REDESIGN OF TRADITIONAL SICKLE HANDLE USING VALUE ENGINEERING TECHNIQUE

(Case Study of Sickle Type in Yogyakarta)

THESIS

This is Submitted to Fulfill Prerequisite of Industrial Engineer of International S-1 Program

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"IT'S BETTER TO BE THE LEADER OF ANT
THAN SOLDIER OF ELEPHANT."

(Anonymous)

This Thesis is Presented Special for My Mother Birthday's
August 7, 2006

THIS THESIS IS DEDICATED TO:

♥ MY LOVELY PARENTS, PAPA AND MAMA
♥ MY SISTER, WIDYA AND ATIKA
♥ MY BEAUTY GIRL, DIAN
♥ ALL OF MY BEST FRIEND

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Yogyakarta

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ABSTRACT

Sickle is the agriculture traditional tools which made from hardness steel that usually used to cut grass, twig, clump, etc. In Yogyakarta many farmers still use sickle to cut the grass manually. This conventional sickle is made by small industry. The weakness of the conventional sickle is on the form and the size of handle. The form and the size of handle is different each other, because the form and the size of handle is measured based on hand of blacksmith. During the survey was found the problem on the existing design of sickle handle. The conventional sickle handle tends to make deflection on the user hand. After do some analyses is need to be developed the new design of sickle handle.

The result of this research is a new design of sickle handle which can reduce or eliminate the deflection on hand. The dimension of sickle handle is adjusted based on the anthropometry data which are measured from the farmer. So the new design of sickle handle can make the farmer work more comfortable.