Product Portfolio Overview

Aluminum (Al)
Silicon (Si)
Titanium (Ti)
Cobalt (Co)
We understand the elements –

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<tbody>
<tr>
<td>![Sun]</td>
<td>13</td>
<td>![Grass]</td>
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<tr>
<td>Al</td>
<td>aluminum</td>
<td>Co</td>
<td>cobalt</td>
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<tr>
<td>22</td>
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<td>14</td>
<td></td>
</tr>
<tr>
<td>Ti</td>
<td>titanium</td>
<td>Si</td>
<td>silicon</td>
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inside and out.

Metal coatings that last start with the right formulations and are proven through years of research, testing, and use. AkzoNobel meets your unique coatings requirements with products and services that stand up to the demands of the elements.
Coil and Extrusion Coatings
Americas Product Portfolio

Providing industry-leading performance across a variety of industries, AkzoNobel Coil and Extrusion Coatings has the right solution for your pre-painted metal requirements.

Coating Systems Overview

<table>
<thead>
<tr>
<th></th>
<th>RESISTANCE TO FADING</th>
<th>RESISTANCE TO CHALKING</th>
<th>COST</th>
<th>FLEXIBILITY</th>
<th>IMPACT RESISTANCE</th>
<th>AGGRESSIVE ENVIRONMENT</th>
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<tr>
<td>TRINAR</td>
<td>★★★★</td>
<td>★★★★</td>
<td>★★★</td>
<td>★★★★★</td>
<td>★★★★★★</td>
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<tr>
<td>CERAM-A-STAR® 1050</td>
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PVDF Coatings

Premium-performance fluropolymer coating that provides superior flexibility along with excellent UV protection, enhanced color retention and resistance to chalking.

TRINAR Minimum 70% PVDF-containing coating for use in both Coil and Extrusion AAMA 2605 applications.

ALUM*A*STAR® 50% PVDF-containing coating for use in Extrusion AAMA 2605 applications.

Pigments Ceramic and Inorganic
Applications Exterior exposure

Silicone-Modified Polyester (SMP) Coatings

High-quality coating that provides excellent scratch and abrasion resistance along with color stability and gloss retention.

CERAM-A-STAR Superior moisture and UV protection for use in both Coil and Extrusion AAMA 2604 applications.

Pigments Ceramic and Inorganic
Applications Exterior exposure

Polyester Coatings

Designed to balance cost and performance for a variety of prefabricated metal products, for both exterior and interior uses.

POLYDURE® 1000 Superior performance coating designed for applications where an economical yet reliable coating for exterior building products is required.

POLYDURE 500 Economical solution for exterior building products such as rain gutters and other accessories, or where there is a need to balance performance and cost.

POLYDURE 528 Proven solution for roll-up doors and shutters that require a tough finish to stand up to the wear and tear of normal use.

POLYDURE Interior-use coating designed to provide a hard, durable surface for metal components that are used in applications with no exterior exposure.

Pigments Ceramic, Inorganic, and Organic
Applications Exterior and interior surfaces where performance in UV exposure is not critical
Offering a complete selection of coatings designed to serve each unique market segment for pre-painted metal, backed by solid research and proven through real world testing.

**Complete Range of Pre-Painted Metal Finish Options**
With a product portfolio that consists of a wide selection of coil and extrusion coating solutions designed for agricultural, commercial, and residential uses, our finishes for pre-painted metal can be found in construction, appliance, and transportation applications. We have a strong track record of giving our customers the best products possible, backed by rigorous testing and quality programs, and excellent customer support.

### End-Uses Overview

<table>
<thead>
<tr>
<th>End-Uses Overview</th>
<th>TRINAR</th>
<th>CERAM-A-STAR</th>
<th>POLYDURE 1000</th>
<th>POLYDURE 500</th>
<th>POLYDURE 528</th>
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<th>ALUM-A-STAR</th>
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Proven Performance

Ongoing testing of our products ensures they meet the highest quality specifications - yours. This provides confidence and peace of mind knowing your decision will stand up to the elements.

Why Pigment Selection Matters
Pigments used in metal coatings fall into three classifications: organic, inorganic, and ceramic. Organic pigments have good — but usually not ultimate — durability. They are a good cost-effective choice when long-term exterior durability isn’t needed. Inorganic and ceramic pigments provide excellent long-term performance, which make them ideal for use in the highest quality exterior coatings to assure long-term color retention after decades of exposure to the elements.

Real World Testing Program
Our product performance is proven with years of real-world experience at multiple outdoor test sites - exposing our products to the harshest conditions, which ensures they will stand up to the test of time. For decades we have been testing production samples of our coil and extrusion coatings at weathering facilities in South Florida and other locations around the world. These samples are constantly being evaluated to ensure their products are performing to the high levels expected of them.

Our real-world exposure program is the largest in the industry, with over 40,000 panels exposed to the elements in South Florida alone. We are regularly reviewing these test panels to make sure that we understand and can predict how they perform in the elements.

Real world testing in south Florida is the best way possible to ensure you are getting the best possible durability and appearance in your choice of AkzoNobel coatings. Our products are tested in the harshest climate imaginable for paint, where heat, humidity, and UV rays are unrelenting.

It’s simply not possible to simulate the impact of the climate and natural elements of South Florida in a controlled environment. Our real world testing program enables us to conduct authentic research and development on every aspect of product development and manufacturing.

Application Performance
In addition to making sure our products perform in the real world, we also constantly evaluate the performance of our products at our coater partners. We have a well-developed testing program designed to monitor the use of our products by coaters, which allows us to quickly respond to changes in the application environment. This results in products that are more reliable and trouble-free when being applied, with fewer costly issues and on-line adjustments.
What is COOL CHEMISTRY?
COOL CHEMISTRY products utilize ceramic and inorganic infrared reflective pigments. These special pigments are designed to reflect infrared energy while still absorbing visible light energy, thus appearing as the same color yet staying much cooler.

COOL CHEMISTRY formulations are available in both our TRINAR and CERAM-A-STAR coatings lines.

Increased efficiency, reliable performance
When COOL CHEMISTRY coatings are used on metal roofing, the result is a sustainable building material that can lower air conditioning costs, reduce peak energy demand, and help to mitigate urban heat island effects. When used on roofs and walls, COOL CHEMISTRY coatings can help reduce air conditioning costs by up to 15 percent when used in hot climates.

Long term durability needs to go hand-in-hand with the gains in energy efficiency that are possible with solar reflective pigments. With COOL CHEMISTRY formulations, you are getting the same exceptional resin technology as standard versions, along with the benefits of solar reflective pigmentation.

COOL CHEMISTRY and Energy Efficiency Rating Programs
COOL CHEMISTRY coatings exhibit solar reflectance and thermal emittance properties that qualify them as cool roofs in many energy codes and rating systems. They are designed to meet Energy Star® guidelines, in addition to other local, regional and federal code requirements for energy efficient building products. They can also help contribute to points in LEED and other green building programs to help make projects more sustainable.

Energy Star is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy, which is designed to identify and promote energy efficient products. Energy Star has a labeling program for reflective roofing products, which includes cool metal roofs. This allows manufacturers to use the Energy Star label on reflective roof products that meet the U.S. EPA’s specifications for solar reflectance and reliability.

Our COOL CHEMISTRY coatings are designed to meet the requirements of the Energy Star program for reflective roofing products. We have well-established relationships with testing and certification bodies and can help manufacturers navigate the path to registering their roofing panels that use COOL CHEMISTRY coatings.
Color Matching Services

Color Matching Services
Every project is unique. Because of this we offer the option of custom color-matched formulations for specific applications, upon your request. With our dedicated color-matching lab we can handle the development of custom colors quickly and efficiently.

We understand the unique needs of different market segments, and tailor our resources to respond effectively to requests. We have experience working closely with fabricators, architects, and specifiers, all with the goal of bringing color to your next project.

Color Standards Program
Our color standards program is a vital tool for ensuring our products perform on-line, and match the colors you have approved. Our color standards department manages tens of thousands of color standard panels that have been distributed to our coaters and customers, throughout the world.

How it works
Each color we match has a single Master Standard that has been approved by the customer for whom it was developed. Our system assures that every working panel in the field can be correlated to its respective master, guaranteeing color consistency regardless of the manufacturing plant or applicator of the paint.

Benefits
This program assures our customers of receiving the best color control and batch-to-batch consistency in the industry. When a new or existing color is developed, matched and approved, it is very important to us that you receive the same color each and every time.

This consistency is extremely important to ensure coils or components match each other, helping to avoid big headaches down the road. Often times different batches of paint, applied by different coaters, can come together on the same job. Without the strong color standard controls we have in place, the results could be a patchwork of similar but different colors.

Research and Development

Focusing on the Future
AkzoNobel loves to push the boundaries of paint and coatings technology. We recognize that the needs of our customers and the market constantly change and evolve. We also know that customers expect not only creative, but also practical answers.

We have two dedicated research labs that are looking into future technologies for coil and extrusion coatings. We also keep an eye on research done around the world by other divisions of AkzoNobel that could be adapted to meet the challenges and opportunities of our markets.

While we are always looking towards the future, we also have resources available to solve the problems of today. When prepainted metal issues arise, our local technical team has the knowledge and experience required to provide solutions for application and manufacturing related concerns.

Customer Support
Keeping our customers' interests our top priority with products backed by the best support in the industry.

We believe in building lasting partnerships and relationships with our customers. Our shared success is based upon working together to develop solutions that result in the best possible products.

When you specify AkzoNobel coil and extrusion coatings, you are ensuring quality service and support from specification to installation, and beyond. We partner with fabricators, architects and specifiers to select the right product(s). We also work very closely with coaters to ensure consistent color and quality, and to develop creative solutions, when required, to help them maintain their optimal efficiency.

Global Coordination
As the world’s largest coatings company, we have coatings expertise around the globe. Our local experts are networked throughout our organization to provide you with optimal solutions wherever your project is being designed, fabricated, and constructed.

Ongoing Support
Our sales and support team is there every step of the way, from helping develop the spec to application, all the way through fabrication and assembly, and even beyond. Rest assured that we are always just a phone call away.
AkzoNobel is a leading global paints and coatings company and a major producer of specialty chemicals. We supply industries and consumers worldwide with innovative products and are passionate about developing sustainable answers for our customers. Our portfolio includes well-known brands such as Dulux, Sikkens, International and Eka. Headquartered in Amsterdam, the Netherlands, we are consistently ranked as one of the leaders in the area of sustainability. With operations in more than 80 countries, our 50,000 people around the world are committed to delivering leading products and technologies to meet the growing demands of our fast-changing world.

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