CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE, MYSORE – 570 020

Sesame Dehulling (Wet process) (Process code - CPF 1840)

INTRODUCTION

At present the major portion of sesame seed produced in the country is used for extraction of oil. Sesame seed is also directly used in a variety of sweets, confectionery, bakery and pharmaceutical purposes. For utilization in the above food products, sesame has to be dehulled to remove the outer fibrous husk cover. This is usually done by soaking the seeds overnight in water, followed by drying and rubbing against a rough surface. The hulls separated are removed by winnowing. The method is laborious, time consuming and suitable for processing small quantities only. CFTRI has developed a wet dehulling process, which accomplishes easy removal of the husk. The dehulled seed can be expeller pressed for obtaining good quality oil. The protein rich cake is further solvent extracted to recover residual oil and this protein in rich meal after grinding could be used for protein fortification. The protein-rich flour could also find good export market.

RAW MATERIAL

Sesame seed is locally available. All-India production of sesame is of the order of lakh tonnes.

PLANT AND MACHINERY

Sesame seed pre-cleaning unit

De-stoner

Wire mesh basket

Mixing tanks

Vibratory screen

Pulper

Mechanical drier

a)	Land	600 m^2
b)	Building	100 m ²
c)	Plant and machinery	Rs.12,00,000

PRODUCTION CAPACITY- (estimate)

Capacity of the unit : 1 tonne/shift/day Working days : 180 days/annum Optimum capacity utilization : 70%

TECHNOLOGY / MANUFACTURING PROCESS - AVAILABILITY

The technology for sesame dehulling has been developed at CFTRI, Mysore using appropriate equipment optimal product recovery of right quality. The institute has the necessary expertise to provide technical assistance and guidance for setting up the project and implementation, under technical consultancy arrangements.