Now available on-line—CINDAS Aerospace and High Performance Alloys Database (AHAD)

The AHAD web-based database is a combined version of the popular CINDAS products, the Aerospace Structural Metals Database (ASMD) and the High Performance Alloys Database (HPAD). It contains 298 alloys with over 19,300 PDF pages of text, tables and figures, 11,000 references, 28,000 datasets, and nearly 100,000 data curves. The user friendly interface enables AHAD subscribers to quickly select and compare the attributes of the alloys for which they are looking.

The AHAD provides numeric and graphic information as part of the database, including a comprehensive PDF consisting of additional information for each alloy.

AHAD Users

Universities Course Material Aid
Technical Schools Project Reference & Guide
Government Agencies New Material Research
Aerospace Industry Turbine Design
Automotive Industry Developing Engines & Frame
Industrial Suppliers Manufacturing/Machinery
Research Corporations Research & Development

And many others...

About the Data

The database contains the same data as the HPAD and the ASMD in one convenient location so customers needing information contained in both of those popular products have only to search a single database.

Search and Browse the Aerospace and High Performance Alloys Database by

Material Group
(Aluminum, Titanium, Nickel Alloys, Stainless Steels, etc.)

Material Name
(Al6061, Ti-6Al-4V, Inconel 706, etc.)

Property Group
(Mechanical, Thermophysical, etc.)

Property Name
(Yield Strength, Elongation, Fracture Toughness, Corrosion Rate, etc.)

Property Groups

The AHAD contains 705 different properties. These properties are separated into 20 easy-to-navigate property groups. Alternatively, you can search the property names by using keywords which would bring you directly to the property you’re interested in.

Thermophysical
Thermoradiative
Electrical and Nuclear
Mechanical Properties
Strength, Stress, Hardness, Fatigue & Crack Growth, Impact Energy, Strain, Area Reduction, Deformation and others

Temperature
Time, Life to Failure
Corrosion, Oxidation, and Weight Change
Length, Thickness, Diameter, Size, and Grain Size
Content of Component, Phase

Plus others...
Searching and Browsing: Aerospace and High Performance Alloys Database (AHAD)

Finding Information

**Search:** Enter the full or partial name of the property or material.

**Browse:** Use the drop-down menu to find the property or material.

The Aerospace and High Performance Alloys Database contains 298 metal alloys in 21 metal groups and 705 properties in 20 property groups.

Customizing Information

**Select:** The independent variable.
Viewing Information

The AHAD allows the user to view a property of multiple materials on one graph.

Step 1: Select Materials.

Step 2: Select Data Curves or Test Conditions.

Note: At any time, the user can click on the “Show Text” button to see the values of the data points, text description, references, etc.

Results: Graphic and Numeric

- Nearly 100,000 data curves
- Color-coded data curves
- Multiple curves of different materials per graph
- Hovering cursor to show X and Y values of each data point
- Unit conversion package
  - Contains both English and SI units
  - Shows all typically used units for the variables
  - Allows both X-axis and Y-axis selection
Materials Cross Index

The materials cross index contains the commercial and alternative designations for all the metal alloys in the database. This feature can be used to find the correct metal alloy when only the trade name or commercial designation is available.

On-line Handbook

The Aerospace and High Performance Alloys Database includes an interactive on-line version of the printed handbook. The on-line PDF handbook supplements the AHAD by providing additional information about the metal alloys.

- General Overview
- Commercial Designations
- Alternative Designations
- Metal Specifications
- Composition
- Heat Treatment
- Forms & Conditions
- Melting & Casting
- Fabrication
- Metal Treatments

And many others...

We Are Confident in Our Products

The AHAD is quick, efficient, and frequently updated, and is currently used by a growing list of universities, corporations and research facilities. Please visit www.cindasdata.com for a demo.