

DEVELOPMENT OF MOULDED VACUUM BULK PACKAGING SYSTEM

Moulded Vacuum Packaging System

The moulded vacuum packaging system is an integrated unit that creates the following sequence of packaging operation :

- i) Vacuum
- ii) Gas Flushing – Optional
- iii) Compacting
- iv) Placement in Outer Box

The system makes use of co-extruded multi-layered or laminated barrier bags, moulds and sleeves for vacuum packaging and/or gas flushing and forming rectangular block.

The moulded vacuum packaging system produces consistent rectangular blocks ranging in size from 500 grams to 25 Kgs. This gives an overall improvement in the quality of production, with benefits down the line i.e. packaging, transport, handling, display etc.

The use of compact rectangular blocks, as opposed to uneven packs, makes it possible to achieve considerable savings in the outer transport pack (outer corrugated fibre board box).

The rectangular shape of the packs would ensure minimum movement during handling and transportation, giving the contents maximum protection. The removal of air reduces the incidence of rancidity and microbial growth. The vacuum also totally eliminates insect infestation.

In the case of AFD corn full vacuum (100%) was drawn as the product quality is not affected by this process. However, for dehydrated onion flakes and dehydrated garlic powder, 75% vacuumisation is recommended.

The rectangular blocks (2 blocks of 12.5 Kgs. each for dehydrated onion flakes, 1 block of 25 Kgs. dehydrated garlic powder and 1 block of 10 Kgs. AFD Corn) can be placed into an outer CFB box which can be closed by use of pressure sensitive tapes and reinforced with plastic straps.

The moulded vacuum packaging system is user friendly and stain free, where the operator does not have to lift heavy products at any stage of packing.

The specifications details of the barrier bag and outer box are given in Annexure – XXVI.