

Abstract

This research is an application of the Total Productive Maintenance (TPM) to reduce the wastes in production line of the electronic device manufacturer. This research applied the first pillar of the TPM concept Mold & Die cleaning process. A cart of maintenance instruments for Mold & Die maintenance and machine inspection was produced and allocated around the machines. The first pillar of the TPM concept is applied to improve wire melted with Frame by improvement thickness of Upper Electrode. The second, third, fourth and sixth pillars of TPM concept were also applied to solve a problem on the wire melted with Frame by Period changing disrobe part and period machine monitoring check point follow machine condition judgment criteria. In addition, production operator training was held so that the operators can monitor machines by them selves.

The results from the study shows that the transportation time in Mold & Die cleaning process was reduced from 31 to 1 minutes per day. The waste time in machine inspection process was reduced from 46 to 1 minutes per day. The waste from break down was reduced from 35.25 to 13.40 minutes per day. The OPEN No Good (NG) Defect loss was reduced from 8,413 to 3,414 pieces per day. The product output increased from 133,745 to 179,949 pieces per day. The Overall Effective Efficiency (OEE) increased from 64.52 to 81.22%.