

Home Appliance Coating Cases

2024 Edition

MUSI Technology - Spray Coating Specialist

Document Reference: MUSI-CS-HOM-2024

Issue Date: 2026

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Industry Overview

Home appliance manufacturing requires high-volume, multi-shift coating lines for radiators, air conditioner shells, refrigerator panels, washing machine drums, and microwave casings. MUSI delivered 18 appliance projects in 2024 with output ranging from 600 to 1,500 units per shift.

Sector Snapshot

Market Drivers

Replacement cycle in mature markets, smart home adoption, energy efficiency labeling.

Coating Challenges

Aesthetic surface for visible parts, durability for outdoor units, interior cleanability.

Production Volume

Most appliance OEMs run 24/7 - reliable equipment critical.

Common Coating Challenges

Aesthetic Surface Quality

Visible appliance parts demand mirror finish or controlled texture.

Outdoor Durability

AC outdoor units and washing machine outer panels need anti-UV and anti-corrosion.

Quick Color Change

Multiple color variants requires 15-30 minute color change.

Eco-Compliance

EU and major Asian markets require low-VOC paint.

Throughput Reliability

OEM lines run 24/7 - any downtime cascades to assembly lines.

Selected Case Studies - 2024

Radiator Coating Line - Epoxy Powder

Field	Detail
Client Type	Major home appliance OEM
Region	Turkey
Scale	1,200 radiators per shift
Equipment Delivered	Hook conveyor, 5-stage pretreat, epoxy powder booth, 200 deg C oven, cyclone+cartridge recovery
Key Results	Daily output 2,400+ units, salt spray 500h, zero re-coat rate
Status	Operating since 2024

AC Outdoor Unit 2-Coat Polyester Line

Field	Detail
Client Type	Air conditioner OEM
Region	Vietnam
Scale	800 sets/day
Equipment Delivered	Power-and-free conveyor, 7-stage pretreat, primer+topcoat booths, 180 deg C oven
Key Results	24/7 operation, anti-UV 3-year warranty, 99.2% yield
Status	Operating since 2024

Refrigerator Panel Coating - Pre-Treatment + Powder

Field	Detail
Client Type	Refrigerator manufacturer
Region	Egypt
Scale	600 panels per shift
Equipment Delivered	Spray pretreat, electrostatic powder booth, 5-color quick change, 180 deg C oven
Key Results	5 colors per day, food-contact safe coating, 8-min color change
Status	Operating since 2023

Washing Machine Drum Coating - Anti-Rust + Decorative

Field	Detail
Client Type	Top-load washing machine manufacturer
Region	India
Scale	500 drums per shift
Equipment Delivered	Rotary table sandblast + electrostatic powder booth + IR oven
Key Results	5-year anti-rust warranty, 2-color decorative pattern
Status	Operating since 2024

Microwave Casing Water-Based Coating

Field	Detail
Client Type	Multinational microwave OEM
Region	China
Scale	2,000 casings per shift
Equipment Delivered	Climate-controlled water-based spray line, 22-26 deg C / 60-70% RH
Key Results	VOC less than 4 g/m ² , eco-label certified, color +/-1.5 dE
Status	Operating since 2024

Small Appliance Multi-Product Line

Field	Detail
Client Type	Small appliance contract manufacturer
Region	Thailand
Scale	10,000 pcs/shift mixed
Equipment Delivered	Overhead chain with quick-change tooling, 12-color quick-change powder booth
Key Results	12 product variants on same line, 10-minute changeover
Status	Operating since 2024

Benefits Delivered to Clients

High Daily Volume

600-1,500 unit/shift output verified.

Reliable 24/7 Operation

Average MTBF over 2,000 hours.

Eco-Label Compliance

Low-VOC water-based options certified.

Quick Multi-Color

15-30 minute color change.

Cost-Effective

Powder recovery >=98%, energy reduction 20-30%.

Aftersales

Local engineers in major appliance manufacturing hubs.

Industry Key Metrics

Metric	2024 Performance Average
Projects delivered	18 appliance projects
Average daily output	1,000+ units/shift
Average uptime	>96%
Material recovery (powder)	98%
Color change time	15-30 min
Compliance	EU eco-label, China GB, US FDA
Customer satisfaction	4.6 / 5.0
Repeat business	13 of 18 from existing customers

Contact MUSI Technology

For inquiries, technical questions, or to request a custom quotation, please contact our sales engineering team:

Channel	Details
Sales Email	lin@coating-spray.com
Phone (Sales)	+86 181 5173 1332
WhatsApp	+86 181 5173 1332
Website	https://coating-spray.com
Headquarters	Wujin Industrial Park, Changzhou City, Jiangsu Province, China
Business Hours	Monday-Saturday 08:30-18:00 (GMT+8)
Response Time	Sales inquiries within 24 hours, technical proposals within 5-7 business days

How We Engage

Step 1 - Discovery

Share workpiece specifications, target throughput, color count, facility layout, and budget. Engineers respond with technical questions within 24 hours.

Step 2 - Process Simulation

We model your line in 3D, simulate cycle time and energy consumption, and provide a baseline ROI analysis.

Step 3 - Proposal and Quotation

Detailed technical proposal with layout drawings, equipment list, payment terms, and delivery schedule.

Step 4 - Manufacturing

Custom fabrication in our 28,000 sqm facility under ISO 9001 QMS. Progress photos shared via customer portal.

Step 5 - Factory Acceptance Test

You witness or remotely observe pre-shipment testing.

Step 6 - Site Installation

MUSI engineers travel to your site for installation, commissioning, and operator training.

Step 7 - Aftersales Support

Warranty support, remote diagnostics, preventive maintenance, and spare parts supply via our global network.