

# The World's Most Comprehensive Materials Database



Ultimate all in one solution and the first choice of engineers worldwide



In partnership with



# What's Inside

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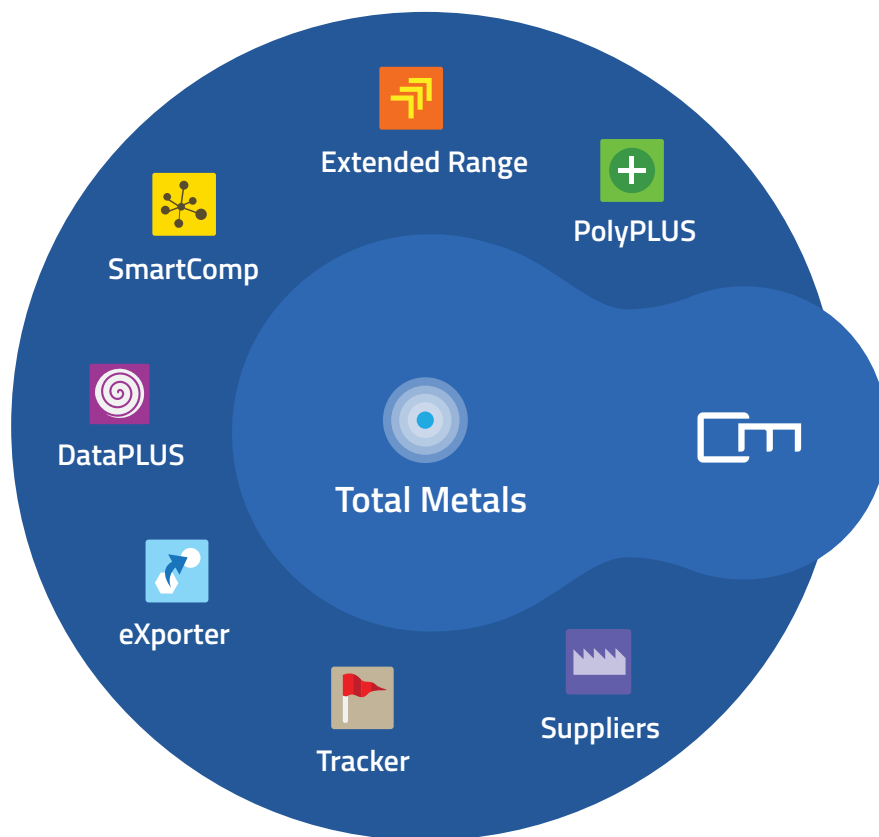
More than 12 million property records for over 450,000 metallic and non-metallic materials presented in 26 languages

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- ✓ Properties for 450,000+ Materials
- ✓ 2,000+ Sources for Advanced Data
- ✓ Metals, Polymers, Ceramics, Composites
- ✓ 150,000+ Stress-Strain Curves
- ✓ 69 Standard Development Organizations
- ✓ 15,000+ Materials with Cyclic Properties
- ✓ International Cross-Reference Tables
- ✓ Property Estimation and Interpolation
- ✓ Chemical Composition
- ✓ Data Export to CAE Software
- ✓ Mechanical and Physical Properties
- ✓ Identification of Unknown Materials
- ✓ Multiple Material Comparison Options
- ✓ Standard and Material Update Tracking

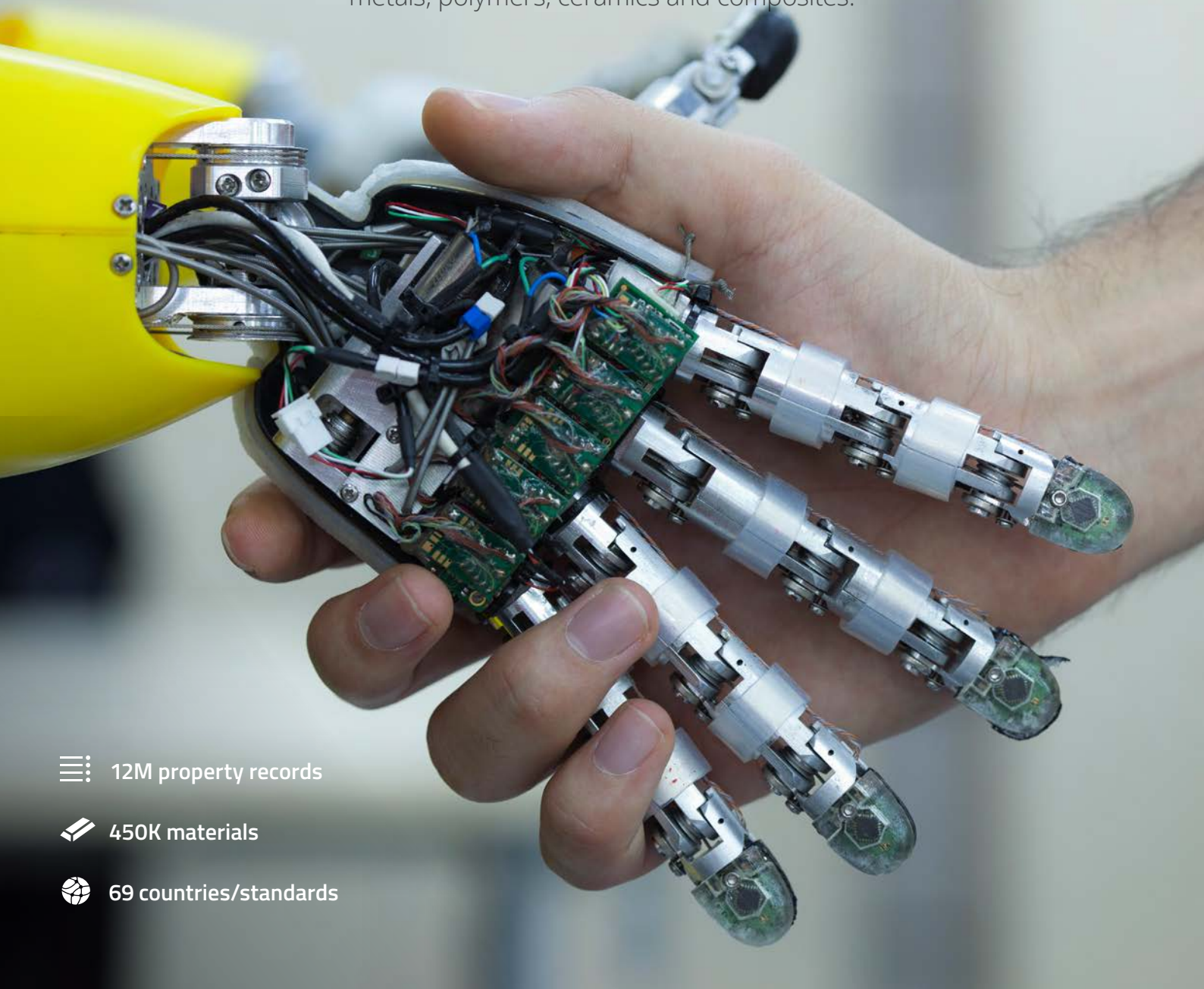
# Components


Data and functionality modules that combine to provide the ultimate all in one solution



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 which serve the global engineering community.

Total Materia is the world's most comprehensive materials database providing lightning fast access to properties for over 450,000 metals, polymers, ceramics and composites.



 12M property records

 450K materials

 69 countries/standards









- ✓ Properties for 450,000+ Materials
- ✓ 2,000+ Sources for Advanced Data
- ✓ Metals, Polymers, Ceramics, Composites
- ✓ 150,000+ Stress-Strain Curves
- ✓ 69 Standard Development Organizations
- ✓ 15,000+ Materials with Cyclic Properties
- ✓ International Cross-Reference Tables

- ✓ Property Estimation and Interpolation
- ✓ Chemical Composition
- ✓ Data Export to CAE Software
- ✓ Mechanical and Physical properties
- ✓ Identification of Unknown Materials
- ✓ Multiple Material Comparison Options
- ✓ Standard and Material Update Tracking

From consultants, small enterprises, and medium sized businesses, through to the largest multinational organizations, Total Materia has a package and licensing option to suit your needs.

## Components

Full-featured Total Materia Database covers metal alloys properties from 69 countries/standards and includes More than 12,000,000 property records for over 450,000 alloys – steel, iron, aluminum, titanium, copper, magnesium, tin, zinc, lead, nickel, cobalt, and more.

 <b>Total Metals</b>	<i>The World's Most Comprehensive Metals Database</i>
 <b>PolyPLUS</b>	<i>Property data for thousands of non-metallic materials</i>
 <b>Extended Range</b>	<i>Unparalleled advanced material properties resource</i>
 <b>Smart Comp</b>	<i>Immediate material identification</i>
 <b>DataPLUS</b>	<i>Providing corrosion data, dimensions and coatings</i>
 <b>eXporter</b>	<i>Bridge the gap between data source and CAE software</i>
 <b>Tracker</b>	<i>Providing important standard and material updates</i>
 <b>Suppliers</b>	<i>Metal supplier sourcing directory and search engine</i>

## PRODUCT EDITIONS



**WEB EDITION**



**DESKTOP EDITION**











**WEB+DESKTOP**

Total Materia can be accessed through a range of product edition options, including a single user desktop edition and a whole host of flexible web based options for the single users, multiuser set ups for companies small and large all the way through to corporate solutions for international businesses.

## Product Packages

Total Materia offer a range of packages carefully created to provide an ideal solution for all possible material data needs.

PACKAGES	COMPONENTS							
	 TOTAL METALS	 SMART COMP	 EXTENDED RANGE	 POLY PLUS	 EXPORTER	 DATA PLUS	 TRACKER	 SUPPLIER
<b>Essentials</b>	✓						✓	✓
<b>Essentials PREMIUM</b>	✓			✓	✓	✓	✓	✓
<b>Inspect</b>	✓	✓					✓	✓
<b>Inspect PREMIUM</b>	✓	✓		✓	✓	✓	✓	✓
<b>Design</b>	✓		✓				✓	✓
<b>Design PREMIUM</b>	✓		✓	✓	✓	✓	✓	✓
<b>PowerPack</b>	✓	✓	✓				✓	✓
<b>PowerPack PREMIUM</b>	✓	✓	✓	✓	✓	✓	✓	✓





# Total Metals

The World's Most Comprehensive Metals Database



10M property records



350K materials



69 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

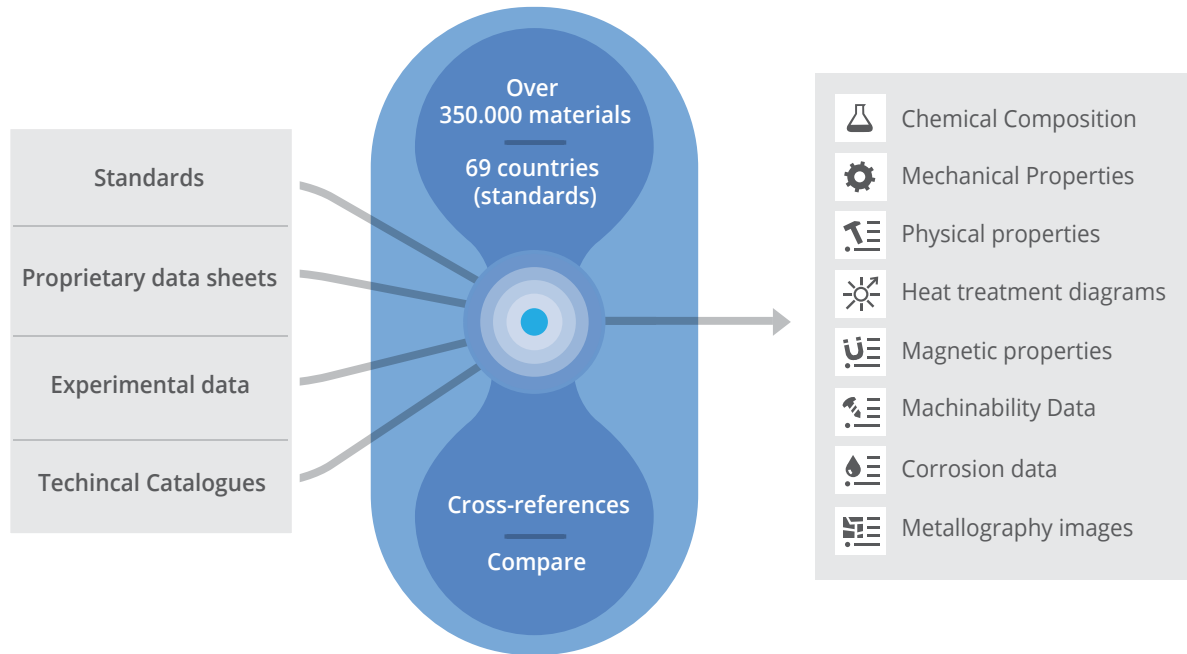
- ✓ The largest resource of metal properties available for basic and complex engineering activities
- ✓ International cross reference tables from 69 countries giving the ultimate assistance in identifying similar and equivalent materials
- ✓ Standard data complimented by thousands of proprietary materials and other sources providing the complete solution

## The Benefits

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

# The World's Most Comprehensive Metals Database

Focused on providing standard metal properties data, Total Metals provides you with a staggering 10 million property records for over 350,000 materials from 69 countries/standards.



Properties

Conditions Standards

Display: table 10 diagrams

Property	TYP	Value	Unit
Thermal conductivity	100	57.8	W/m°C
	200	55.2	W/m°C
	300	49.4	W/m°C
	400	45.6	W/m°C
	500	41	W/m°C
	600	36.8	W/m°C
	700	33.1	W/m°C

## 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 ☐ Material ☐ Official ☐ Composition data ☐ Other sources ☐ Results ☐ SmartCross<sup>2</sup>

Resulted Round 811

MATERIAL	COUNTRY / STANDARD	EQUIVALENCY CATEGORY	COMPARE
6617H170002	China / GB	Official	[X]
6617H170002	China / GB	Official	[X]
6617H170002	China / GB	Official	[X]
6617H170002	China / GB	Official	[X]

## 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.



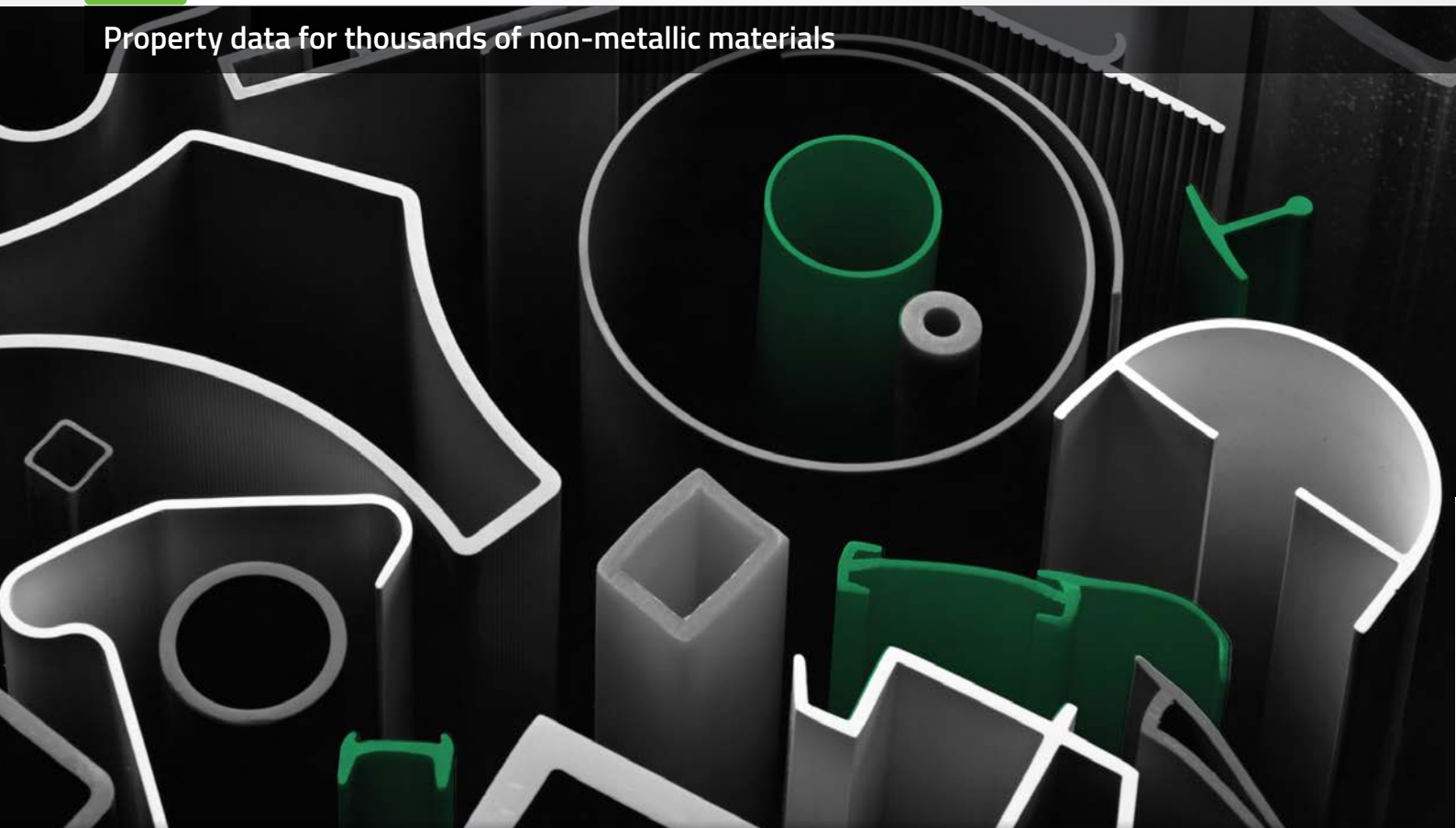
## UNPARALLELED DEVELOPMENT & CUSTOMER SUPPORT

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!



# PolyPLUS

Property data for thousands of non-metallic materials



Polymers

Ceramics

Composites

Fibers

Cements

Foams

Honeycombs

Wood

PolyPLUS is the non-metallic material properties dataset for thousands of plastics, ceramics, composites, fibers, cements, foams, honeycombs and wood

## The Challenge

- Finding precise traceable standard and proprietary material property data for polymers, composites, ceramics, fibers, cements, foams, honeycombs and wood
- Simultaneous comparison of different kinds of metallic and non-metallic materials and finding the best alternatives
- Sourcing rare advanced properties information for FEA/CAE calculations including stress-strain and fatigue data

## The Solution

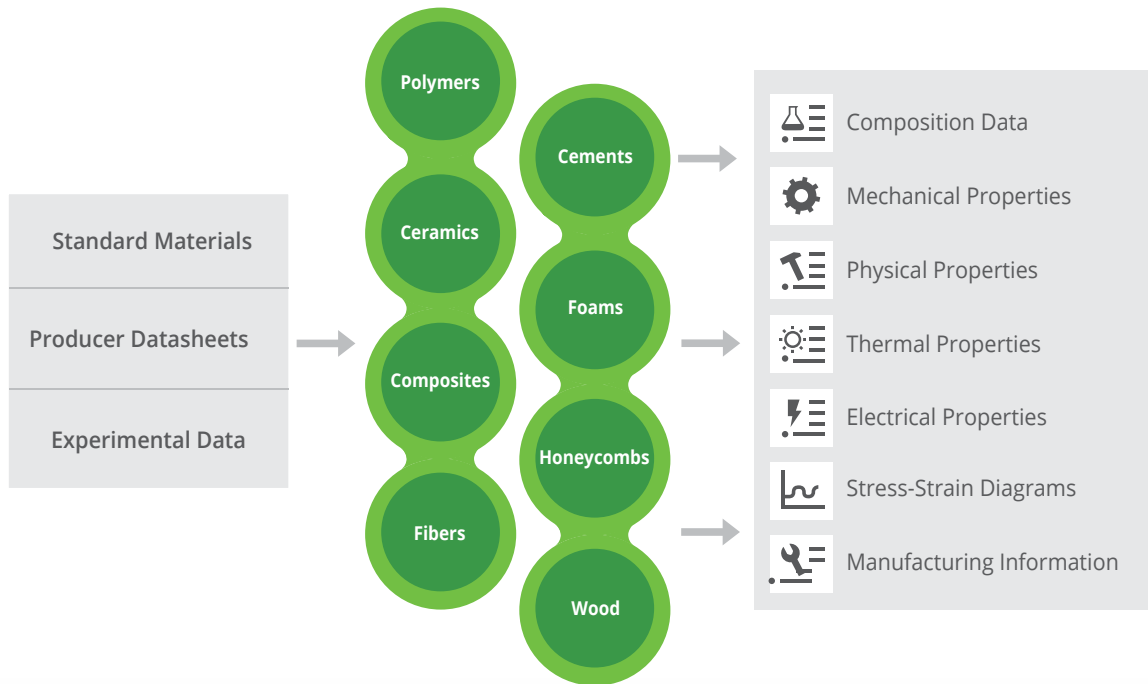
- ✓ Non-metallic material properties data for tens of thousands of plastic, ceramic, composites, fibers, cements, foams, honeycombs and wood
- ✓ Containing thousands of both standard and proprietary materials
- ✓ Effortless searching of advanced property data for non-metallics including stress strain curves and cyclize properties

## The Benefits

- One stop resource for all material properties data needs
- New opportunities in design by comparing the performance of completely diversified materials



Integrated with the Total Metals database which contains over 350,000 metallic alloys, PolyPLUS allows Total Materia to be used as a truly one stop solution for your material needs.



Mechanical Properties				
Room Temperature (1) High Temperature (2) Low Temperature (3)				
Property	Value	Units	Notes	
Cond. 20%RH				
Ball indentation hardness	179	MPa	Test Method: ISO 15705-1	
Residual Strength	105	MPa	2 min/min Test Method: ISO 178	
	95	MPa	at 10% loss; 2 min/min Test Method: ISO 178	
Tensile Strength	40	MPa	at Break; 5 min/min Test Method: ISO 527-1:2	
	64	MPa	at Break; 5 min/min Test Method: ISO 527-1:2	
Sample Strain	1.2	%	at Break; 5 min/min	

## ULTIMATE ONE STOP RESOURCE FOR ALL MATERIAL PROPERTY NEEDS

In combination with the world's most comprehensive metals properties database, PolyPLUS provides all the benefits of the Total Metals database for non-metals including property information for thousands of plastics, ceramics, composites, fibers, cements, foams, honeycombs and wood materials and all available at the click of a button!



## ADVANCED PROPERTY DATA FOR NON-METALS

As well as housing a unique collection of advanced property data for metallic materials, Extended Range also offers a comprehensive set of stress strain curves and fatigue data for non-metals.

Physical Properties				
General (1) Thermal (2) Flammability (3) Electrical (4) Rheological (5)				
* Use condition selector to view data for all conditions				
Conditions				
Properties				
Conditions: Cond. 1: Fiber volume (40.0)				
Property	Value	Units	Notes	
Modulus of Elasticity	55	GPa	Test Method: ASTM D3039	
	24	GPa	Test Method: ASTM D3039	

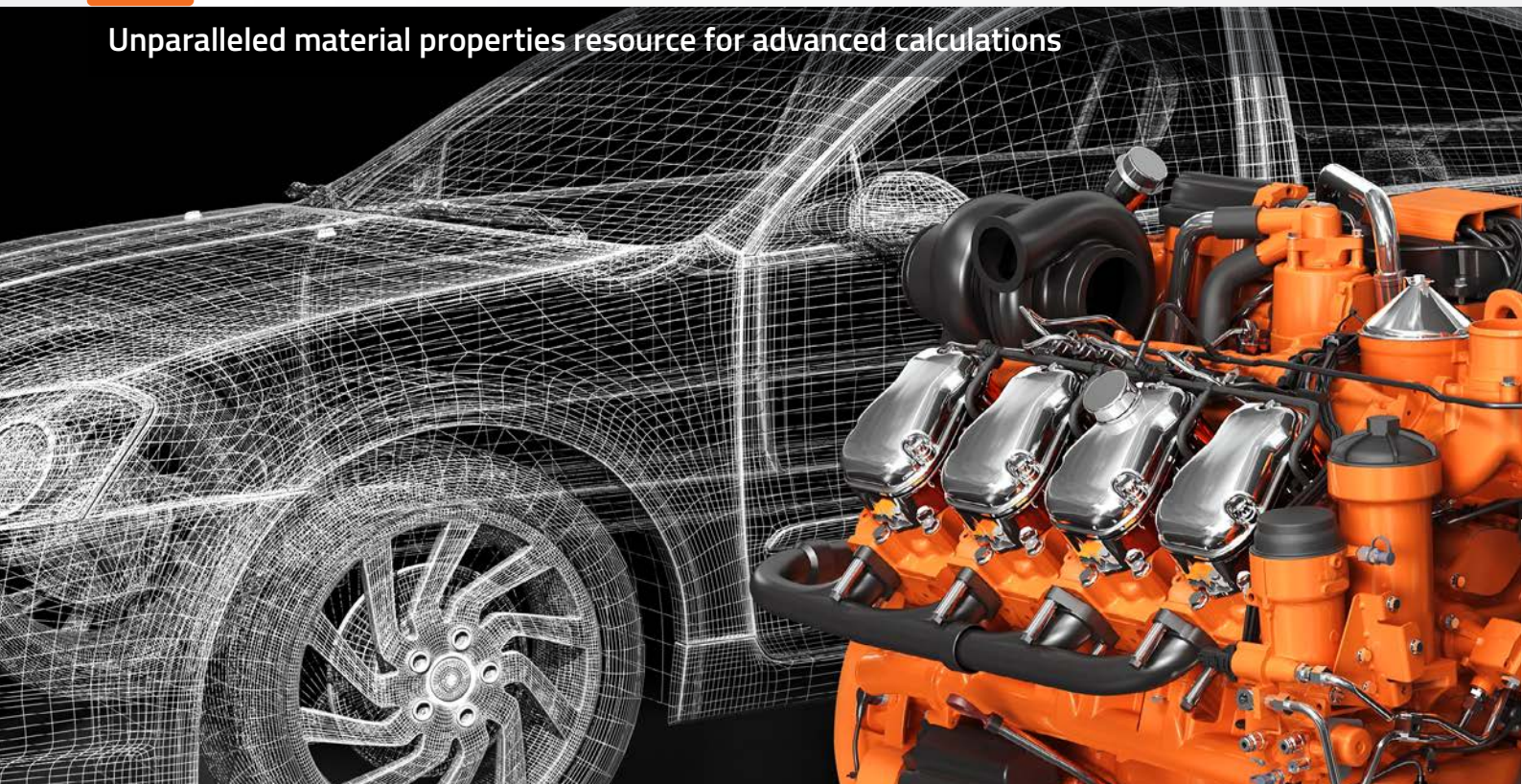
## UNPARALLELED DEVELOPMENTS AND UPGRADES

Through our dedicated PolyPLUS team, new data and functionality upgrades are added on a monthly basis meaning that our growing library of non-metals is fast becoming an indispensable resource for the engineering community.



# Extended Range

Unparalleled material properties resource for advanced calculations



Stress-Strain Diagrams



Formability Curves



Fatigue Data



Creep Data

Extended Range offers a unique collection of advanced property data  
for use in critical design activities

## The Challenge

- Finding material data essential for advanced engineering calculations and computer aided engineering (CAE) and finite element analysis (FEA) simulations
- Obtaining stress-strain curves at various temperatures and at different strain rates
- Comparing fatigue properties of different origins for example American, European and Asian materials

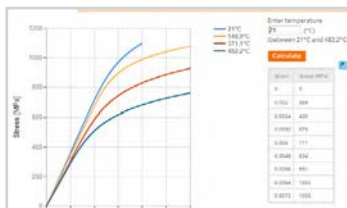
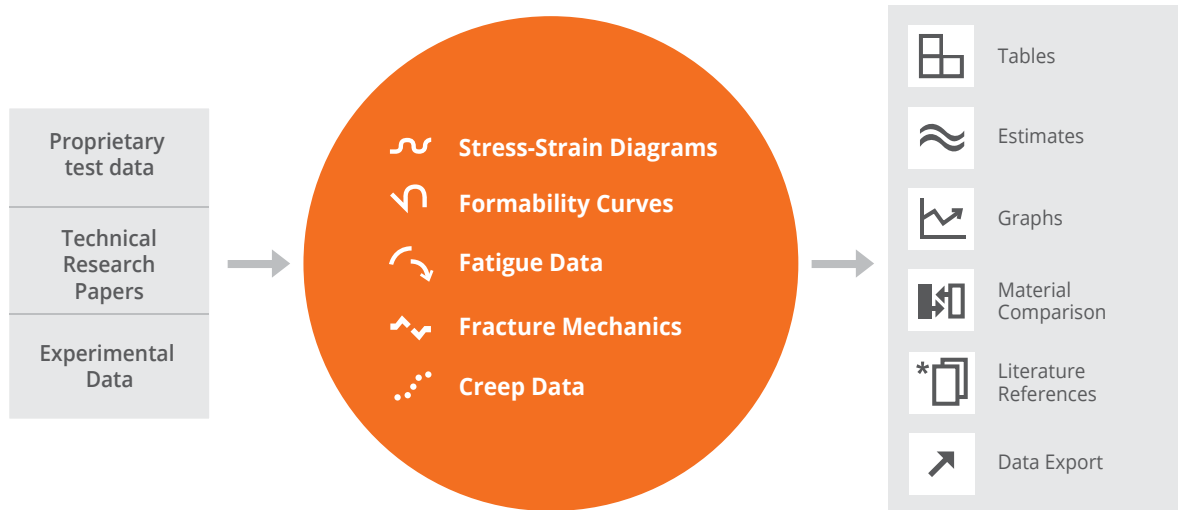
## The Solution

- ✓ Offers a unique collection of advanced property data for use in critical design activities
- ✓ Effortless efficiency in the extremely time consuming task of finding reliable material property information, for advanced calculations
- ✓ Proprietary data acquisition methodology for experimental data from over 2,000 references and documents

## The Benefits

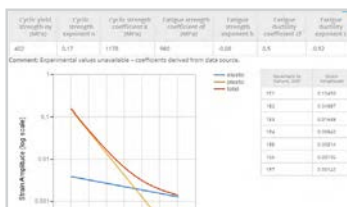
- Avoiding costly and potentially dangerous errors
- Opening new opportunities for more optimized and cost-effective design
- Enhancing accuracy and efficiency throughout the entire process chain

Total Materia's Extended Range dataset provides an unparalleled material properties resource for advanced structural and thermal calculations and analysis including: stress-strain curves, formability diagrams, fatigue data and more.



## THOUSANDS OF STRESS-STRAIN CURVES

Unique collection of more than 150,000 stress-strain curves for calculations in the plastic range covers more than 48,000 materials, with various heat treatments, working temperatures and strain rates, from quasistatic to over 1,000 1/s. Both true and engineering stress curves are given, with a possibility to interpolate curves for user-defined temperatures and strain rates.



## LARGEST COLLECTION OF CYCLIC PROPERTIES

The largest database of strain-life and stress-life parameters for more than 15,000 materials, e-N and S-N diagrams, for various heat treatments and loading conditions. Monotonic properties are included for reference along with statistical fatigue parameters where applicable.

**Creep Data**

Measurement units: °F scales (°C) angle (rads)

Select condition: 1. Quenched and tempered Bars

Condition: Quenched and tempered bars

Creep Data: Larson-Miller Parameter

Temperature (°C)	10% Yield Stress (MPa)	0.1% Yield Stress (MPa)	Creep Rupture Strength (MPa)
100	308	190	248
200	187	102	238
370	161	107	228
500	174	145	217

## PROPRIETARY METHODOLOGY FOR PROPERTIES ESTIMATION

Based on Total Materia cross-reference tables and properties of equivalent materials, Extended Range provides estimates for stress-strain curves for additional 90,000 materials and cyclic properties for another 60,000. Although estimates cannot completely replace experimental data, they provide a valuable starting point for further research and calculations.



## MORE ADVANCED PROPERTIES FOR DESIGN AND SIMULATION

Forming limit and high-strain curves at a range of temperatures, for simulating forging, drawing and other forming operations. Fracture mechanics K<sub>1C</sub>, K<sub>C</sub>, crack growth and Paris law parameters are presented, with the corresponding graph of crack growth. Creep data including yield stress and creep rupture strength at different temperatures with the calculation of Larsen-Miller parameter and remaining life of the component.





# SmartComp

Immediate unknown material identification



SmartComp, the add on module from Total Materia allows intelligent metal identification by chemical composition obtained from spectrometer or other analytical sources.

STEP 1

Take a chemical composition  
of an unknown material

As you get it from the measurement  
instrument, test results  
or documentation

STEP 2

Get the results  
instantly

Total Materia's proprietary  
algorithm finds suitable  
matches in seconds!

STEP 3

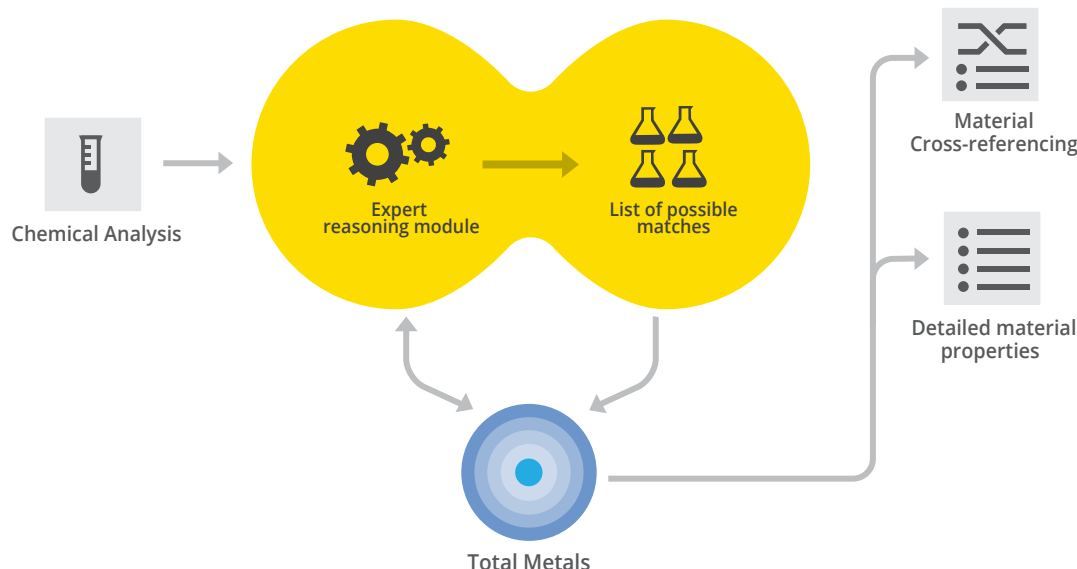
Review materials,  
properties and more

View and compare  
materials and data harnessing  
the full power of Total Metals

Tremendous time and cost savings through high speed material identification; strengthening business quality functions, from vendor assurance to material testing; expert reasoning helps to make the right decisions, and quickly!



Using a patented algorithm, SmartComp can eliminate a huge amount of working time dedicated to research and increases efficiency by allowing fast, multi-criteria material identification.



**SmartComp Standard mode**

Select element: **Fe**      Select compound: **Fe**

Element	Value	Element	Value	Element	Value	Element	Value
C	0.10	Si	0.02	Al	0.02	Fe	0.81
Mn	0.02	Ni	0.01	V	0.00	Cr	0.01
P	0.02	S	0.01	Se	0.00	Br	0.00
S	0.01	N	0.00	Ag	0.00	Fe	0.81

## EXPERT REASONING THROUGH PATENTED TECHNOLOGY

Designed to “think” like an expert, SmartComp carries out what would be extremely time consuming manual research work in a matter of seconds. Using a patented algorithm SmartComp ensures that problematic trap elements, impurities and oligoelements do not bog the identification process down and focuses the search on the most important elements to the user.

Total items found: 393

Forward to Advanced Search

Material	Country/Standard	Similarity
1.2067	Austria / ONORM	0.94
1.2067	Belgium / NBN	0.94
1.2067	Bulgaria / BGS	0.94
1.2067	Czech Republic / ČSN	0.94
1.2067	European Union / EN	0.94
1.2067	Finland / SFS	0.94
1.2067	France / AFNOR	0.94

## POWERED BY THE LARGEST METALS DATABASE

Even the best expert cannot do a lot without a large data library for lookup and comparison. SmartComp is therefore integrated with the Total Materia Database, setting up the possibility to compare the entered chemical analysis with composition data from over 350.000 materials, thus ensuring finding material matches is a hassle free process.

Chemical Composition (%)

Element	Value	Element	Value
C	0.95	N	0.002
Si	0.14	Sn	0.002
Mn	0.33	Nb	0.002
P	0.012	Ti	0.004
S	0.015	V	0.004
Cr	1.45	Ca	0.004
Cu	0.004	Pb	0.004

## ADVANCED IDENTIFICATION OPTIONS

In addition to Standard identification mode, advanced Expert mode offers a possibility to set the relative importance to each alloying element individually, thus obtaining matching alloys that may be more appropriate for the specific problem. Reference Materials is another module, which facilitates finding materials for calibrating spectrometers.

Compare materials

Material	Composition (%)	Material	Composition (%)
100C2	C: 0.95, Si: 0.14, Mn: 0.33, P: 0.012, S: 0.015, Cr: 1.45, Cu: 0.004	100C2	C: 0.95, Si: 0.14, Mn: 0.33, P: 0.012, S: 0.015, Cr: 1.45, Cu: 0.004

## BEYOND IDENTIFICATION

Identifying matching materials may only be one part of the story. Total Materia allows direct access from the material match list to material properties, thus providing a possibility for a more detailed comparison of candidate materials and their properties, including side-by-side comparison option, and combining comparison of chemical composition and mechanical properties using cross-reference tables and SmartCross<sup>2</sup> module.



# DataPLUS

Corrosion data, material welding info, dimensions and coatings information for thousands of materials



Corrosion



Joints



Dimensions



Coatings

DataPLUS is a supplementary data module providing corrosion data, material joining information, material dimensions and tolerances and coatings information for thousands of metallic and non-metallic materials

## The Challenge

- Understanding corrosion behaviour of materials in real life applications
- Material and consumables selection for successful welding operations
- A unified view of both material property and dimensional data
- Finding coatings and their properties related to materials in one unified platform
- Communicating between engineering and purchasing avoiding potential errors

## The Solution

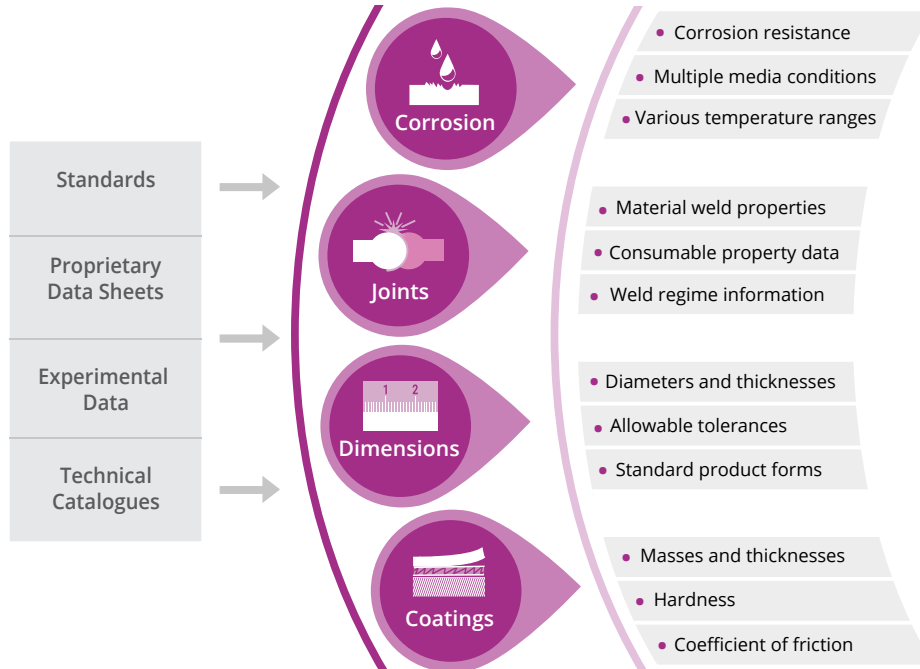
- ✓ DataPLUS covers a wide range of information within its four data sub-sets acting as a critical additional resource for the process of material selection
- ✓ Completely integrated, DataPLUS connects seamlessly to other key information such as chemical composition, tables of equivalent materials, mechanical and physical properties, which means viewing the bigger picture is effortless

## The Benefits

- Drives more accurate material selections
- Provides further insight into material behavior in real life conditions
- Widens the scope of finding bulk material properties
- Bridges the gap between the processes of design and material acquisition

## Providing corrosion data, material welding information, dimensions and coatings

In synergy with the primary material databases, Total Metals and PolyPLUS, DataPLUS supports and supplements key industrial application decisions by helping make accurate and considered choices relating to material selection and usage.



CONDITION	
1	Acid gas chlorine gas Dry 1: 200°C
2	Acid gas chlorine gas Dry 1: 300°C
3	Acid gas chlorine gas 1: 300°C
4	Acid gas hydrogen chloride Dry 1: 200°C
5	Acid gas hydrogen chloride Dry 1: 300°C

Properties	
Selected Condition: Acid gas chlorine gas Dry 1: 200°C	
Property	Value
Corrosion Rate (mg/m <sup>2</sup> )	30
Temperature (°C)	200

### CORROSION DATA FOR THOUSANDS OF MATERIALS

Find information about material corrosion rates and corrosion resistance in diversified environments and at a range of temperature conditions. Corrosion data including media, temperature, exposure time, and corrosion type are seamlessly integrated with mechanical and physical properties, thus providing a unified platform for material selection.

Condition	
Electrode	ER 405 USA / AWS
Welding method	GTAW
Joint geometry	Butt joint
Shielding gas	Argon, flow rate 10 l/min
Comment	Current 120 Amps, welding speed 30 mm/min, arc voltage 19-21 V, Electrode 2% Thoriated Tungsten, number of passes 3

Properties of joint			
joint			
Mechanical Properties			
Property	Value	Unit	Note
An welded joint (condition 1 & 2) 1.0 x 1.0 x 1.0 in x 1.0 in			

### WELDING INFORMATION FOR GLOBAL MATERIALS AND CONSUMABLES

Find critical welding information such as mechanical properties at joint, information for thousands of material combinations, base material property data, consumable characteristics and references to related welding methodologies.

European (EN) / EN	
Standard	EN 121-18
Standard description	Copper and copper alloys - hot dip plated strip
EN 121-18	2018

Tolerance on thickness for strip before tinning	
Thickness (mm)	Tolerance (mm)
0.1 - 0.2	±0.010
0.2 - 0.3	±0.015
0.3 - 0.4	±0.018
0.4 - 0.5	±0.020
0.5 - 0.6	±0.022
0.6 - 0.8	±0.025
0.8 - 1.0	±0.030

### FIND DIMENSION AND TOLERANCE INFORMATION IN SECONDS

A must have to bridge the gap between engineering and purchasing, the dimensions and tolerances dataset allows you to find information relating to specific material product forms measurements and their permissible variations.

Minimum coating mass (total of both sides)	
Coating mass (g/m <sup>2</sup> )	Coating mass (g/m <sup>2</sup> )
10	10
20	20
30	30
40	40
50	50
60	60
70	70
80	80
90	90
100	100

### SEARCH FOR COATINGS INFORMATION TO UNDERSTAND PERFORMANCE

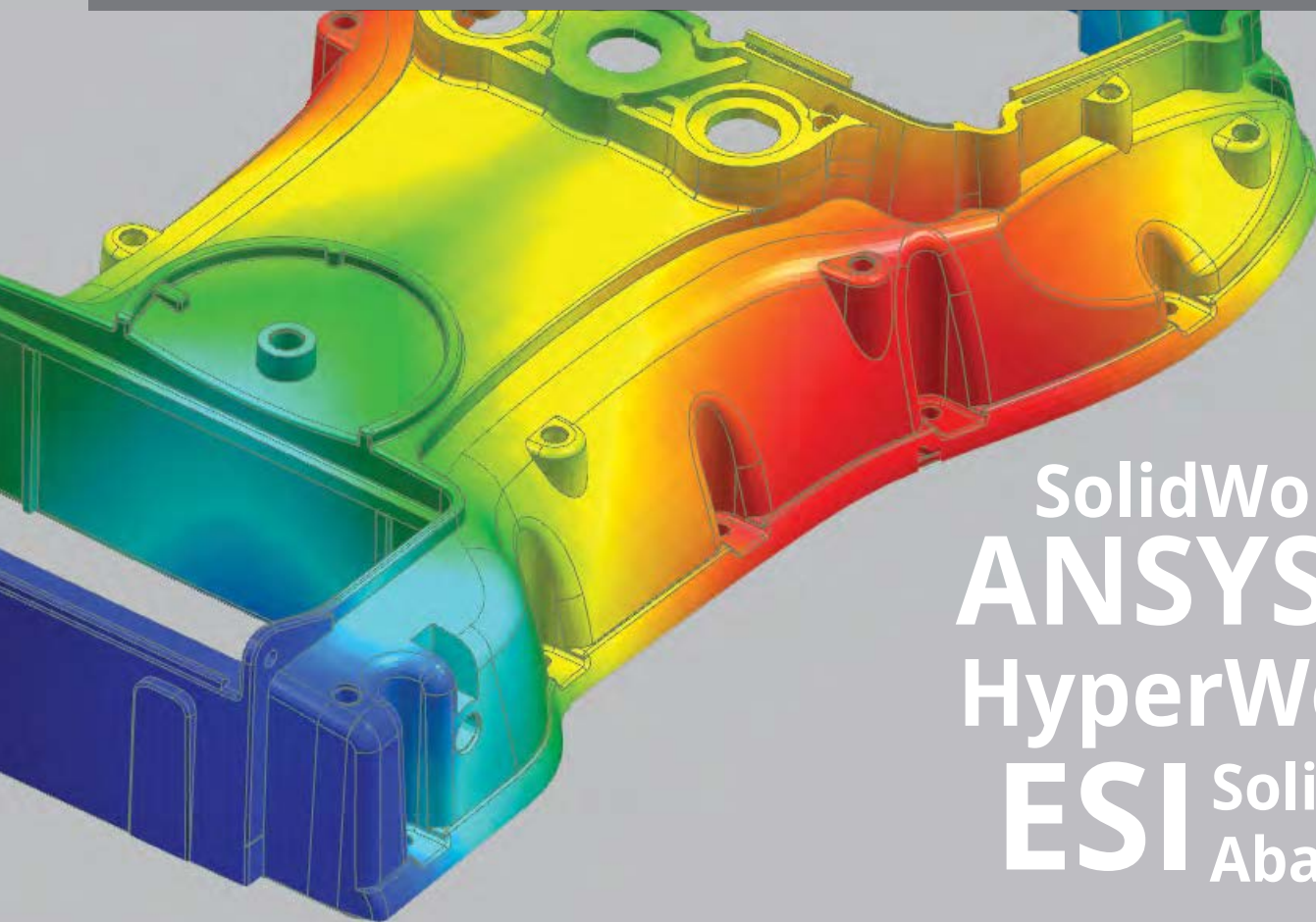
Hundreds of coating designations available with dimensional and properties data to help drive accurate decisions relating to coating selection and performance. Using the simple search interface, find properties such as dimensions, maximum working temperature, hardness and much more.





# eXporter

Bridge the gap between data source and CAE software



SolidWorks  
**ANSYS** XML STL  
HyperWorks  
**ESI** Solid Edge  
Abaqus

eXporter is the add on module which primarily helps bridge the gap between data source and computer aided engineering (CAE) software.

## The Challenge

- Finding advanced property data for linear and non-linear CAE calculations in a ready to use solver format
- Importing data from source into CAE software without the need for additional data processing, copying, pasting and retyping
- Obtaining reliable inputs for material properties thus avoiding dangerous and costly errors
- Carrying out multiple and repeatable design tasks in the most efficient way possible

## The Solution

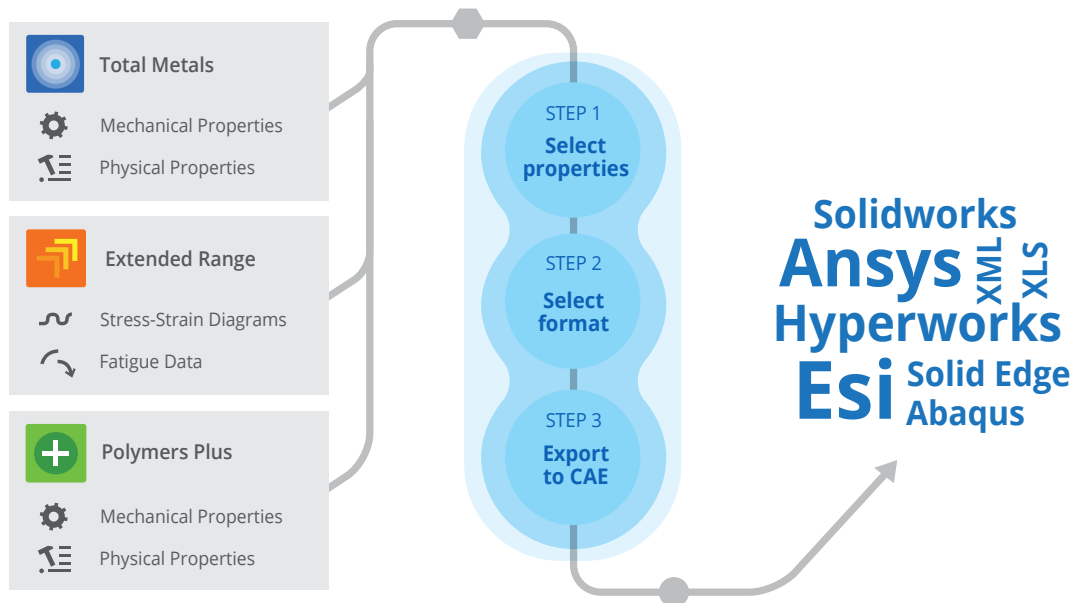
- ✓ eXport a wealth of data for use in multiple design activities, from mechanical properties to stress-strain curves
- ✓ Simple 3 step process for selection, checking and importing data into a wide range of top CAE solver formats
- ✓ Fast and accurate transfer of data without the need for data processing or retyping

## The Benefits

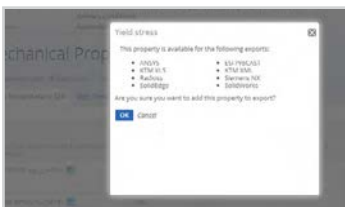
- Tremendous time savings, whilst relieving you from tedious retyping
- Increasing accuracy through elimination of data editing errors
- Streamlining and systemizing data acquisition workflow



Whether you want to move data from Total Materia directly to CAE software or simply export in excel or .xml, eXporter provides all the functionality you need. In a form of a simple 3-step wizard, it provides multiple-format data exports in mere seconds.



**Please Note:** A maximum of 100 data set exports allowable per concurrent license for the duration of the subscription. All previous exports are available at any time and re-usable an unlimited number of times for the duration of the subscription.



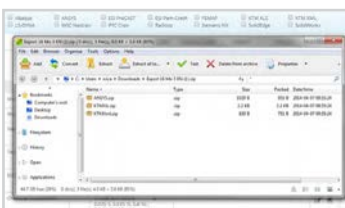
## EXPORT FROM THE ULTIMATE RESOURCE

Total Materia offers the world's largest material properties resource and it is now possible to select data from a collection of over 450,000 materials and 12 million property records, and then export ready for use in the next step of the design process.



## COMPREHENSIVE CHOICE OF CAE SOFTWARE FORMATS

eXporter can be used to export critical material data for advanced calculations such as mechanical, physical, stress strain and cyclic data in a number of CAE software compatible formats. From bespoke xml., to simple xls. eXporter makes the transit of data from source to software quick and easy.



## SEAMLESS INTEGRATION OF TOTAL MATERIA MODULES

Maximizing the potential of eXporter, the entire Total Metals and Extended Range data sets can be used to find the properties of interest. With full access to the largest international cross-reference tables and comparison functionalities, the full power of Total Materia can be utilized to ensure the selection of data for export is backed up by informed and traceable decisions.



# Tracker

## Traceability of standard and material updates



Material



Standard



Producer



Favorites tracking

In today's ever increasing pace of changing international standards, and producer specifications, Tracker is the Total Materia answer to your critical material traceability needs.

### The Challenge

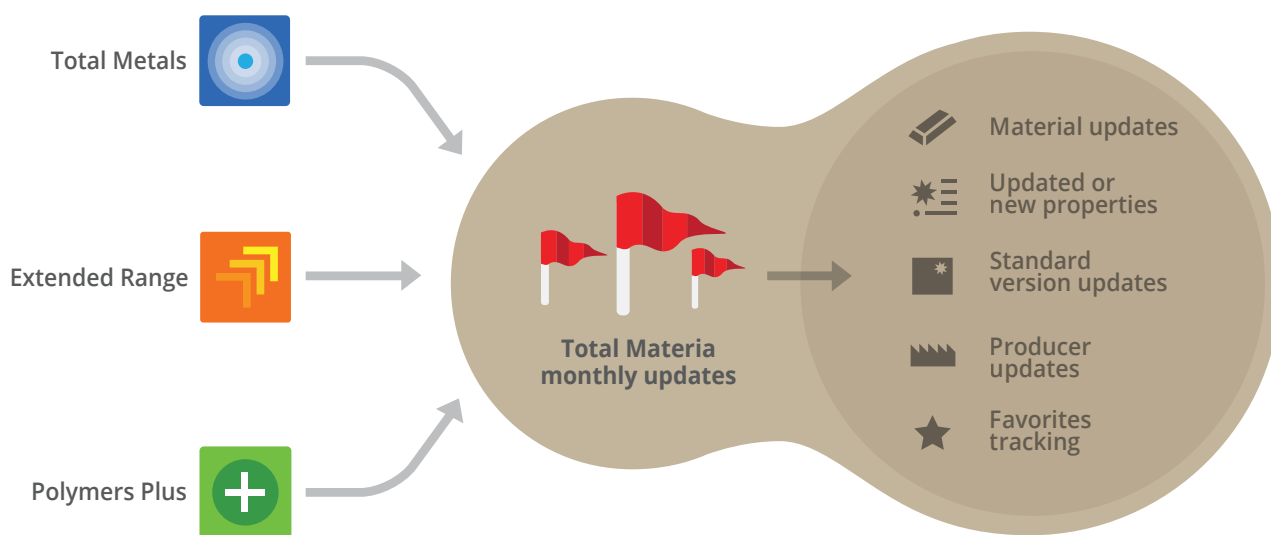
- Ensuring the most up to date information available is being used for the job
- Providing reliable, accurate and traceable information to other areas of the business
- Staying up to date with material, standard and specification changes
- Contributing to company best practices relating to information usage, configuration management and overall process quality

### The Solution

- ✓ Making sure that the data being used is the most up to date and therefore most reliable information available
- ✓ See exactly what has changed within the database and when from standard version updates to property data changes
- ✓ Track the favourite materials and their changes according to specific engineering needs

### The Benefits

- Confidence that accurate and up-to-date information is used
- Avoiding unnecessary costs for standards acquisition
- Driving business excellence through an optimized information usage workflow



Providing a bulletin style monthly notification service, Tracker allows, not only important standard and material updates to be monitored but even gives information on exactly what has changed within the material, whether it be updates to important properties data, addition of completely new datasets, or a simple update to version details.



# Suppliers

Supplier sourcing directory and search engine



Direct suppliers



Alternative suppliers



Cross reference

The Suppliers module in synergy with the Total Materia module gives you precise connections between material specifications and suppliers from all over the world.

## The Challenge

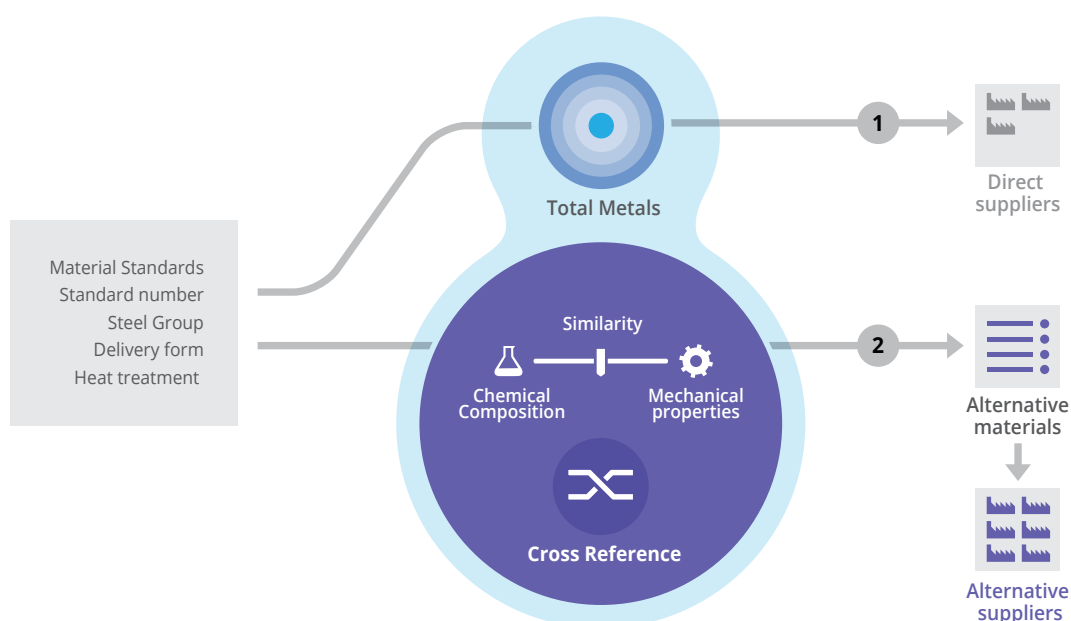
- Checking for suitable suppliers quickly according to a range of selected materials
- Coping with price volatility and meeting tight deadlines for material delivery by searching for alternatives in lower cost countries
- Finding material suppliers in other countries to help coordinate global purchasing activities
- Improving communication between engineering, purchasing and manufacturing

## The Solution

- ✓ Invaluable communication tool between engineering, procurement and manufacturing
- ✓ Allows a global approach to purchasing and material sourcing in synergy with international cross reference tables
- ✓ Find alternative suppliers at the click of a button through seamless integration with all Total Materia packages

## The Benefits

- Opens new opportunities for cost saving in material sourcing
- Brings engineering and procurement together
- Linking materials with suppliers helping avoiding costly errors in the decision making process



Allowing a direct link between materials of interest and finding suppliers across the globe, Suppliers allows for maximized communication and a critical starting point for the purchasing process.



# Total Materia Integrator

New material database platform for increased productivity and improved accuracy



*Your Data +*



*Total Materia =*



*Total Materia Integrator*

Total Materia Integrator is a new software for creating a private company database of material information, whether it be internal standards and regulations, test data or external data sources.

## The Challenge

- Managing multiple disorganized and scattered data sources
- Making accurate material information readily available throughout the organization
- Maintaining traceability and ensuring information is accurate and up-to-date
- Keeping up with the ever increasing pace of change of standards for materials

## The Solution

- ✓ Simple, lite and easy to use, yet powerful web application for inserting and managing materials, properties and related information
- ✓ Complete traceability by tracking all changes made
- ✓ Flexibility to add a range of user defined properties, datasets and documents
- ✓ Advanced property searches, comparing materials and datasets, exporting data and much more in mere seconds

## The Benefits

**Simple:** Flexible package configuration, available online or installed

**Fast:** Immediately ready off-the-shelf access can be granted in a matter of hours

**Up to Date:** New functionalities and data upgrades every single month

**Easy to use:** Standard Total Materia interface making finding information a pain free experience

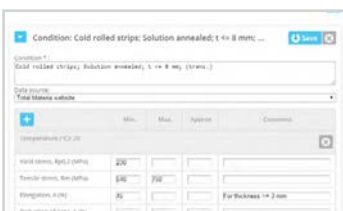
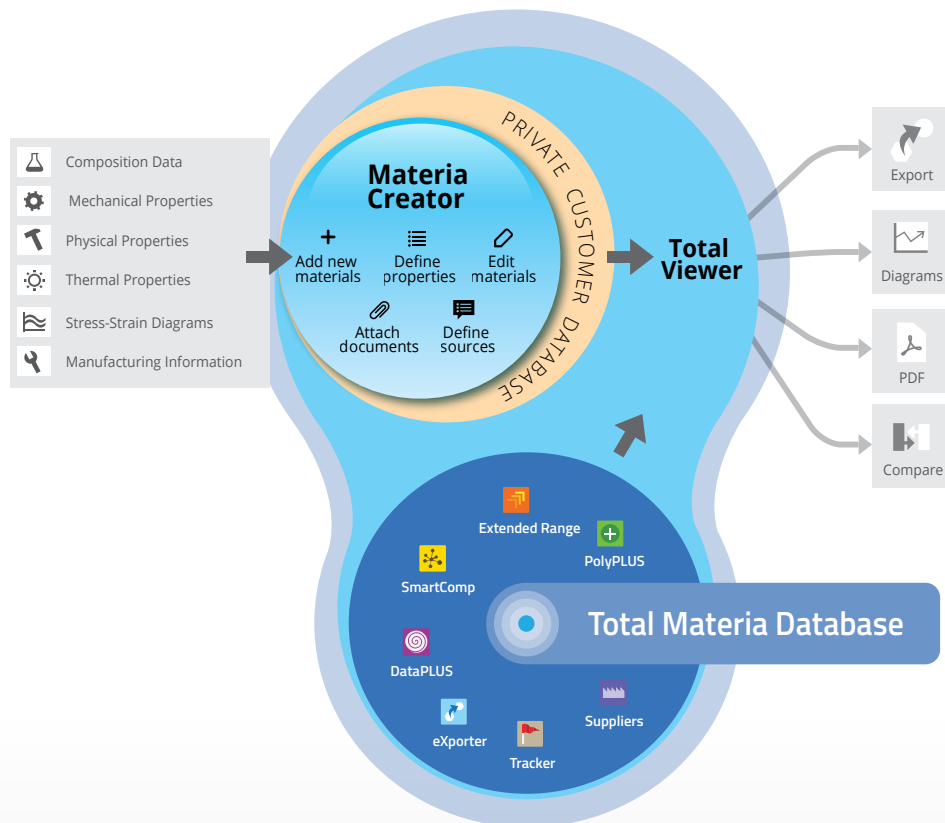
**Powerful:** Combined with Total Materia data, provides an invaluable data management tool

**Affordable:** Price is a fraction of comparative solutions on the market



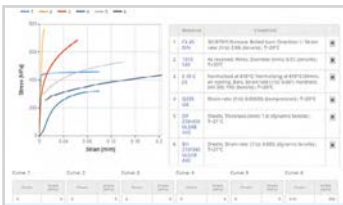
# The World's Most Comprehensive Materials Database

In synergy with the Total Materia database, Integrator provides a solid, yet easy to deploy foundation for better engineering decisions, time savings and increased reliability.



## ULTIMATE PRICE-PERFORMANCE RATIO

Integrator combines simplicity and an easy to use interface with flexibility to add multiple properties, diagrams and curves for private materials, along with a range of user defined datasets and documents. Unprecedented swiftness for deployment, huge instantaneous gains in productivity and accuracy, together with world class support, altogether, represents exceptional value for money.



## THE POWER OF INTEGRATION WITH THE WORLD'S LARGEST DATABASE

Through coupling with the Total Materia database, Integrator provides the complete scope of more than 450,000 materials, as well as the full functionality of Total Materia, such as advanced property searches, intuitive comparison tools for materials and datasets, exporting data in various formats including the leading CAE solvers and much more in a matter of seconds.

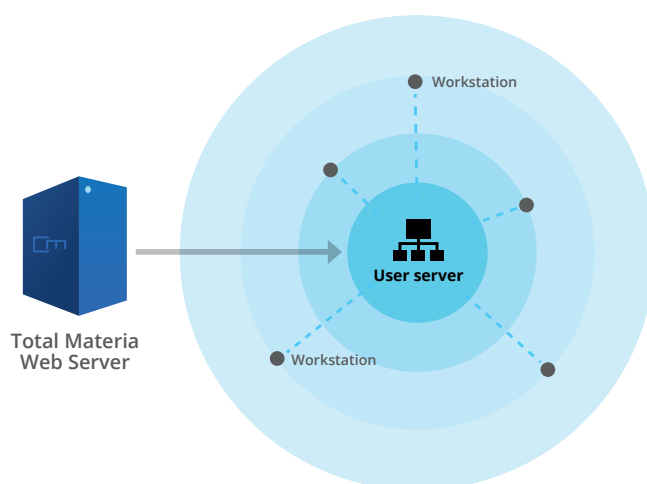


**Add Integrator to your current package immediately!**

*Contact us to arrange a demo or for more info*

# Multi-user Solutions

Multi-user web licensing with Total Materia is the most convenient and cost-effective solution for groups small and large, offices and enterprises.



## Multi-user Licensing: Network and Corporate Edition

Distribute the informational power and knowledge of the Total Materia Databases with access incorporated into your intranet. You and all your colleagues can access the database on an "as needed" basis any time, directly within your corporate network.

Multi-user solutions provide unprecedented flexibility. Select the licensing option that best fits your needs:

**Network:** Server-based license, with 3 to 6 simultaneous accesses. Provides password free convenience and distributed access for mid-sized and larger organizations.

**Corporate:** Server-based license, with unlimited number of simultaneous accesses and unlimited number of servers. Perfect price/performance ratio for large companies and centralized resource centers.

## Benefits of Multi-user Solutions

**Turn-key solution, maintenance-free:** No need to install, download, and maintain any software on your server and computers.

**Always up-to-date:** Your users will always be working with the most recent and up-to-date version of the Database.

**Fast and easy access to the database and content:** Users do not need to hassle with logins and passwords.

**Exceptional economy:** This is the most cost-effective solution if you have several individuals who need access to material properties information. Many people can have access to the database information whenever they need it.

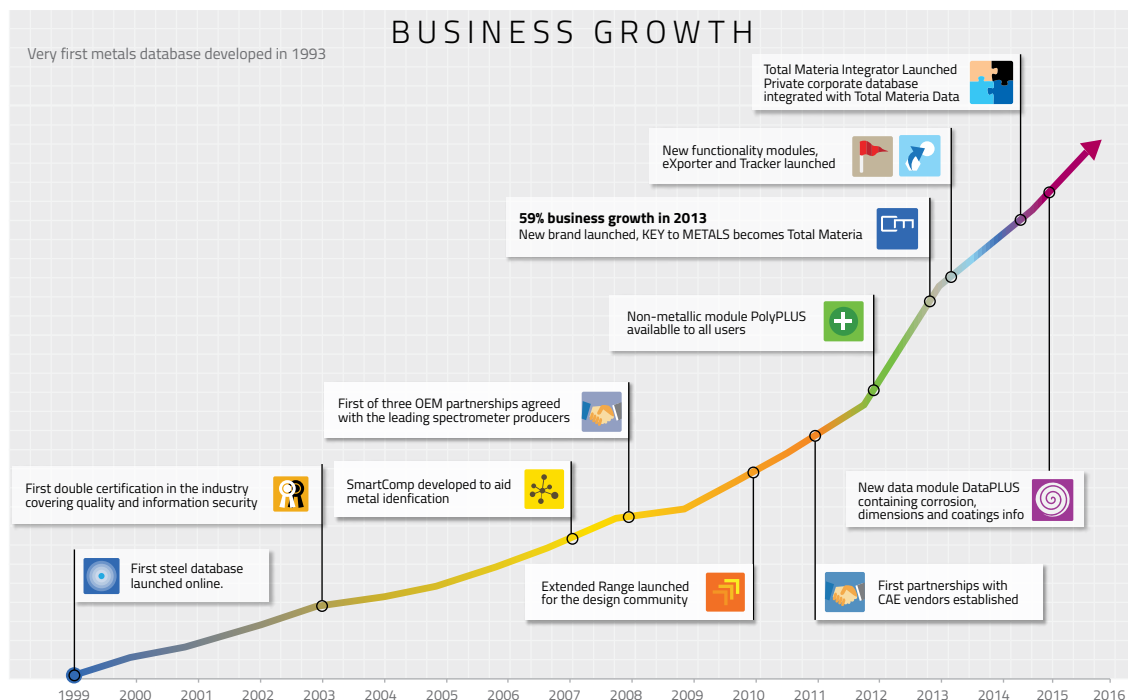
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## Pricing

Multi-user pricing is based on the number of simultaneous connections, with a minimum of 3, up to an unlimited amount through our Corporate option and also the number of locations that you want to serve.

# About us

Key to Metals AG is a privately owned Swiss company dedicated to developing and powering the Total Materia range of databases and related software applications, customized projects and OEM solutions.



## MISSION

Be the global leaders in providing the ultimate one-stop place for material properties information, thus helping engineers, professionals and companies worldwide to improve efficiency, effectiveness and reliability.

## VISION

Remain at position #1 by providing continually improving unique multi-dimensional, highly intuitive informational platforms for all material properties and be the universal choice in resolving diversified present and future technological challenges.

## OUR MAIN PRINCIPLES ARE

- ✓ **Building trust and reducing uncertainty** by providing data reliability and integrity to the highest possible level
- ✓ **Dedication to our customers** with unparalleled support, localization and presence worldwide
- ✓ **Leadership through innovation** with relentless investment into development of products and services

## For more information

[www.ihsmarkit.com](http://www.ihsmarkit.com)

### ABOUT IHS MARKIT ([WWW.IHSMARKIT.COM](http://WWW.IHSMARKIT.COM))

IHS Markit (Nasdaq: INFO) is a world leader in critical information, analytics and solutions for the major industries and markets that drive economies worldwide. The company delivers next-generation information, analytics and solutions to customers in business, finance and government, improving their operational efficiency and providing deep insights that lead to well-informed, confident decisions. IHS Markit has more than 50,000 key business and government customers, including 80 percent of the Fortune Global 500 and the world's leading financial institutions. Headquartered in London, IHS Markit is committed to sustainable, profitable growth.

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