STRONG3000

TECHNICAL DATA SHEET

Product Data Sheet · Revision: November 2026

INDUSTRIAL OVENS

Powder Coating Ovens

STRONG3000 Powder Coating Ovens cure and polymerize the organic resin of the applied powder coating at approximately 160–200°C. Engineered for uniform temperature distribution and low energy consumption, they deliver a durable, repeatable coating film.

Open online
strong3000.com/en/products/powder-coating-ovens/



KEY FIGURES

Operating temperature	Temperature uniformity	Heating	Insulation
160 – 220 °C	**± 3 – 5 °C**	**Natural gas / LPG / electric**	**100 – 150 mm rock wool**

OVERVIEW

Controlled Heat for Organic Curing.

Powder coating curing ovens melt the electrostatically applied powder film so it flows out, then cross-link (polymerize) it to a hard finish. This typically happens at ~160–200°C over a process-matched dwell time, where temperature uniformity directly determines the final film quality.

Available with gas or electric heating, the ovens use an insulated enclosure and controlled air circulation to hold uniform temperature across the entire working volume. They pair with STRONG3000 booths, application equipment and conveyor systems as part of a coordinated line.



HOW IT WORKS

From the Booth, Cured in the Oven.

1. **Entering the oven**
   Parts coated with powder leave the booth and enter the oven on the conveyor. The entry opening is shaped to the part silhouette; the smaller the opening, the lower the heat loss.
2. **Heating and melting**
   Circulated hot air heats the part; the powder melts, flows and forms an even film on the surface.
3. **Curing**
   The part stays in the oven at the temperature and time specified by the powder manufacturer (typically ~160–200 °C); the resin cross-links and hardens.
4. **Exit and cooling**
   Cured parts leave the oven and, depending on the line layout, pass through a cooling zone to the unloading station.

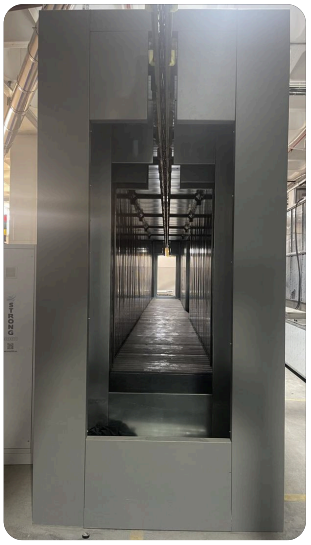
Conveyor speed and oven temperature are set from the PLC touch screen; the curing profile is set according to the part and the powder type.



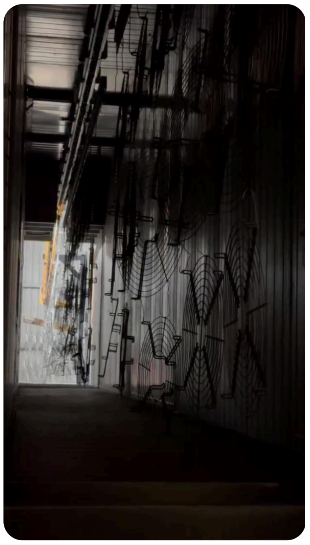
FROM THE FIELD

Footage from an Installed Line.

From a running STRONG3000 line: the oven entry cut to the part silhouette, and parts moving through the oven on the conveyor.



Oven entry



Inside the oven — parts on the conveyor

KEY BENEFITS

Consistent Curing.

Uniform Temperature

Even heat across the working volume for consistent polymerization.

High Thermal Efficiency

Low energy loss thanks to the insulated body and controlled circulation.

Precise Temperature Control

Stable, repeatable curing profile across the ~160–200°C range.

Flexible Heat Source

Gas or electric heating to suit your plant infrastructure.

TECHNICAL SPECIFICATIONS

Powder Coating Ovens — Technical Specifications.

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

Operating temperature	160 – 220 °C
Temperature uniformity	± 3 – 5 °C
Heating	Natural gas / LPG / electric
Insulation	100 – 150 mm rock wool
Type	Box / conveyorised / U-type
Control	PLC + touchscreen, data logging

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.

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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.