

ABSTRACT

DESIGN OF CRACKERS RAMBAK'S CUTTING TOOL USING APPROPRIATE TECHNOLOGY (Case Study at UKM Mrs. Boinah)

**By:
Theresia Ludina Keristin Susanti
12.12.016**

UKM Mrs. Boinah produce crackers rambak. Problems in making crackers rambak is cutting process use scissors, because of that cutting process to be a long process and customer needs are not met by 18,3%. In this research was designed cutting tool using appropriate technology. Designing tool is adapted from workers's body dimensions and specifications of crackers rambak. Rectangler-shaped tool consisting of 13 part. Framework measuring tool 38cmx29,5cmx20cm by 17.5 cm leg length, blade size 40cmx5cm with 3.1 cm in grip diameter, driving sized 34cmx3,5cmx6,5cm to 2.9 cm in grip diameter. Moreover, it is designed of molds sized 30cmx20cmx2cm. The cost of making the tool is Rp. 1.443.000,- with maintenance costs Rp. 29.000,- per month, break-even point in units is 34 pack, break event point in the rupiah is Rp 169.200,- and the payback period in 4 days. Before using cutting tools to cut one mold dough takes an average of 887 seconds. Meanwhile, after using the tool only takes 195 seconds for cutting each one mold dough rinds. Energy expended before using the tool is 193 kcal/hour, while after using the tool is 151 kcal/hour.

Keywords: Cutting Tools Crackers Rambak, Appropriate Technology, Break Event Point, Payback Period, Energy.