

## CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE, MYSORE

### MINI VERSATILE DAL MILL

#### INTRODUCTION

The production of pulse in India is of the order of 15 million tons per year. Generally pulses are consumed in a variety of food preparation after conversion into dhal viz., de-husked split pulse. It is estimated that more than 75% of the pulse produced is converted into dhal. Dhal milling is probably the third largest of food processing industry after rice and wheat. Milling of pulse is practiced as a small-scale rural operation from ancient times and more recently as a large commercial operation.

The Mini versatile Dal Mill, developed at this institute, has been designed to process all type of pulses including minor ones. The mill is comparatively free from dust pollution.

#### MINI VERSATILE DHAL MILL ADVANTAGES:

- a. The mini versatile dhal mill consists of three principle sections/ assemblies namely (1) de-husking system (2) aspiration system and (3) grading system
- b. It is able to process pulses pre-treated by wet/ dry pre-treatment.
- c. It is able to process smaller sized pulses (green gram, black gram) to dhal using dry pre milling treatment and also
- d. Able to produce well de-husked dhal (~98% de-hulling) comparable to large scale dhal mills.
- e. Operate at 550 rpm, 1HP single phase motor (2 nos)
- f. Capacity 150 kg/h

#### SPECIFICATION

- Dimensions: 2\*1.2\*2 meters (L\*B\*H)
- Weight: About 230 kg
- Capacity: 125 – 150 kg/h
- Power required: 2HP
- Arrangement for adjusting the gap between abrasive surface and outer screen to suit different sized grains.
- Arrangement to collect husk, powder and dust to minimize pollution.
- Grader to separate broken, dhal and un-split whole grains.

#### ESTIMATED PROJECT COST (IN '000)

Land (200M <sup>2</sup> )	60.00
Building (80 M <sup>2</sup> )	320.00
Equipment cost	552.00
Other expenses	200.00
Working capital	148.00
Total project cost	<b>1280.00</b>
<b>Production capacity – 24 units/ annum</b>	
<b>Working days – 300</b>	