

Improvement of Pulp Separator for Sugar Apple and Atemoya Fruit

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Summary

The power source of the separator is single-phase 220 volt, and it starts a 3hp electric motor to work. The power is transported through belts and wheels and rotates the scrape board of the circular screen mesh of the separator. For the diameter of the circular screen mesh, the scale of the input part is smaller than the scale of the seed export; it looks like a trumpet sharp, its mean diameter and length of the circular screen mesh is 25 centimeters and 60 centimeters. The apertures of the screen have two scales are 4.0×4.0 mm and 4.0×20.0 mm. The scrape board has three pieces, and each piece is attached soft plastics. The distance of space is about 2.0mm to 2.5mm between the screen and the soft plastics. The rotating speed of the separator is 500rpm.

The capacity of the separator is about 15 kilograms per minute, and the percentage of separation is 85%~97%, and the percentage of seed break is 0.3%~7.1%. The stuff of pulp is loaded in jars and refrigerated with -20°C low temperature in a refrigerator, and we observe the color of pulp to know the change of quality. After six months, the quality of stuff of pulp has none bad state, and it absolutely can be provided to make agricultural manufacture products.

Key words: Sugar apple fruit , Atemoya fruit , Separator, Pulp

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