

Analisis pengurangan unplanned shutdown pada turbine Gas compressor dengan metode reliability centered maintenance studi kasus pada PT. Pertamina hulu energi offshore North West Java = Analysis of reduction of unplanned shutdown at the Gas turbine compressor with the method of reliability centered maintenance case study on PT. Pertamina hulu energi offshore North West Java

Kartika Nur Alfina, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20332056&lokasi=lokal>

Abstrak

Dalam era globalisasi dan perkembangan teknologi yang sangat pesat, berbagai sektor industri juga turut mengalami kemajuan pesat. Perkembangan teknologi dan industri Indonesia tidak terlepas dari berkembangnya industri minyak dan gas bumi saat ini. Kemajuan ini mendorong munculnya banyak persaingan, salah satu strategi untuk menghadapi persaingan luar yaitu dengan melakukan strategi Continuous Improvement.

PT. Pertamina Hulu Energi Offshore North West Java memiliki beberapa pilar konsep improvement, diantaranya yaitu Managing Historical Losses. Unplanned shutdown merupakan salah satu kendala yang harus dihadapi oleh perusahaan setiap jam operasi oleh karena itu pengurangan kejadian Unplanned shutdown ini merupakan salah satu hal terpenting.

Kejadian Unplanned shutdown yang disebabkan oleh Turbine Gas Compressor dapat di analisa menggunakan Reliability Centered Maintenance untuk mendapatkan potential failure yang mungkin terjadi dengan menggunakan FMEA. Sedangkan simulasi Monte Carlo digunakan untuk forecasting kejadian Unplanned shutdown di tahun-tahun mendatang. Semua hasil tersebut akan di analisa dengan Benefit-Cost Analysis untuk mendapatkan metode optimasi maintenance yang paling optimal.

.....In the era of globalization and rapid technological development, various sectors of the industry also experienced a rapid progress. The development of technology and industry in Indonesia is inseparable from the development of oil and gas industry at the moment. This progress led to the emergence of a lot of competition, one strategy for dealing with out-of-competition that is by doing a Continuous Improvement Strategy.

PT. Pertamina Hulu Energi Offshore North West Java has some pillars of the concept of improvement, among others, namely Managing Historical Losses. Unplanned shutdown is one of the obstacles to be faced by any company operating hours therefore a reduction in incidence of Unplanned shutdown is one of the most important things.

Incidence of Unplanned shutdown caused by the Gas Turbine Compressor can be analyzed using the Reliability Centered Maintenance to get potential failure that may occur with the use of FMEA. While Monte Carlo simulation is used for forecasting incidence of Unplanned shutdown in years to come. All the results will be analyzed with a Benefit-Cost Analysis method to get the most optimal maintenance optimization.