

**ANALISIS PERHITUNGAN *OVERALL EQUIPMENT  
EFFECTIVENESS* (OEE) PADA MESIN POMPA AIR  
DISTRIBUSI DI PT SARANA CATUR TIRTA KELOLA  
(SCTK)**

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**ABSTRAK**

PT Sarana Catur Tirta Kelola (SCTK) merupakan perusahaan yang bergerak sebagai penyedia air bersih. PT SCTK, terkhusus pada dua mesin pompa distribusinya, terkadang mengalami *downtime* yang mempengaruhi hasil air distribusinya. Kepuasan konsumen tidak mencapai ambang batas 90% yang disebabkan kurangnya efektivitas mesin pompa dalam menyalurkan air olahan. Oleh karena itu, diperlukan perhitungan dan analisa keefektivitasan mesin pompa tersebut. Pendekatan *Total Productive Maintenance* (TPM) memanfaatkan perhitungan *Overall Equipment Effectiveness* (OEE) yang merupakan tolak ukur keefektivitas mesin atau peralatan secara luas dengan memanfaatkan nilai berdasarkan tiga indikator utama yaitu *availability rate*, *performance rate*, dan *rate of quality*. Setelah menggunakan pendekatan ini, ditentukan nilai OEE pada mesin pompa distribusi 1 dan 2 tidak mencapai batas minimum optimal OEE sebesar 85% yaitu hanya sebesar 67% dan 48%. Upaya perbaikan yang diusulkan meliputi penambahan 2 pengawas pada saat melakukan perbaikan mesin pompa, pengawasan dalam pengembalian alat perbaikan setelah digunakan pada WTP, dan pengadaaan SOP dengan tujuan mengatur lama aktivitas dan langkah-langkah dalam perbaikan yang benar. Dengan perubahan pola berdasarkan usulan peneliti, perusahaan dapat meningkatkan nilai efektivitas berdasarkan perhitungan OEE hingga 92%.

Kata kunci: perhitungan efektivitas, *Total Productive Maintenance* (TPM), *Overall Equipment Effectiveness* (OEE).

# **ANALYSIS OF OVERALL EQUIPMENT EFFECTIVENESS (OEE) CALCULATIONS FOR DISTRIBUTION WATER PUMP MACHINE AT PT SARANA CATUR TIRTA KELOLA (SCTK)**

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## **ABSTRACT**

*PT Sarana Catur Tirta Kelola (SCTK) is a company engaged in providing clean water. PT SCTK, especially its two distribution pump machines, sometimes experiences downtime which affects the results of its distribution water. Consumer satisfaction does not reach the 90% threshold due to the lack of effectiveness of the pump machine in distributing treated water. Therefore, it is necessary to calculate and analyze the effectiveness of the pumping machine. The Total Productive Maintenance (TPM) approach utilizes the calculation of Overall Equipment Effectiveness (OEE), which is a broad measure of the effectiveness of machines or equipment by utilizing values based on three main indicators, namely availability rate, performance rate, and rate of quality. After using this approach, it was determined that the OEE values for the distribution pump machines 1 and 2 did not reach the optimal minimum OEE limit of 85%, namely only 67% and 48%. The proposed improvement efforts include the addition of 2 supervisors when repairing pump engines, supervision in returning repair tools after being used on WTP, and establish a SOP in order to set the duration of activities and steps in correct repairs. With changes based on the pattern of researchers' suggestions, companies can increase the effectiveness of values based on OEE calculations by up to 92%.  
Keywords: effectiveness calculation, Total Productive Maintenance (TPM), Overall Equipment Effectiveness (OEE).*