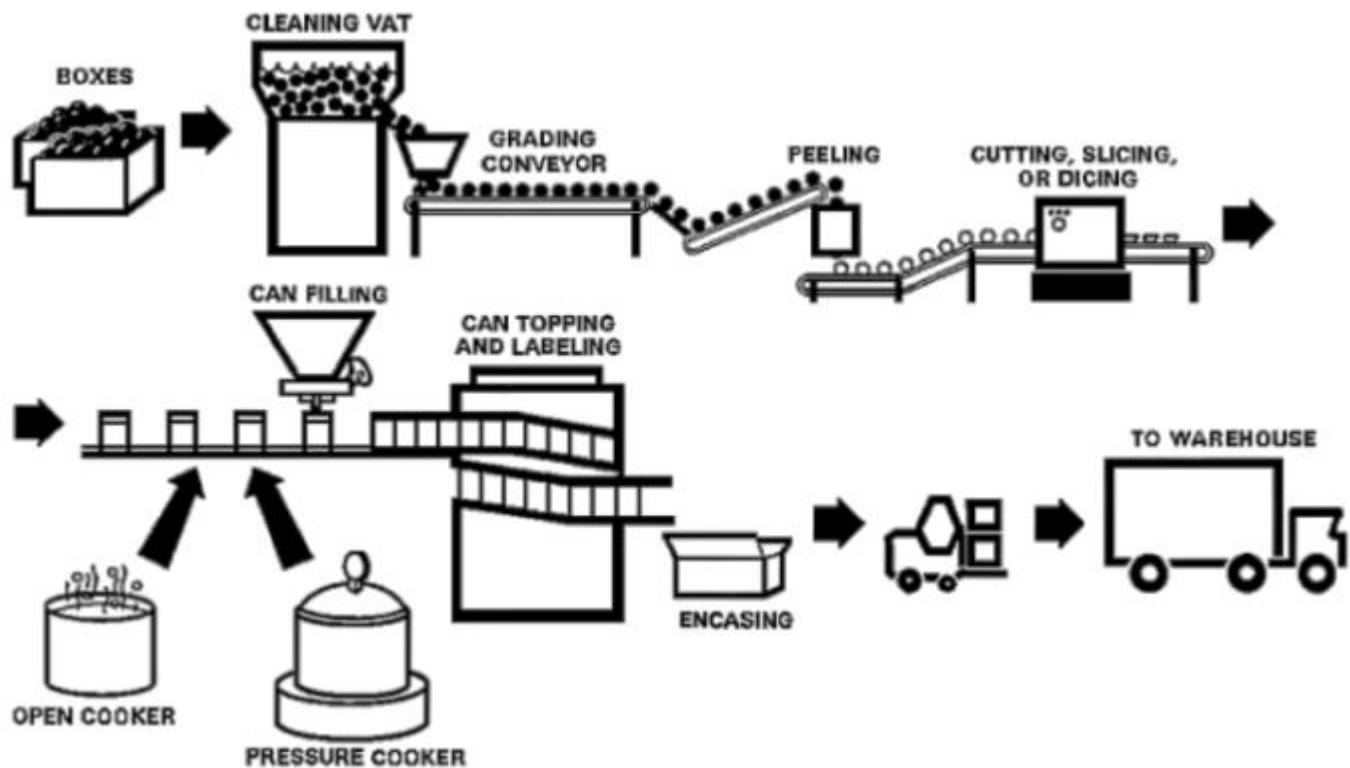
Date: 10/2009

OSHNC INDUSTRIAL DATA REPORT

Pages: 3

Industry: Food and Kindred ProductsSub-Group: Canned and Preserved Fruits and VegetablesSIC: 2032 and 2033NAICS: 311421, 311422 and 311423

PROCESS DESCRIPTION: Canned fruits and vegetables are prepared from raw products by canning as individual items or in a mixture. They are received from the grower in open boxes, crates or in bulk, and are cleaned by air, water, steam, brushing or a combination of these methods. Peeling is done by both machine and by hand. Foods are canned both peeled and unpeeled and are canned whole, sliced or diced. They may be seasoned with salt, sugar or vinegar. When vinegar is used the fruits and vegetables are normally pickled in open containers for a prescribed time. When salt is used they are normally cooked immediately and canned, or canned and then cooked. When sugar is added the products are usually canned immediately, uncooked. After canning they are labeled, encased and stored to await shipment. Except for some cutting and pulling, the operations are generally mechanical with little or no employee contact.

PROCESS FLOW:

 NCDOL <i>N.C. Department of Labor</i>	NORTH CAROLINA DEPARTMENT OF LABOR		No. 20-6
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Hazards Analysis

Major Hazards			Other Hazards		
Location	Item	Hazard	Location	Item	Hazard
Receiving, storing and shipping	Boxes, cases Forklift trucks	Falling objects, strains and strains from lifting Collisions and carbon monoxide	Storage preparation	Encasing and palletizing	Back injuries, hernia, hand and foot injuries from manual loading pallets
Cleaning area	Cleaning agent, dust and dirt	Burns from steam or hot kettles and caustic or foreign objects in eyes	Labeling area	Glue	Fire, dermatitis and inhalation of vapors
Cooking	Open and pressure cookers	Steam burns, explosion and propane	Seasoning area	Acetic area	Inhalation of vapors
Throughout plant	Noise	Hearing loss	Throughout	Cleaning/Repairing equipment	Rotating moving parts, accidental start up
Canning room	All machines	Unguarded moving parts causing hand injuries and amputation			

Key OSHNC Standards

Reference	29 CFR 1910 - General Industry Standards
Subpart D	Walking and working surfaces
Subpart E	Exit Routes, Emergency Action Plans, and Fire Prevention Plans
Subpart I	Personal protective
Subpart O	Machinery and machine guarding
Subparts S	Electrical
1910.95	Occupational noise exposure
1910.146	Permit-required confined space entry



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1910.147	Control of hazardous energy (lockout/tagout)
1910.176	Handling materials - general
1910.178	Powered industrial trucks
1910.1000	Air contaminants
1910.1026	Hexavalent Chromium
1910.1200	Hazard Communication

Inspection Analysis

Inspection should begin in the receiving area where produce received in boxes is dumped into a hopper. Boxes must be checked for loose nails, boards and other damage. The hopper must be inaccessible or guarded. The forklift or front end loader must be checked for safety equipment, trained and authorized operators and safe operation procedures. The cleaning process must be evaluated for employee exposure to dust, dirt, caustic materials and hot substances. All conveyor systems must be evaluated for nip point guards, guards on v-belt and chain drives and tagging and lock-out procedures. Exposed moving parts of other machines must be guarded and locking and tagging procedures must be established. Means of egress must be provided for all employees from their work area. Machine tender stations must be located at the safest position possible with convenient egress. Personal protective equipment must be worn by employees exposed to eye and hand hazards and falling objects. Cases must be interlocked on pallets to prevent falling when stored. Employees in the warehouse, as well as in receiving, must wear head protection. Foot protection is required when moving cases by hand.

Other Pertinent Comments: Slips, trips and falls comprise the most frequent types of accidents because of wet floors. Injuries to the hands, feet and back occur frequently from handling cases and containers of products and canning materials. There are hand injuries from moving machine parts.