

Contribution to the Decision-Making Process for Selecting the Suitable Maintenance Policy

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Abstract : Industrial companies may be confronted with questions about their choice of maintenance policy. This choice must be guided by several numbers of decision criteria or objectives related to their production or service activities but also to their level of development and their investment prospects. A decision-support methodology to choose a maintenance policy (corrective, systematic or conditional preventive, predictive, opportunistic or not) is proposed to facilitate this choice using the main categories of the most important decision criteria. The different steps of this methodology are illustrated using theoretical case: identification of the different maintenance alternatives, determining the structure of the most important categories of the decision criteria, assessing the different maintenance policies on to the criteria by using an ordinal preference relation, and finally ranking the different maintenance policies.

Keywords : maintenance policy, decision criteria, decision-making process, AHP

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