STRONG3000

TECHNICAL DATA SHEET

Industry Sheet · Revision: November 2026

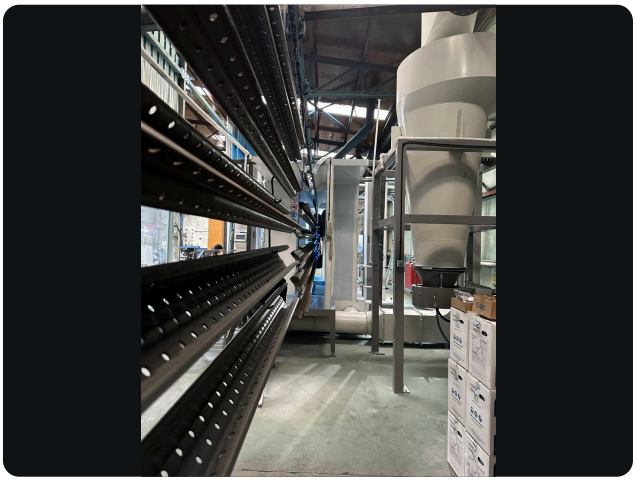
INDUSTRIES

# Aluminum Profile Powder Coating Line & Facade Coating Plant

Qualicoat-grade super-durable polyester powder coating for architectural aluminum profiles and facade panels — vertical profile hanging conveyor, chrome-free conversion coating pretreatment and turnkey line engineering.

**Open online**

strong3000.com/en/industries/aluminium/



OVERVIEW

## Engineering for Aluminum Profile Powder Coating Lines.

Architectural aluminum requires surfaces that withstand UV, marine atmospheres, corrosion and decades of exterior facade use, applied consistently along long profile lengths. STRONG3000 handles the application, automation and engineering of the powder coating line — from the vertical profile hanging conveyor to the Qualicoat-grade curing oven.

For demanding exterior facade applications we recommend Qualicoat-grade super-durable polyester architectural powders; chrome-free conversion coating (a chrome-6 alternative) is integrated as standard for aluminum pretreatment.



APPLICATIONS

## Parts We Help Coat.

Aluminum's low thermal mass, the Faraday channels of extrusion geometry and chrome-free conversion coating are this industry's specific challenges. Below we summarize how we approach profiles, facades and cladding parts; you can download part-specific technical datasheets (PDF) for the detailed engineering approach.



POWDER COATING

### Architectural Aluminum Profiles (Extrusions)

Risk of Faraday effect in closed channels and edge pull-back at sharp corners; chrome-free conversion coating and Qualicoat-grade super-durable polyester for a facade finish that lasts for decades.

Technical Datasheet (PDF)

OWL Integration



POWDER COATING

### Window & Door System Profiles (Thermally Broken)

Narrow gasket channels and lock cavities are Faraday zones; chrome-free conversion coating and Qualicoat-grade polyester for a finish that is consistent on visible faces and protected on hidden surfaces.

Technical Datasheet (PDF)

OWL Integration



POWDER COATING

### Facade Cassette Panels (Folded Sheet Panels)

Color/gloss and orange peel consistency over large surfaces, plus coverage at folded edges and corner welds, are critical; Qualicoat-grade super-durable polyester for a matched facade cassette finish.

Technical Datasheet (PDF)



POWDER COATING

### Railing & Cladding Profiles (Balustrades)

Risk of mutual Faraday shielding and edge pull-back on closely spaced thin bars; chrome-free conversion coating and Qualicoat-grade super-durable polyester for an exterior railing finish.

Technical Datasheet (PDF)

OWL Integration



POWDER COATING

### Sun Shading / Brise-Soleil (Louvers)

Risk of pull-back at thin blade edges and Faraday effect in inner grooves and at connection ends; chrome-free conversion coating and Qualicoat-grade super-durable polyester for a sun-shading finish that withstands direct UV.

Technical Datasheet (PDF)

OWL Integration



WET PAINT

### Large Facade Panels & Composite (ACP) Surfaces

PVDF-based wet paint for very large/composite facades that do not fit in a powder curing oven or are unsuitable for powder curing; a matched facade finish over large surfaces with 25+ years of color stability.

Technical Datasheet (PDF)

SOLUTIONS

# The Right Process for Profile & Facade Coating Plants.

### Powder Coating

Weather-resistant super-durable polyester and Qualicoat-grade finishes for architectural profiles and facades.

### Wet Paint

PVDF-based wet paint application for large or specially shaped facades that do not fit in a powder curing oven.

### Automation & Robotics

Automatic reciprocator and robotic application systems for consistent coating on long profiles.

### Turnkey Lines

Complete finishing plants engineered around your profile and facade production targets.

WHY STRONG3000 FOR ALUMINUM

## Qualicoat-Grade Durability, Turnkey Line.

Architectural aluminum requires certified finishes that must hold their color and gloss on the facade for decades. STRONG3000's expertise in super-durable polyester and Qualicoat-grade powder coating application, wet paint and turnkey line engineering means a single partner can design your profile and facade line end to end.

- ✓ Super-durable polyester & Qualicoat-grade powder coating equipment
- ✓ Vertical profile hanging conveyor system & large facade geometries
- ✓ Turnkey line including chrome-free conversion coating pretreatment
- ✓ Wood-grain transfer (sublimation) line option



CASE STUDIES

# Projects from the Field.

Selected projects from STRONG3000 plants in operation.



Powder Coating · Booth

### Range Hood / Extractor Cover Powder Coating Booth

Electrostatic powder coating application booth for range hood and extractor covers.

| | |
|---|---|
| Scope | **Powder coating booth** |
| Project No. | **1467** |




Enamel Furnace · Pretreatment

### Enamel Furnace, Washing & Drying Line

Sintering (enamel) furnace, washing and drying line for enameling plants.

| | |
|---|---|
| Country | **Türkiye** |
| Project No. | **0851** |



Wet Enamel · Automatic Line

### Valve & Pipe Wet Enamel Line

Automatic line-type wet enamel plant for the inside and outside of valves and pipes. Filtered, stackless application booths.

| | |
|---|---|
| Country | **Germany** |
| Project No. | **0638** |

See all case studies →

RELATED INDUSTRIES

# Other Coating Applications.

### Metal Industry & General Metal Fabrication

Cyclone recovery booths, automatic conveyorized powder coating lines and complete metal paint shops.

### Pipes, Profiles & Wire Mesh

Continuous-conveyor powder coating lines, panel fence coating and pipe coating equipment.

### Automotive & Wheels

Robotic powder coating booths, KTL primer lines and powder coating equipment for automotive suppliers.

### Turnkey Powder Coating Line

Complete powder coating plant engineering including pretreatment, application booth, curing oven and conveyor.

WHY STRONG3000?

# The Engineering Difference.

We don't sell equipment and walk away; we stay with your line from design through commissioning and beyond.

**Integrated Engineering**

Machinery, electrical, automation and software under one roof — not sourced and assembled.

**In-House Technology**

Smart AI and OWL are original STRONG3000 technologies developed in-house.

**Proven Experience**

25+ years of engineering; installation, commissioning and service in 40+ countries.

**24/7 Support**

Phone, remote connection and 24/7 live support via WhatsApp.

## Quotes & Technical Consulting

Tell us about your part, capacity and process. A STRONG3000 engineer will get back to you with a tailored proposal.

| | |
|---|---|
| Production Center | Ömerli Mah. Elektro 2000 Sanayi Sitesi B18 Blok, Tunaboyu Sk. No:1AZ, 34555 Arnavutköy / Istanbul, Türkiye |
| Phone | +90 212 438 56 94 · +90 534 037 98 10 |
| E-mail | info@strong3000.com |
| 24/7 WhatsApp | +90 537 353 54 19 |
| Web | strong3000.com/en/industries/aluminium/ |

FOR A QUOTE, PREPARE

- Product to Be Coated
- Max. Part Dimensions
- Required Capacity
- Number of Colors
- Daily Color Changes
- Coating Process
- Project Timeline

Values are typical ranges; final values are confirmed per project by STRONG3000 engineering. This sheet summarises the product page on our website; scan the QR code for the latest information.