News Release

December 9, 2025
Proterial, Ltd.

Proterial Launches AIGAMI™, a revolutionary blade steel that balances superior sharpness with corrosion resistance

Proterial, Ltd. has developed a mass production system for a revolutionary blade steel that combines high hardness and excellent corrosion resistance, and is pleased to announce its sales launch under the "AIGAMI" brand. AIGAMI has been developed as a material for knives that boast the sharpness demanded by professional chefs while demonstrating protection from rust. In addition to high-grade kitchen knives, these advanced properties are also expected to deliver superior performance across a wide range of applications that demand sharpness combined with corrosion resistance, from surgical scalpels and replacement razor blades to outdoor knives.

1. Background

Due to the strong emphasis on sharpness, high-grade kitchen knives such as those used by professional chefs tend to be made from high-carbon steel (sold under the Proterial product name Aogami™) thanks to the high level of hardness they deliver. However, that high hardness has come at the price of corrosion resistance. On the other hand, stainless steel knives are the preferred material in knives for household use, but while these knives exhibit strong corrosion resistance, sharpness has proven challenging. For this reason, striking a balance between the hardness and corrosion resistance of conventional blade steel has been difficult.

Proterial has achieved a higher level of hardness and corrosion resistance by leveraging its expertise in texture and composition control technologies with a focus on metals, while also successfully developing the blade steel AIGAMI, which possesses superior grindability (ease of sharpening), and working to establish the necessary production technologies and a mass production workflow.

2. Outline

Proterial has now developed the production technology for AIGAMI 2, part of the revolutionary AIGAMI series of blade steel combining high hardness and corrosion resistance. Proterial has built a mass production workflow at our Yasugi Works and started sales. When used in knives, the material offers the sharpness desired by professional chefs while helping to achieve high-grade knives that are also resistant to corrosion. Moreover, the advanced properties of the AIGAMI series, which includes the AIGAMI 1 currently under prototype evaluation, have the potential to deliver superior performance across a wide range of applications beyond cooking that require sharpness combined with corrosion resistance, including outdoor knives, replacement razor blades and surgical scalpels.

Proterial, Ltd.
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AIGAMI represents a new category of blade steel that neither carbon steel nor stainless steel fills. With the launch of AIGAMI, Proterial will carve out a new chapter in the lineup of Yasugi Specialty Steel, an industry-leading brand of high-grade kitchen knife materials.

3. Characteristics

AIGAMI 1 delivers higher hardness than SUS440C stainless steel, combined with strong corrosion resistance on par with SUS420J stainless steel. AIGAMI 2 possesses extremely high hardness matching or exceeding Aogami 2, while delivering corrosion resistance on par with GIN® 3 stainless steel. The AIGAMI 1 spec emphasizes corrosion resistance, while AIGAMI 2 favors hardness (sharpness).

Note that since the properties of AIGAMI differ from regular stainless steel, corrosion may occur depending on the usage environment, handling and manufacturing processes.

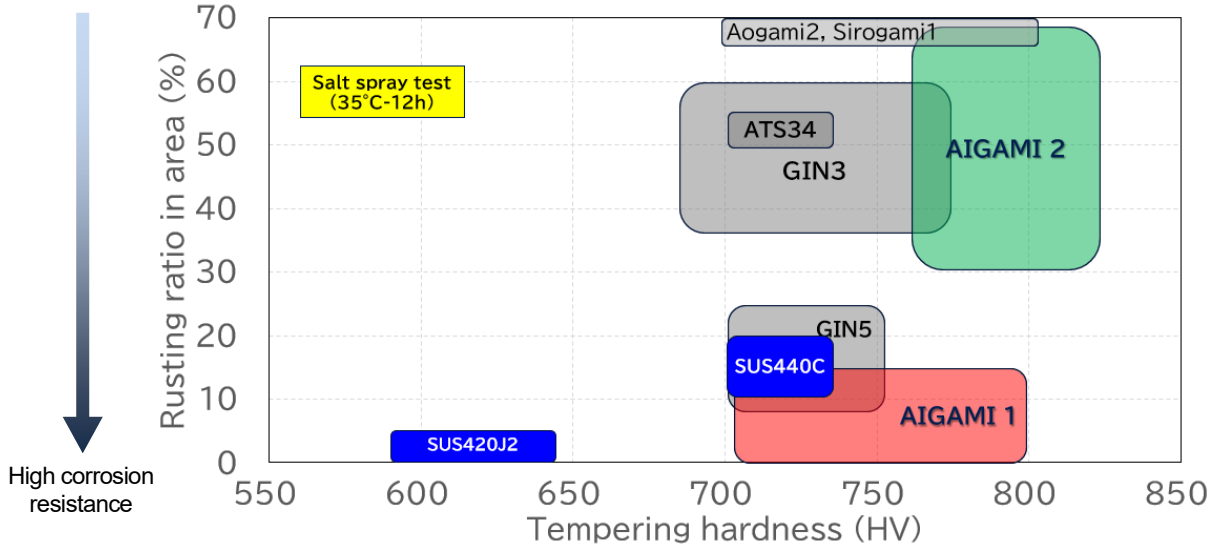

Figure: corrosion resistance and hardness

Table: Main components excluding iron (C: Carbon, Cr: chromium, Mo: molybdenum, W: tungsten) and their applications

Steel grade name	C	Cr	Mo	W	Main applications
AIGAMI™ 1	Undisclosed				High-grade kitchen knives, outdoor knives, replacement razor blades, surgical scalpels, etc.
AIGAMI™ 2					High-grade kitchen knives, outdoor knives, etc.
GIN™5	0.7	13	-	-	Replacement razor blades, kitchen knives, surgical scalpels
GIN™3	1.0	13	-	-	Kitchen knives, scissors
Aogami™ 2	1.1	0.3	-	1.3	High-grade planes, high-grade kitchen knives, sickles
Sirogami™ 1	1.3	-	-	-	High-grade kitchen knives
ATS™34	Undisclosed				Custom knives
SUS420J2	0.3	13	-	-	Kitchen knives, knives, scissors, surgical scalpels
SUS440C	1.0	17	0.5	-	Kitchen knives, paring knives

4. Production site

Yasugi Works, Proterial, Ltd. (Yasugi, Shimane Prefecture)

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* HV: Vickers hardness Generally used as a measure of hardness.

■About Proterial

PROTERIAL

The Thinking Behind our Company Name
"Proterial" combines **"pro-"** with the word **"material."**
"Pro-" represents elements of our Values:

- **Unparalleled Professionalism**
- **Unbounded Progressiveness**
- **Unleashing Proactiveness**

"Material" refers to the high-performance materials that our original technologies produce and underpinned by the three pros. With our focus on solving customer issues and bringing new levels of value, we promise to contribute to the realization of a sustainable society through the products and services that embody our philosophy.

■Proterial, Ltd. — Company Overview

Established: April 1956
Head office: Toyosu Prime Square, 5-6-36 Toyosu, Koto-ku, Tokyo 135-0061, Japan
Capital : 310 million yen (as of March 31, 2025)
Representative : Sean M. Stack
Representative Director, Chairperson, President, & CEO
Sales revenue: 768.6 billion yen (Term ended March 2025)
History: 1910: Founded as Tobata Foundry Co.
1937: Merged with Hitachi, Ltd.
1956: Established separately as Hitachi Metals Industries, Ltd.
2023: Renamed from Hitachi Metals, Ltd. to Proterial, Ltd.

Proterial is a participant of the United Nations Global Compact and adheres to its principles-based approach to responsible business.
In January 2025, Proterial received a Silver rating in the EcoVadis Sustainability Assessment.