## I-DEAS® Material Data Catalog – Metals

links master models to various metals properties

I-DEAS® Material Data Catalog - Metals software is available for access through the I-DEAS Material Data System™ software. The catalog consists of more than 2,640 records covering aluminum, copper, steel, stainless steel, nickel, and reactive alloys. The catalog is compiled and updated from manufacturers' data sheets and industry standards information sources. The data should be used for initial design analysis only and should not be considered design-allowable information.

## **Properties**

The catalog includes materials properties commonly needed for engineering design and analysis including:

- •Young's Modulus
- •Shear Modulus
- •Poisson's Ratio
- Yield Strength
- Ultimate Strength
- Elongation
- Density
- Coefficient of Thermal Expansion
- Thermal Conductivity
- Specific Heat

Graphs of metal characteristics include:

- •Strength versus Temperature
- •Coefficient of Thermal Expansion versus Temperature
- •Specific Heat versus Temperature
- •Thermal Conductivity versus

Temperature

•Stress versus Strain at Various Temperatures

References to specific trade names and UNS designations are provided. Reference to thicknesses, tempers, test temperatures, and test conditions are also provided.

## **Prerequisite**

Core Master Modeler

-or-

I-DEAS Product Design Package

-or-

I-DEAS Artisan™ Package

-or-

Core Simulation

## For More Information

For more information, contact your local SDRC representative or call 1-800-848-7372.