PROTOTYPING MACHINE PRESS OLD COCONUT WITH 3 LITRES/HOUR CAPACITY

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Abstract

Small industry which produces the coconut oil still used a simple manual method, it more take a long time and less of sterilization. So to solve it in efficiency and productivity for produce a coconut oils, we make an old coconut press machine with 14 kg/hour capacity.

Making process of press machine start from designing of roll movement mechanism and power screw, find the force and power pressing of roll which put on the coconut, find element of machine which uses (shaft, pin, belt, pulley, and bearing), the value of power and the capacity of coconut oil.

From the results of design of the machine is needed a 1,07 HP with 2400 rpm motor which reduced with 1:40 gearbox ratio to spin the roll and screw with 60 rpm and the machine capacity is 3 liters/hour

Key word: roll, power screw, pressing, old coconut and coconut oil.