



Material Properties

Material databases are available for some materials and links to these databases are included in some finite element codes. Some of these include MMPDS (formerly MIL HANDBK) and ANSYS nCode DesignLife. However, these databases include only a fraction of the thousands of possible materials, and the completeness of the data may not be sufficient for the desired analysis. In such cases, relevant data can sometimes be found or inferred from government reports and open literature. It is often necessary to combine the information from various sources to arrive at material properties for a specific application. In some cases where material properties are completely unavailable, it is necessary to conduct new materials tests.