STRONG3000

TECHNICAL DATA SHEET

Product Data Sheet · Revision: November 2026

APPLICATION EQUIPMENT

Powder Enamel Gun

The Powder Enamel Gun is engineered to apply electrostatic dry glass-frit enamel powder. Enamel is glass — not paint: it is finely milled glass frit, surface-treated so it can hold an electrostatic charge, and it is fired at roughly 780–850°C to fuse into a glass layer on the metal. Because this frit is far more abrasive than organic powder paint, the gun runs a wear-resistant powder path and charging characteristics tuned for enamel frit, delivering a consistent, clean coat on steel panels, oven cavities and water-heater/boiler tanks.



Open online

strong3000.com/en/products/powder-enamel-gun/

KEY FIGURES

Application	Output voltage	Wear set	Head groups
Powder enamel (vitreous)	**0 – 100 kV (adjustable)**	**Enamel-grade nozzle & electrode**	**Part-specific head group options**

OVERVIEW

Enamel Is Glass — Not Paint.

Powder enamel is dry glass frit that is electrostatically charged, applied to metal and then fired at high temperature to become glass. Organic powder coating is a polymer film cured at roughly 160–200°C; powder enamel is an inorganic glass coating that melts and fuses to the metal at roughly 780–850°C. The two processes are chemically different, and enamel should never be called paint.

Because glass frit is hard and abrasive, it quickly wears the internal path of a standard powder coating gun. This gun answers that with a powder channel built from wear-resistant materials and charging settings optimized for enamel frit, suited to steel panels, oven cavities and tanks that demand chemical resistance and heat durability.



KEY BENEFITS

Engineered for Glass Frit.

Wear-Resistant Powder Path

Powder channel and components protected against abrasive frit.

Charging Tuned for Enamel

Electrostatics optimized for surface-treated frit to hold charge.

High-Temperature Coating

Glass coating fused to metal by firing at ~780–850°C.

Industrial Use

Steel panels, oven cavities and water-heater/boiler tanks.

GALLERY

Take a Closer Look.







TECHNICAL SPECIFICATIONS

Powder Enamel Gun — Technical Specifications.

Values are typical ranges; final values are confirmed per project by STRONG3000 engineering.

Application	Powder enamel (vitreous)
Output voltage	0 – 100 kV (adjustable)
Wear set	Enamel-grade nozzle & electrode
Head groups	Part-specific head group options
Manual / Automatic	Both variants available

HOW IT WORKS

From Powder to Finished Part.

01

Enamel Powder Feed

Enamel powder fed by abrasion-resistant injectors.

02

Electrostatic Charging

0–100 kV charging with enamel-grade electrode set.

03

Head Group Application

Homogeneous coating with part-specific head groups.

04

Recovery & Sieving

Overspray enamel is sieved and returned to the system.

CONFIGURATIONS

Choose Your Setup.

Manual Enamel Gun

Manual set for touch-up and low volume.

Automatic Short / Medium

Fixed mounting in line-type booths.

Head Group Options

Dedicated heads for cavity, burner cap, flat part and pipe.

COMPATIBLE EQUIPMENT

Part of the STRONG3000 System.

- ✓ **Powder Enamel Booths** — cavity / burner cap / pipe / stove
- ✓ **Enamel Injectors** — wear-resistant feed
- ✓ **OWL Intelligent Motion** — access to deep geometry
- ✓ **Ultrasonic Sieving** — enamel-grade recovery
- ✓ **Enamel Firing Ovens** — 780–860 °C line integration

APPLICATIONS

Where It Excels.

Oven Cavities

Oven cavities & stove bodies



Explore →

Burner Caps & Grates

Burner caps & grates



Explore →

Boiler Tanks

Boiler inner tanks



Explore →

Cookware

Pots & cookware



Explore →

VIDEO

See It in Action.



Nozzle & Deflector Types — Spray Patterns

Watch on YouTube ↗

FAQ

Frequently Asked Questions.

How does it differ from a standard powder gun?

Enamel powder is glassy and abrasive; nozzles, electrodes and powder paths are made of abrasion-resistant materials.

Can OWL be used for enamel?

Yes. OWL's head motion is particularly effective in cavity enamelling.

What is the wear-part lifetime?

It depends on usage intensity; the set is quick-change and supplied from stock.

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/products/powder-enamel-gun/

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.