

Reliability assessment framework for a multi-state multi-component system

Jain, Niketa, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20465150&lokasi=lokal>

Abstrak

Assessing the reliability of complex multi-state systems comprising numerous sub-systems and components is one of the key challenges faced by industry. The effect of degradation of individual component on other associated components plays a vital role in entire system transition from a higher performance level to a lower performance level. The proposed work focuses on the effect of dependence or functional association among various components on system reliability. There are many components in any complex system that hold higher critical order and failure of these critical components may cause the decline in the performance level of the total system. This paper takes under consideration the critical order of each component along with their dependent nature and captures the effect of their degradation on overall system reliability.