Matmatch

Bringing material selection into the digital age

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Susanne Schwarzwälder

The evolution of shipbuilding materials

For centuries wood was the main shipbuilding material.

The evolution of shipbuilding materials

Steel is by far the most common and economic material for naval construction.

The evolution of shipbuilding materials

Today, great effort is made to increase the use of lightweight alternatives & composites in naval applications.

Introducing novel materials

The use of novel materials is always a challenge for the designers, when no exact guidelines are available.

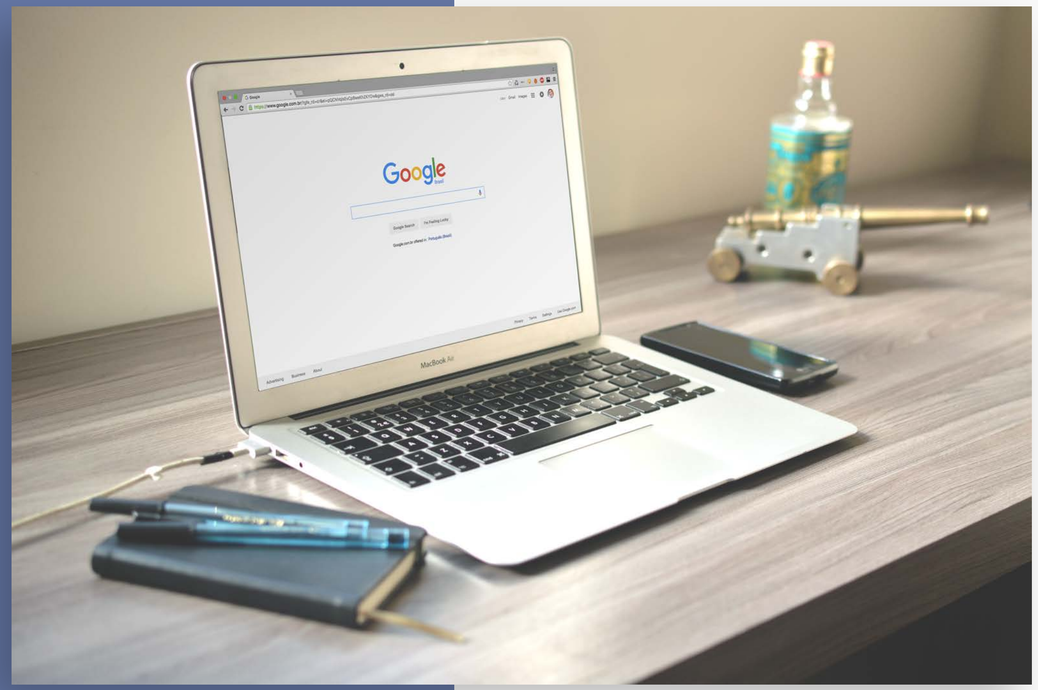
Where to find reliable material data?

Having access to comprehensive material data is key for driving innovation.

Bringing materials selection to the digital age

Not only materials have changed.

Digitization facilitates material selection and material sourcing.

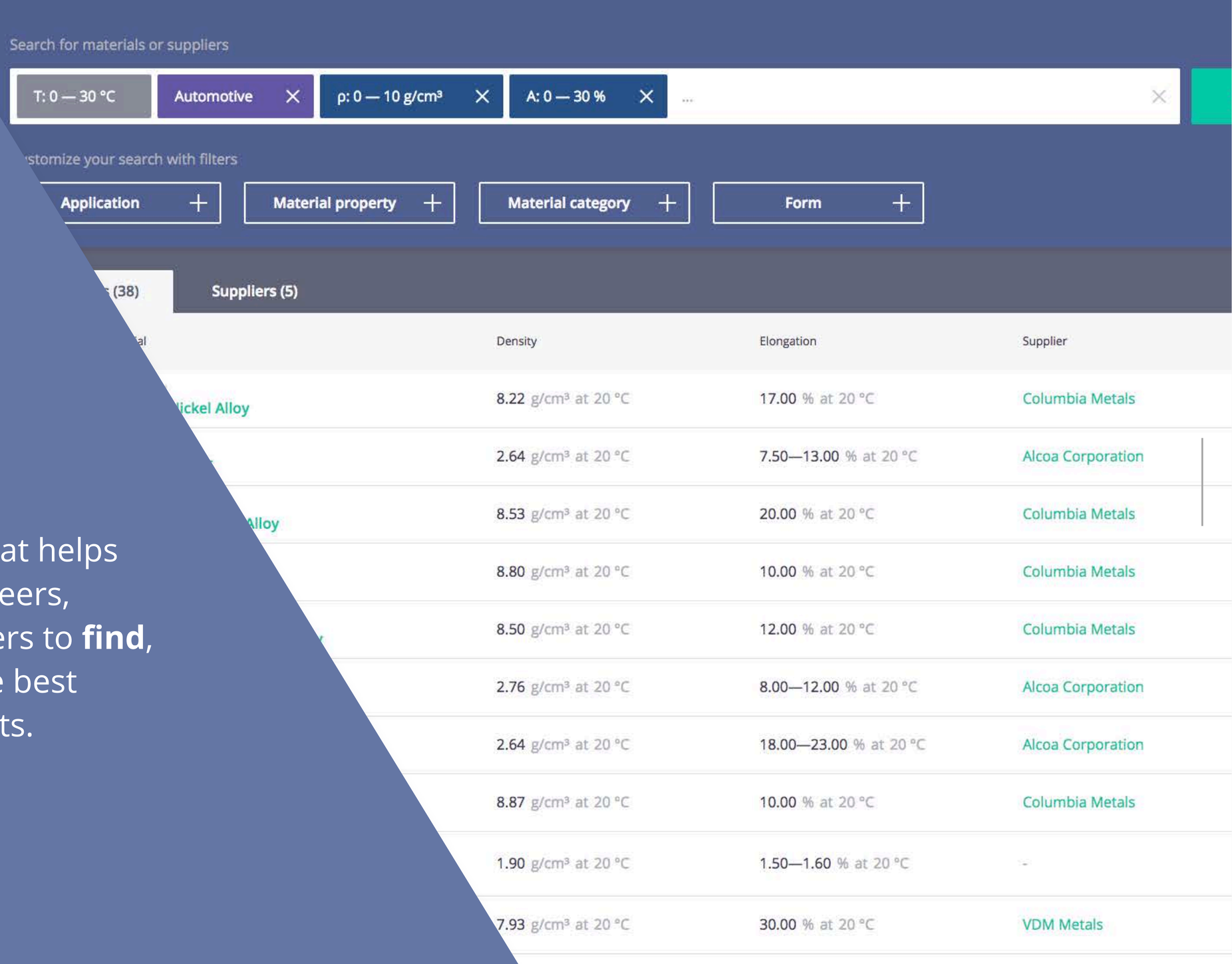


Which resources do you use for retrieving material data?

We want to inspire people to **build better products** by changing the way the world **discovers and uses materials.**

How?

With a digital platform that helps product designers, engineers, academics and researchers to **find**, **evaluate** and **source** the best materials for their projects.



How Matmatch works.

Find.

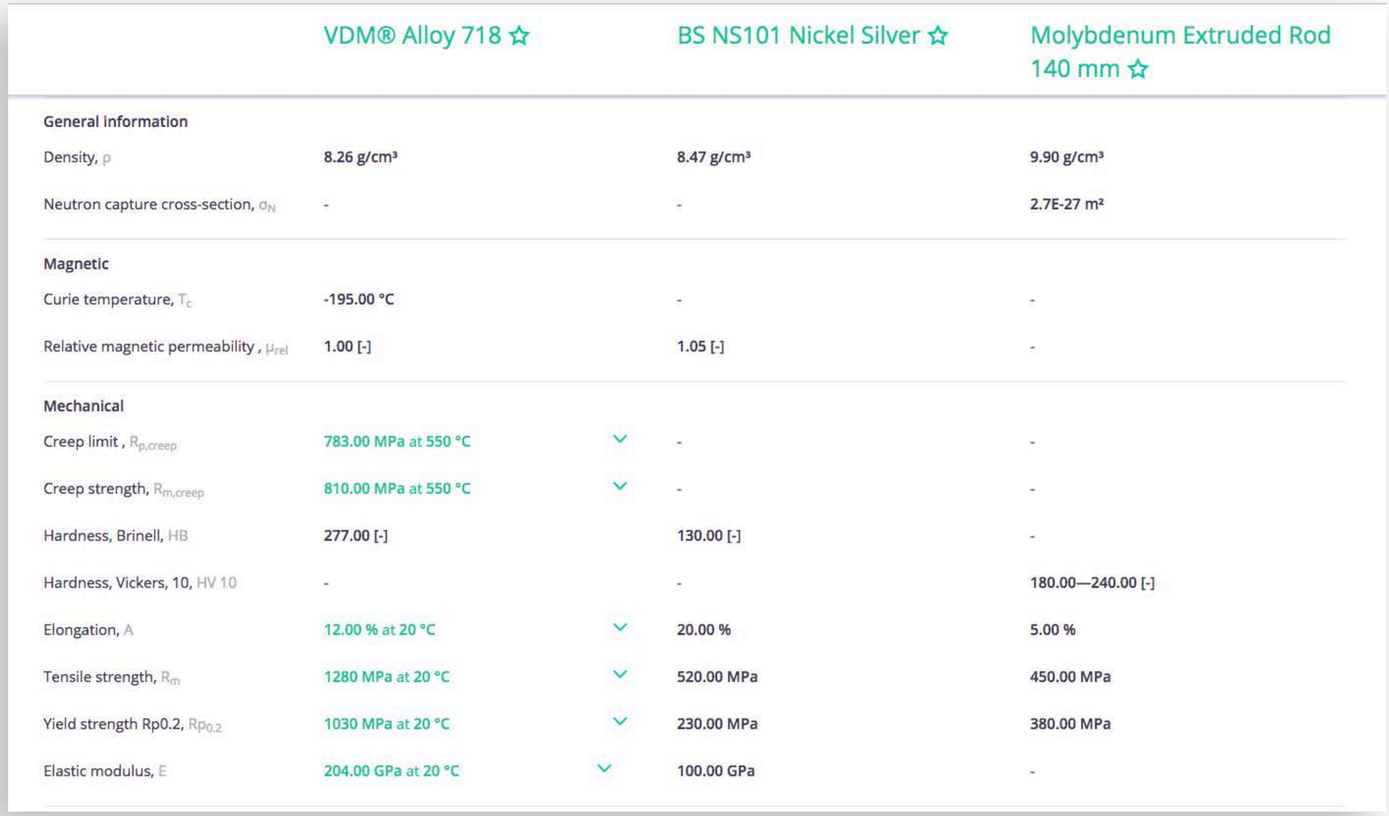
Search a database of over 80,000 materials using a wide range of filters:

- Application
- Material property
- Material category
- Form

How Matmatch works.

Evaluate.

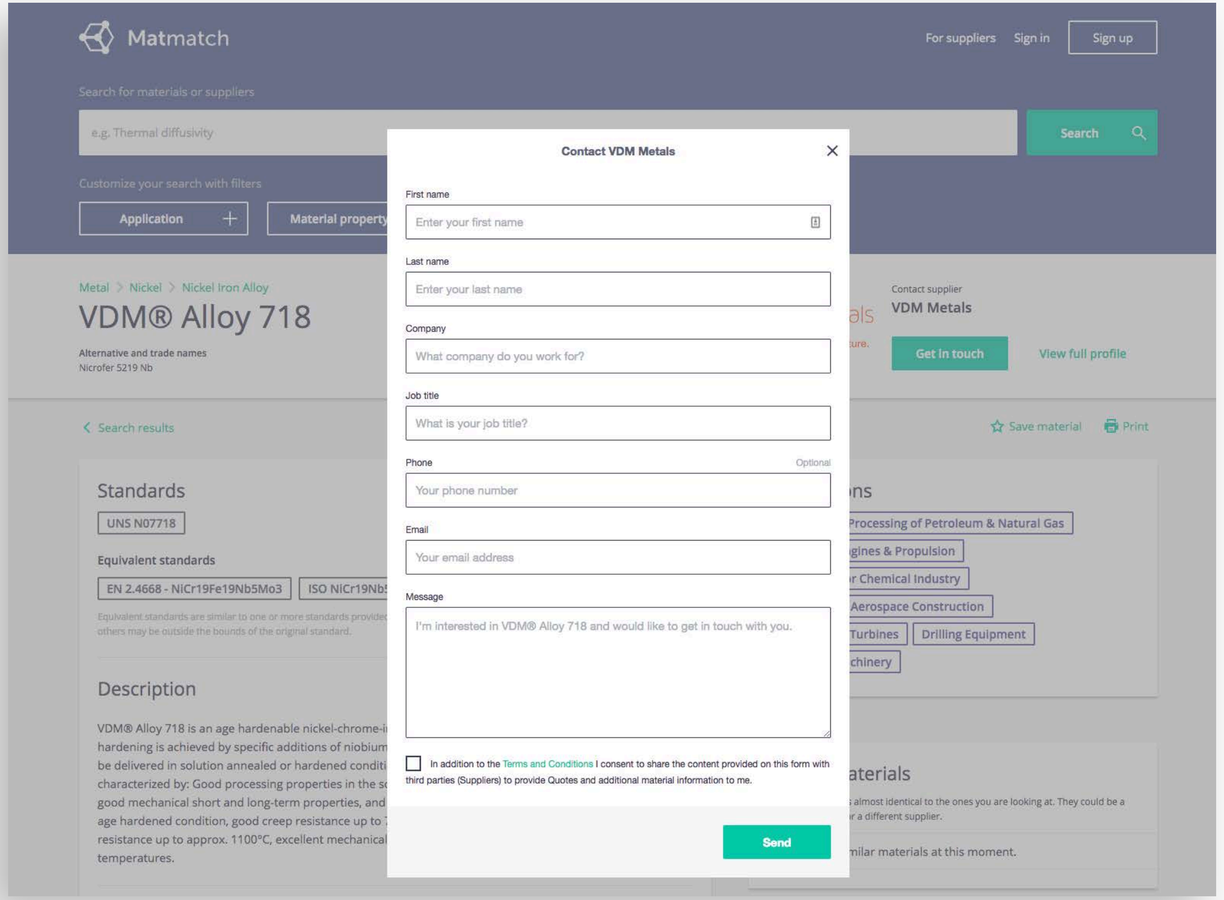
Compare different materials side-by-side to determine which one best meets your needs.



	VDM® Alloy 718 ☆	BS NS101 Nickel Silver ☆	Molybdenum Extruded Rod 140 mm ☆
General information			
Density, ρ	8.26 g/cm³	8.47 g/cm³	9.90 g/cm³
Neutron capture cross-section, σ_N	-	-	2.7E-27 m²
Magnetic			
Curie temperature, T_c	-195.00 °C	-	-
Relative magnetic permeability , μ_{rel}	1.00 [-]	1.05 [-]	-
Mechanical			
Creep limit , $R_{p,creep}$	783.00 MPa at 550 °C	-	-
Creep strength, $R_{m,creep}$	810.00 MPa at 550 °C	-	-
Hardness, Brinell, HB	277.00 [-]	130.00 [-]	-
Hardness, Vickers, 10, HV 10	-	-	180.00—240.00 [-]
Elongation, A	12.00 % at 20 °C	20.00 %	5.00 %
Tensile strength, R_m	1280 MPa at 20 °C	520.00 MPa	450.00 MPa
Yield strength Rp0.2, $Rp_{0.2}$	1030 MPa at 20 °C	230.00 MPa	380.00 MPa
Elastic modulus, E	204.00 GPa at 20 °C	100.00 GPa	-

Source.

Contact materials suppliers directly, or ask Matmatch to help find the right one.



Matmatch benefits

Free

There’s no cost to use the platform.

User-friendly

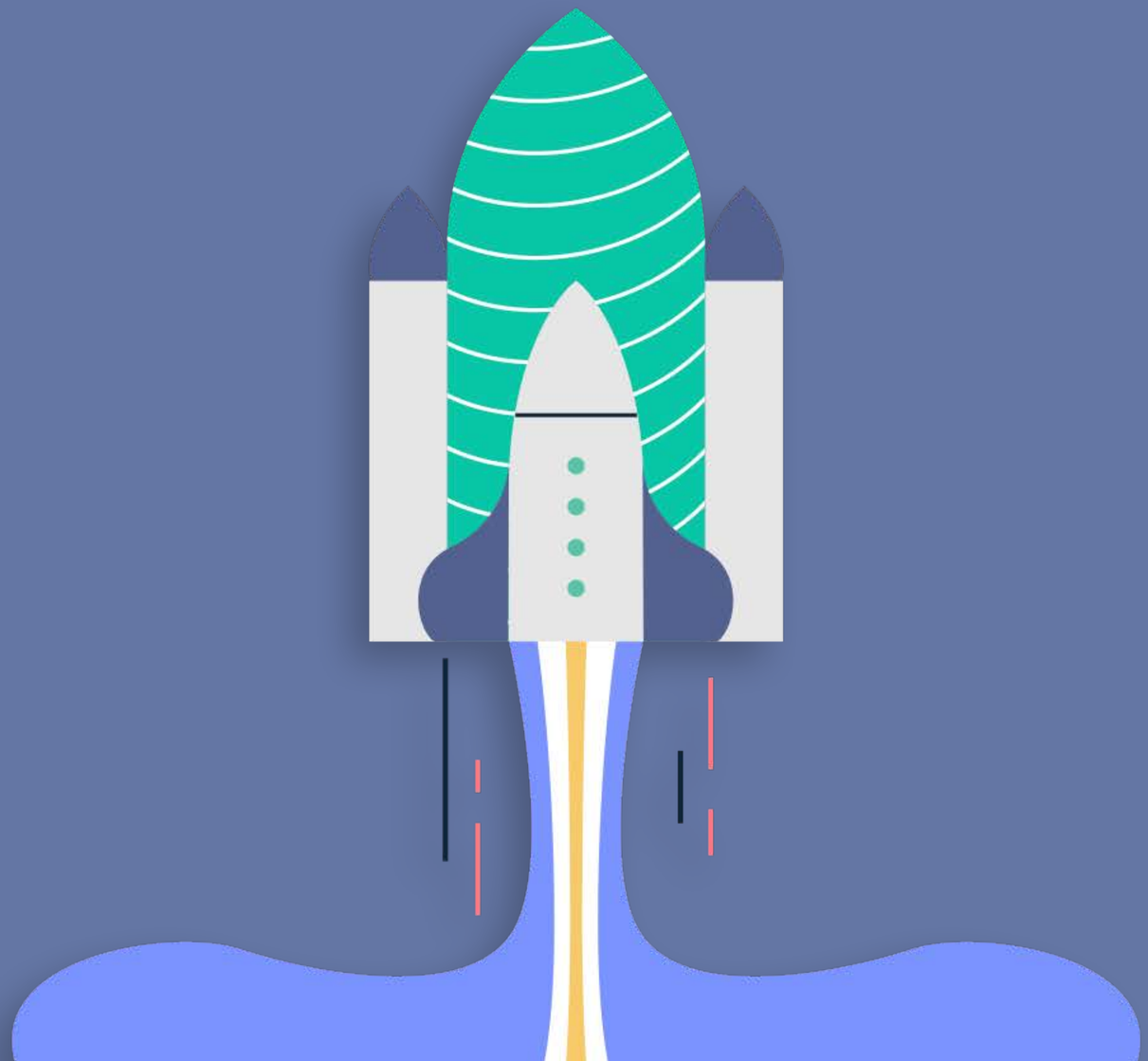
Find materials quickly with our easy-to-use interface.

Comprehensive

Over 80,000 metals, ceramics, polymers and more - and growing.

Links to suppliers

Material discovery and sourcing in one place.



Visit **matmatch.com** to get started today.

Get in touch with feedback and ideas:

info@matmatch.com