

BIO-PLATES

Technology :

Casting of plates and cups from areca sheath.

Application and Use:

Production of plates/cups for serving of food.

Salient Features of Technology:

Traditionally plant residues such as areca sheaths have been used in India for forming into different shapes such as plates, cups and saucers etc. for serving of food.

The sheaths are trimmed to a uniform size of 300-mm diameter and conditioned in water for 30-60 seconds. The trimmed sheaths are passed under water jet spray while on a conveyor belt. The surface cleaned leaves are received in the gap between



the die set and it is electrically heated to a temperature of 130 – 150° C. The sheaths are pressed in the die for a period ranging from 25-30 seconds. At the end of the operation the die moves down and the formed plate/cup is lifted and discharged manually.

Equipment and Machinery: Continuous casting machine - Design drawings available from CFTRI.

Raw Materials: Areca sheath

Status of Commercialization : Commercialized

Minimum Economic Unit Size (MEUS) : 2000-2500 cups or plates/day