

Environmental Performance Indicators into Maintenance Activity of Industrial Equipments

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Abstract

The work proposes two indicators for environmental performance evaluation into maintenance activity of industrial equipments, namely: 1. The absolute indicator (Es) - CO₂ emission involved into service [kg CO₂]; 2. The relative indicator (es)- CO₂ specific emission involved into service [kg CO₂/euro]. The first indicator results from a "power approach" of the "environmental balance" which allows the calculation of "energy involved into service"(Ws). This energy is turn into "equivalent fuel" (Bs) and finally into "CO₂ emission involved into service" (Es). The second ones results by division of (Es) to the "total financial value of maintenance service" (Vs), expressed in euro. A practical application for calculation of these indicators in the case of two power transformers is done. (Es) puts in evidence only absolute value of environmental aspects. (es) is relevant because shows practically, with what environmental impact (kg CO₂) is obtained each monetary unit (1euro), accordingly with performed service.

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