Onion Paste Processing

Nearly, 40% of the produced onions does not reach the consumer of various types of losses due to handling and storage. Processing can reduce these losses.
Onions can be processed into products like fresh onions, onion paste, dehydrated onion flakes, onion powder, onion oil, onion vinegar, onion sauce,pickled onion, onion wine etc

Process of making onion paste

Onion paste can be made with either boiled or fried onions.
Materials required
Raw dried onions are need as a raw material
Machinery used
The onion processing line includes; Industrial washing machine, Onion peeling machine, onion grinding machine, Electric heating jacketed kettle, Pasteurizer and packing machine.

Processing

Cutting stems and roots.

Stems and roots are cut off either conventionally with hands or mechanically done with machines to get clean onion bulbs for processing. Machines are used to save time and labor.

Grading and sorting

This may be done manually or mechanically. Grades B and C are used for processing. Sorting is also done with hands or machines to remove unsuitable onions due to mechanical injury, insects, diseases, immature and over matured.

Peeling

Peeling is an integral part of food processing. Onions need to be peeled to remove the non edible portion and its done in various ways including manual and mechanical peeling.

Washing

Washing is done with jet sprays to remove leftover peel, dirt, dust before crushing onions into paste.

Pulping

Washed onions are then made into paste using a crushing machine and then moved into a pulper to obtain a paste of uniform consistency. An automatic grinding machine can be used for fine, semi moist puree and paste.
Food safety specifications for culinary paste like TSS not being less than 15% and acidity not less than 1.2% should be considered.

Heating

Fresh onion paste contains around 84% moisture. To reduce this moisture content and to make an onions based concentration, heat at 110 degrees in an open steel vessel.
2-5% salt should be added to taste and 0.1 to 0.2% citric acid is added for preservation.

Pasteurization

The onion paste is heated to 82 degrees Celsius or below for 30secons to 30minutes depending on the heating system. This inactivate or kills microorganisms that cause spoilage.

Filling and Packaging

Filling is done by machine at temperature between 75-80 Degrees Celsius to avoid contamination. Containers are filled with paste and immediately sealed to retain the freshness. These containers come in standard pouches, plastic bottles or metal can and then proper labeling is done as per specifications.

Cooling and Storage

Cooling of containers is done to prevent flavor losses and its done by use of cold air or cold water.
The containers are then stored in a cool and dry place.