

1. Title: Double-Pass Single Huller System

2. Product: Design of a Double-Pass improved single huller system for milling of paddy.

3. Description: In the system shelling and polishing are done separately. In the first pass, the huller is operated on manual control to effect a large degree of dehusking, with minimal polishing. The mixture of dehusked rice, unhusked paddy and husk is subjected to aspiration to remove the husk, and later subjected to polishing in the same huller by a controlled second pass. The components of the system include the huller and motor mounted on the same frame, the aspiration system - a centrifugal blower, a vibratory sifter.

4. System Capacity: 300/500 kg capacity of paddy per hour

5. Merits: Compared to the commercial huller

- * Better bran with in oil content of about 12-14% oil acceptable to solvent extractor
- * Increased yield with less brokens
- * Purer by-products obtained separately.

Throughout of huller reduced by 50% because the same huller used for the second pass for polishing.

1. Title: Centrifugal Sheller Huller System

2. Product: Design of a centrifugal sheller huller system for milling of paddy

3. Description: In the system dehusking is effected by a centrifugal sheller and the dehusked product is aspirated off the husk before feeding to the huller for polishing, where the required degree of polishing is obtained by manual adjustments of gates. The bran husk mixture from the huller is sieved to obtain oil-rich bran

4. System Capacity: 500 kg paddy per hour

5. Merits: Compared to the commercial huller

- i. Better bran with an oil content of about 14 -17% acceptable to solvent extractor
- ii. Increase in yield due to less brokens
- iii. Purer by-products obtained separately