

Studi pengukuran umur sisa (Remaining Life Assessment) mesin pada industri = study of machinery remaining life assessment for industries / Aditya Primaperkasa

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Abstrak

[ABSTRAK

Studi Remaining Life Assessment (RLA) dilakukan untuk dapat membantu manajemen industri dalam menentukan rencana kerja ke depan yang ekonomis, setelah Rotating Equipments beroperasi selama bertahun-tahun. Studi ini telah dilakukan dengan contoh kasus Loading Arm pada salah satu mesin produksi perusahaan minyak dan gas bumi (oil & gas). Melalui tinjauan berbagai literatur, lapangan, test dan inspeksi, dipilih metode metallography untuk dapat menemukan nilai martensite. Perbedaan nilai martensite selama kurun waktu 27 tahun (pemakaian 2,068 kali) adalah 10.7% . Dan perbedaan nilai martensite selama pemakaian 2,068 kali sampai ke pemakaian 2,098 kali adalah 0.76%. Trend peningkatan nilai martensite yang didapat dan ditunjukkan dalam grafik seharusnya dapat dipakai untuk menghitung umur sisa. Studi ini telah berhasil diimplementasikan, namun belum mendapatkan hasil umur sisa secara kuantitatif karena kelengkapan data sangat menentukan hasil prediksi;

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ABSTRACT

Studies Remaining Life Assessment (RLA) is done to be able to assist management in determining the industry forward work plane economically, after Rotating Equipments operating for many years. This study was conducted using the example of Loading Arm on one machine production of oil and gas companies (oil & gas). Through literature review, field test and inspection, metallographic method chosen to find the value of martensite. Differences in the martensite during the period of 27 years (use 2.068 times) were 10.7%. And differences in the martensite during the use of 2.068 times to 2.098 times the usage were 0.76%. Trend increase in the value of martensite is obtained and shown in the graph should be used to calculate the age of the rest. This study has successfully implemented, but not getting the rest of life because of the completeness of the data quantitatively determines the predicted results., Studies Remaining Life Assessment (RLA) is done to be able to assist management in determining the industry forward work plane economically, after Rotating Equipments operating for many years. This study was conducted using the example of Loading Arm on one machine production of oil and gas companies (oil & gas). Through literature review, field test and inspection, metallographic method chosen to find the value of martensite. Differences

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