

HEAT RESISTANT WHITE SESAME SEEDS

1. Introduction:

Sesame seed (*Sesamum indicum* L.) is the major commercial source of sesame and is primarily grown in India, China, Mexico and Sudan. The seeds vary considerably in color, size and texture of the seed coat. Sesame seed is often added to various baked wheat flour foods, such as biscuits, breads and crackers. The white bold seeds are preferred due to their appealing appearance compared to other seeds. Dehulled sesame seed finds application in the preparation of candies, confections, bakery products and other traditional foods. For this purpose, the seed has to be dehulled. The dehulled seeds are white in color and are sprinkled on the products like buns after proofing and before baking.

A common problem in the bakery industry is that the sesame seeds turn brown after baking due to the high temperature of baking. Sometimes, the seeds turn transparent on cooling the buns after baking. These decreases the sensory appeal of the product and prevention of browning is desirable for a premium product. Hence this technology driven project.

2. Market potential:

The heat resistant white sesame seeds are used in bakery and confectionary products with better retention of color and shape. The seed retains its white color and shape after exposure to high baking temperatures of 160-240° C.

3. Raw material:

Dehulled sesame seeds, required chemicals listed as per the technology package.

4. Plant and Machinery:

Cleaner cum grader, Destoner, Kettles, Boiler and accessories, Dryer, Conveyers, Elevators, Grader cum aspirator, Colour sorter, Magnetic separator, Mixer etc

a. Land and land development	1000m ²
b. Building and civil construction	300m ²
c. Plant and machinery	Rs.39,80,000

5. Capacity:

Production of heat resistant white sesame seeds

Installed capacity:	500 kg/hour
	8 TPD/ 2 shift/ day
Working:	300 days/ annum

6. Technology / Manufacturing Process:

Dehulled sesame seeds are processed at optimized conditions of temperature, treatment and other processing parameters.