



# Total Metals

The World's Most Comprehensive Metals Database



15M property records



350K materials



74 countries/standards

Total Metals is by far the world's largest database for metallic material properties and sits at the core of the Total Materia product offering serving as the gateway for an unparalleled collection of datasets and modules

## The Challenge

- Finding equivalents to foreign materials and comparing alternatives side by side
- Searching for materials worldwide by specific chemical composition or mechanical properties
- Deciphering material specifications and finding the correct grade for a specific application
- Finding precise traceable and reliable mechanical, physical and other property data for various conditions and temperatures

## The Solution

- ✓ The largest resource of metal properties available for basic and complex engineering activities
- ✓ International cross reference tables from 74 countries giving the ultimate assistance in identifying similar and equivalent materials
- ✓ Standard data complimented by thousands of proprietary materials and other sources providing the complete solution

## The Benefits

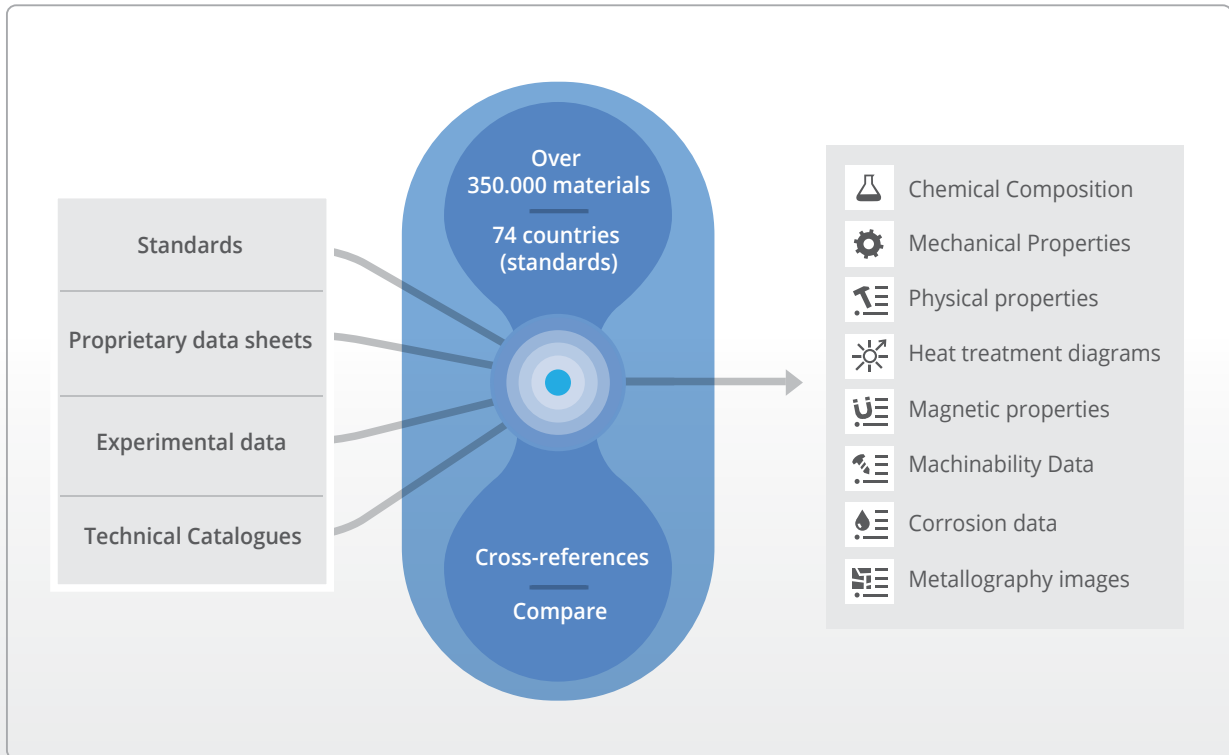
- Outstanding time savings
- Increased accuracy and reliability
- Common platform for repeatable results throughout the organization



Total Materia



Focused on providing standard metal properties data, Total Metals provides you with a staggering 15 million property records for over 350,000 materials from 74 countries/standards.



Properties

Condition: Standards  
Display: Table | Diagram

Property	T (°C)	Value	Units
Thermal conductivity	100	57.8	W/m·K
	200	55.2	W/m·K
	300	49.4	W/m·K
	400	45.6	W/m·K
	500	41	W/m·K
	600	35.8	W/m·K
	700	33.1	W/m·K

### The largest, top-quality database

From chemical compositions, cross-reference tables, mechanical and physical properties at room, elevated and subzero temperatures, to additional information such as heat treatment diagrams, metallography and machinability, Total Metals gives you the highest quality and reliability of the only certified database of its kind in the industry.

Cross Reference Table

Select standard:

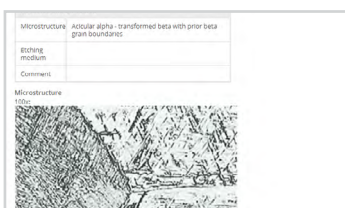
AR Identical official composition 3009 other sources specific SmartCross<sup>2</sup>

Results found: 811

MATERIAL	COUNTRY / STANDARD	EQUIVALENCY CATEGORY	COMPARE
08C17N12M62	China / GB	Official	[+]
0017N12M62	China / GB	Official	[+]
MJ0017N12M62	China / GB	Official	[+]
S3108	China / GB	Official	[+]
0017N12M62	China / GB	Official	[+]

### The fastest and most powerful cross-referencing

The most comprehensive cross-reference tables with more than 15 million records for equivalent materials worldwide are systemized using a proprietary classification of similarity. In addition, patented SmartCross<sup>2</sup> algorithm enables identification of unknown equivalents using similarity of composition, mechanical properties or their combination.



### Unparalleled development & customer support

Total Metals materials and property information are updated every month, keeping you up-to-date with the newest standards developments, as well as upgraded with new datasets, new unique algorithms and new software features. All aspects of Total Materia are fully supported by a dedicated team of specialists with over 300 years of combined industrial experience that provides technical consulting support FREE of charge for all subscribers!