ANALISIS PERBAIKAN EFEKTIVITAS MESIN TUBING PEMBUAT TUBE KABEL OPTIK MENGGUNAKAN METODE *OVERALL EQUIPMENT EFFECTIVENESS (OEE)* UNTUK MEMINIMALISI *SIX BIG LOSSES*

(Studi Kasus PT. XYZ)

Yoga Dwi Yulianto

Abstrak

Losses dapat mengurangi efektivitas penggunaan peralatan dalam proses produksi. Untuk mengetahui dan meminimumkan *losses* yang terjadi diperlukan adanya evaluasi kinerja dari peralatan produksi. Mesin TUBING pembuat tube kabel optik merupakan salah satu peralatan produksi di PT. XYZ yang akan dievaluasi efektivitasnya. Pengukuran efektivitas mesin TUBING dilakukan dengan menggunakan metode *Overall Eqipment Evectiveness (0EE).* Dalam perhitungan, OEE mengukur efektifitas dengan menggunakan tiga sudut pandang untuk mengidentifikasi *six big losses,* yaitu *availability, performance,* dan *quality*. Hasil penelitian menunjukan Hasil pengukuran OEE mesin TUBING T002 dengan rata – rata nilai presentase mencapai 66,49%, sedangkan pencapaian rata – rata presentase pada mesin TUBING T001 yaitu sebesar 35,84%. Hal tersebut menunjukan bahwa presentase mesin T001 belum mencapai target perusahaan (OEE > 65%). Rendahnya pencapaian presentase OEE tersebut disebabkan oleh salah satu faktor yaitu *performance ratio* yang rendah. Dengan melihat matrix OEE faktor dari *six big losses* yang paling signifikan adalah *losses idling and minor stoppages* dan *reduced speed*. Berdasarkan analisis menggunakan FMEA, dapat diketahui bahwa penyebab masalah yang dipecahkan berdasarkan nilai RPN paling besar dengan *cause and effect diagram* adalah proses produksi melambat, kegagalan ini termasuk kedalam kategori *reduced speed* dan diberikan usulan perbaikan dengan metode 5W +1H.

Kata Kunci : *Overall Equipment Effectiveness, Six Big Losses, Failure Mode and Effect Analysis, Idling and Minor Stoppa*ges.

ANALYSIS IMPROVEMENT THE EFFECTIVENESS OF MACHINE TUBING MAKER TUBE OPTICAL CABLE USES THE OVERALL EQUIPMENT EFFECTIVENESS (OEE) TO MINIMIZE SIX BIG LOSSESS (Case Study : PT. XYZ)

Yoga Dwi Yulianto

Abstract

Losses can reduce the effectiveness of the use equipment in production process.To review and minimize losses occurring needs to be performance evaluation of production equipment. TUBING Machine maker tube cable optical is one production equipment in PT. XYZ will be evaluated effective.The measurement of the effectiveness of machine tubing done by using the method overalls eqipment evectiveness (OEE). With calculation, OEE measuring the effectiveness of using three sides to identify six big losses, the availability, performance , and quality.The results showed result of measuring OEE machine tubing T002 with an average the value of the percentage 66,49 % , while the average of percentage on a tubing T001 a month 35,84 %. While the average the percentage on a tubing T001 a month 35,84 % .It shows that the percentage machine T001 not reached on target company (OEE > 65%). Low the percentage OEE was caused by one of the factors that low performance ratio. In terms of the matrix OEE a factor of six big losses most significant losses idling and minor stoppages and reduced speed losses Based on analysis using FMEA, It is known that the problem which will be resolved based on the biggest RPN with cause and effect diagram is production process slowed and given the proposed fixes with the 5w + 1h.

Keyword: *Overall Equipment Effectiveness, Six Big Losses, Failure Mode and Effect Analysis, Idling and Minor Stoppages.*