

Reliable corrosion insights

Get the full picture of corrosion effects and remedies in one place with Knovel Corrosion, the new tool that integrates data, case studies and software in one place to support decision making.



Knovel Corrosion provides performance data for:

- >200 metals against 1,200 exposure media
- >1,200 plastics against 5,000 exposure media
- >800 commercial coatings
- ~350 interactive isocorrosion curves



Knovel Corrosion supports:

- A culture of corrosion awareness with case studies, data and technical reference material
- Easy discovery with a unique means of searching across all materials and exposure media in a single view
- Comparisons of the resistance of different material grades against the same exposure media

According to the NACE Impact Study, the annual global cost of corrosion is US\$ 2.5 trillion. The right knowledge can help safeguard your equipment and infrastructure.

Pairing Knovel with Knovel Corrosion provides the unmatched ability to mitigate the risk of corrosion management decisions. Providing smart, integrated tools and high-quality curated content, they help engineers and decision makers:

- Proactively guide material selection
- Increase asset integrity and plant efficiency
- Reduce unplanned downtime and testing rounds
- Improve safety and lower operational risk
- Conduct failure analysis and develop mitigation plans
- Create a culture of awareness around corrosion
- Facilitate collaboration on corrosion management at the organizational level

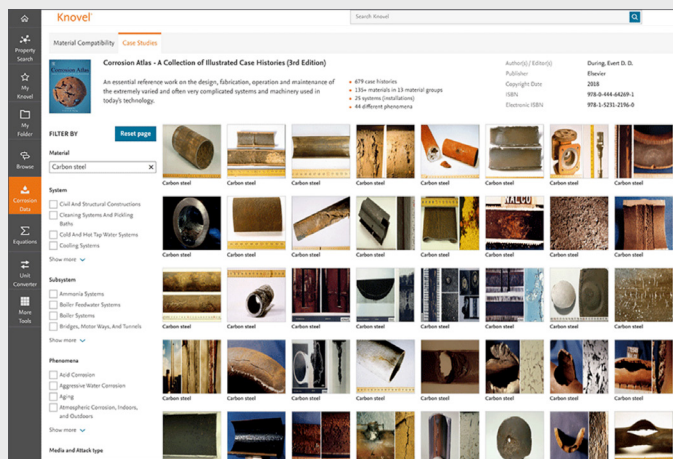


Figure 1. Images showing how corrosion appears in various carbon steel case studies

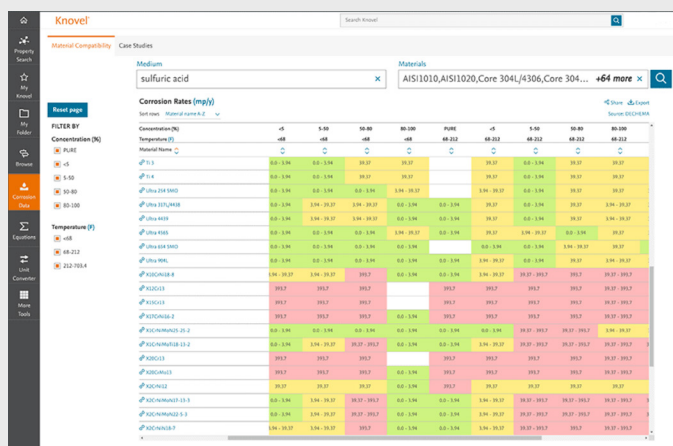


Figure 2. Color-coded corrosion rate chart helping to quickly identify the best candidates for further review

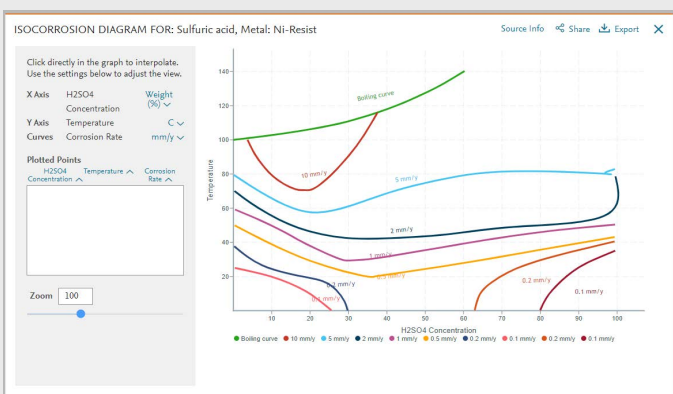


Figure 3. Isocorrosion diagram comparing the constant corrosion rates of a metal exposed to sulfuric acid at a range of conditions

What do Knovel and Knovel Corrosion offer?

In terms of corrosion knowledge, Knovel users have access to hundreds of technical references with essential context for decision-making, including insights into corrosion mechanisms, material properties, and engineering and industry principles. This content is sourced from leading societies and publishers, including the AMPP/NACE, ASM, Wiley, Elsevier, the EFC and the CRC.

Knovel Corrosion augments Knovel's reference-sourced content with data-driven recommendations and real-world insights developed exclusively in partnership with DECHEMA, Elsevier, Corrosion, Altair/M-Base and others.

Knovel Corrosion provides millions of corrosion-specific data points for metals, plastics and elastomers relative to exposure media and mixtures as well as performance data for hundreds of coatings. It also gives access to material-specific technical reference material, isocorrosion curves with insights into conditional impacts on corrosion rates, and over a thousand real-world case studies with practical approaches to corrosion issues.

Importantly, filters for conditions such as concentration and temperature ensure that it's easy to drill down to the relevant results.

Why choose Knovel Corrosion?

Knovel Corrosion is the only solution that offers a detailed, multi-material and conditional database for the evaluation of materials, corrosion rate forecasting and other risk mitigation paired with a unique collection of case studies and technical reference material, including supplier datasheets.

Knovel Corrosion gives engineers and asset managers a common language for discussing corrosion with subject matter experts. It provides a broad perspective on corrosion's potential impact on your business line to better support your design and management activities.



For more information,
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