

# Coconut Shell Powder

## Introduction

Coconut shell powder is manufactured from matured coconut shells. The manufacture of coconut shell powder is not an organized industry in India. The product finds extensive use in plywood and laminated board industry as a phenolic extruder and as a filler in synthetic resin glues, mosquito coils and agarbathis. Coconut shell powder is preferred to other alternate materials available in the market such as bark powder, furfurool and peanut shell powder because of its uniformity in quality and chemical composition, better properties in respect of water absorption and resistance to fungal attack. The product is manufactured in sizes ranging from 80-200 mesh. Keeping in view of the vast industrial uses, the demand for coconut shell powder appears to be promising.

## Process

Coconut shells free from contamination of coir pith, etc., are broken into small pieces and fed into a pulverizer. The powder from the pulverizer is fed into a cyclone and the parallel product is collected in bag filters. The shell powder is then fed into a vibrating sieving machine and packed according to mesh size requirements for various end uses. The rejects from the sieving machine can be recycled in the pulverizer for size reduction. The main requirements for consistent good quality of coconut shell powder, are proper selection of shell of proper stage of maturity and efficient machinery.

## Product Specification

Appearance	Clear light brown free flowing powder
Moisture	10 per cent max.
Apparent density	0.6 to 0.7 g/cc
Ash content	1.5 max.
Sieve analysis - BS sieve	Retained on 200 mesh shall not exceed 0.1%

## Project Cost

<b>(One tonne / day capacity)</b>	
Land required (cost variable)	40 cents
Building (2000 sq. ft. building area)	Rs.10 lakhs
Plant and Machinery	Rs.14.5 lakhs
Preliminary & pre-operative expenses	Rs.3.0 lakhs
Contingency	Rs.1.5 lakh
Working capital (Margin Money)	Rs.5.0 lakhs

## Machinery

- ❖ Hammer mill
- ❖ Storage bin
- ❖ Impact pulverizer
- ❖ Cyclone
- ❖ Bag filter
- ❖ Air blower
- ❖ Sieving machine

## Yield

Raw material	12,000 shell
Shell powder	1 tonne

## Salient Features

Annual sales	Rs.12.0 lakhs
Net profit	Rs.2.25 lakhs
Return on investment	20 per cent

## Sources of Machinery / Equipment

- ❖ Kaps Engineers, 831, G. I. D. C. Makarpur, Vadodara - 390 030
- ❖ Pilots India, Kalletumkara - 680 683, Irinjalakuda Dist., Kerala
- ❖ Universal Enterprises, 99/77/1B Sri Rampura, H. O. Court Road, Mysore - 570 008

## Manufacturing units

M/s.Kongunad Agro Products, Olappalayam PO, Kangeyam Taluk, Erode District, Tamil Nadu Ph: 0491-2567232, Mob: 9447503399

M/s.S.S. Agro Mills, Sidco IGC, Phase II, Samba, Jammu and Kashmir, Pin: 184121. Phone: 9419394038, 9906094038