

ABSTRACT

XYZ Convection is a home industry convection and is included in the small and medium micro business located in Bandung which produces several products, one of them is polo shirts. For production, XYZ MSME uses a make-to-order system with a production area divided into two floors. The problem currently faced by XYZ MSME is the movement of material flow during the production process which is less efficient. This is because the arrangement of facilities divided into two floors causes several production process flows to experience backtracking. The occurrence of backtracking causes an increase in the distance of material movement so that the production rate might get into obstacles. Based on these problems, this study was conducted to help XYZ MSME in minimize the distance of material movement by designing the layout of facilities in the polo shirt production process using the BLOCPLAN method. The results of the proposed layout design process can minimize the distance of material movement by 17.5% with a more organized material flow and better flow.

Key words – distance of materials movements, designing layout, backtracking, BLOCPLAN