STRONG3000

TECHNICAL DATA SHEET

Industry Sheet · Revision: November 2026

INDUSTRIES

Wet Enamel and Powder Enamel Coating Lines for Cast Iron Pans & Pots

From dip wet (slip) enamel lines for cast iron pots and pans to electrostatic powder enamel plants for steel bodies — vitreous enamel surfaces that withstand heat, corrosion and food contact, engineered for production volume.

Open online

strong3000.com/en/industries/cookware/

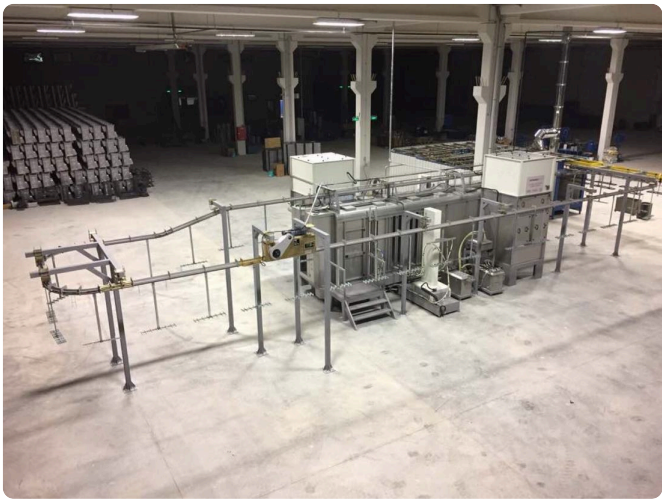


OVERVIEW

Cast Iron Enamel Production Lines & Powder Enamel Plants — From One Partner.

Enamel is a glass layer fused to metal at approximately 780–850°C — not a paint. Cast iron pots and pans need this vitreous surface to withstand heat, corrosion, scratching and food contact. STRONG3000 engineers the application, automation and enamel firing furnace technology for both electrostatic powder enamel plants for steel bodies and wet (slip) enamel lines for cast parts.

From individual application equipment to complete turnkey lines, we tailor the process to every cookware part and production target.



APPLICATIONS

Parts We Help Coat.

In cookware, the substrate (decarburized steel or gray cast iron) determines the process: steel bodies are coated with electrostatic powder enamel, cast parts with wet (slip) enamel. Below we summarize how we approach each part; you can download technical datasheets (PDF) for the part-specific engineering/metallurgy approach.



POWDER ENAMEL

Steel Pot & Pan Bodies (Interior/Exterior)

Outgassing in deep-drawn steel can cause fish scale; decarburized steel and two-coat/one-fire powder enamel for a non-porous, acid-resistant interior.

Technical Datasheet (PDF)

OWL Integration



WET ENAMEL

Cast Iron Casseroles / Pots (Dutch Oven, Interior & Exterior)

Outgassing from casting porosity in cast iron can cause blistering; ground coat + cover coat wet enamel and controlled firing for a food-contact interior and a decorative vitreous exterior.

Technical Datasheet (PDF)



WET ENAMEL

Cast Iron Grill Pans / Griddles

On ribbed grill profiles the ridge tops thin out and the groove bottoms pool; ground coat + cover coat wet enamel and a tuned slip recipe for a uniform grill surface that withstands high heat.

Technical Datasheet (PDF)



WET ENAMEL

Cast Iron Pot Lids (Interior & Exterior)

Drip nubs on the lid interior collect enamel and edges pull back; ground coat + cover coat wet enamel for a blister-free interior and exterior vitreous surface color-matched to the body.

Technical Datasheet (PDF)



POWDER ENAMEL

Steel Serveware & Bakeware

Edge pull-back and Faraday effect at corner radii and folded edges; decarburized steel and two-coat/one-fire powder enamel for an oven-heat-resistant, food-contact surface.

Technical Datasheet (PDF)

OWL Integration



POWDER ENAMEL

Steel Pot Exterior Panels / Decorative Exterior

Color/gloss consistency over the large exterior surface and edge pull-back at the rim curl are critical; decarburized steel and uniform powder enamel for a decorative exterior that withstands cooktop heat.

Technical Datasheet (PDF)

SOLUTIONS

The Right Process for Every Part.

Powder Enamel

Dry glass-frit vitreous enamel, electrostatically applied and fired, for steel pots, pans and panels.

Wet Enamel & Firing Furnace

Wet (slip) enamel applied by dipping, flow coating or slip spraying, and enamel firing furnaces, for cast iron pots and complex hollow parts.

Automation

Robot and robotic application equipment for consistent, high-volume cookware production.

Turnkey Line

Complete enamel coating plants engineered around your cookware production targets.

Smart AI Control

Adaptive control for repeatable results across a wide variety of cookware parts.

OWL Application

Uniform enamel thickness on deep and hollow cookware geometries.

WHY STRONG3000 FOR COOKWARE

Our Cast Iron Enamel Line Expertise Sets Us Apart.

STRONG3000's expertise in both techniques — from powder enamel guns to enamel firing furnaces, and from slip enamel application equipment to turnkey cast iron enamel production lines — means a complete solution from a single partner.

- ✓ Powder & wet (slip) enamel expertise — cast iron pans and steel pots
- ✓ Interior & exterior vitreous surface application (OWL gun)
- ✓ High-volume automation & turnkey enamel coating plants



CASE STUDY

Cookware Enameling in Production.



Wet Enamel · U-Type Booth

Grate & Cookware Wet Enamel Plant

Wet enamel coating plant for grates and pots/pans, including a U-type enamel application booth.

Country	**Türkiye**
Project No.	**1204**



Enamel · Overhead Conveyor

Enamel Cake Mold Coating Line

Enamel coating line with overhead conveyor for cake / bundt molds.

Scope	**Overhead conveyor line**
Project No.	**0925**



Enamel Furnace · Pretreatment

Enamel Furnace, Washing & Drying Line

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

Country	**Türkiye**
Project No.	**0851**

See all case studies →

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/cookware/

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.