

Delivery Performance of the HSWG UNIT

■ Powder(180°C or above) | Drying Time (Duration to pass through the oven): 11 min |

KRS Factory 1

October 2017
For Logistics Warehouse Material Rack
Production Factory

- Drying furnace 1 LOT (W1.8M × L34M × H3M)
- Drying temperature: 210°C
- Drying time: 11 min (Conveyor speed: 3 m/min)



Korea Rack System

April 2017
For Logistics Warehouse Material Rack
Production Factory

- Drying furnace 1 LOT (W1.8M × L34M × H3M)
- Drying temperature: 220°C
- Drying time: 11 min (Conveyor speed: 3 m/min)



■ High-temperature liquid state(around 150°C) | Drying Time(Duration to pass through the oven): 11 min |

Hansung P&T

December 2016
For SUV Vehicle Roof Rack Production Factory

- High-temperature liquid state drying furnace (W1.5M × L60M × H3M)
- Drying temperature: 150°C
- Drying time: 30 min



Delivery Performance of the HSWG UNIT

■ Low-temperature(60°C~80°C)

Hyundai Rotem Factory 3 | 80°C : 60 min |

2014
For Railroad Car Production Factory

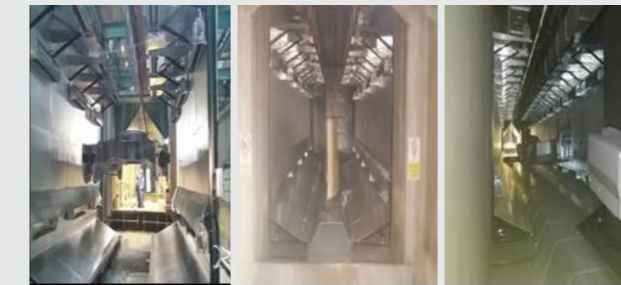
- Putty drying furnace 1 ST (W5.5M × L28M × H6M)
- Painting drying furnace 1 ST (W5.5M × L28M × H6M)



Kunhwa Changwon Factory | 60°C : 40 min |

2018
For Heavy and Construction Equipment Production Factory

- Preheat Drying Furnace (W5.1M × L6.1M × H4.7M)
- Primer Drying Furnace (W4.2M × L12M × H4.2M)
- Topcoat Drying Furnace (W4.2M × L24M × H4.2M)



Shinheung Hydraulic | 60°C : 90 min |

2018
For Heavy and Construction Equipment Production Factory

- Main Drying Furnace (W12M × L6M × H2M)



SH-PAC | 60°C : 30 min |

2019
Hwajeon Factory Hydraulic Cylinder Conveyor
Type Drying Furnace

- Main Drying Furnace (W2.6M × L22M × H6.6M)



■ Deadener Sealer(130°C ~ 150°C)

Kia Motors | 150°C : 30 min |

2019
▪ India Factory Carnival Telegate Batch Type Drying Furnace
▪ Main Drying Furnace (W3M × L6M × H2.9M)



Sharing success
with
our employees

Energy-Saving Technology

Heat Spreader Wave Guide




Green Technology

Greenhouse Gases Reduction Technology
Fine Dust Reduction Technology


The World's Best Technology
Artificial Intelligence Smart Oven

Technology applied to the HSWG UNIT and related patent





Heat Spreader
Semiconductor Heat Radiation Technology



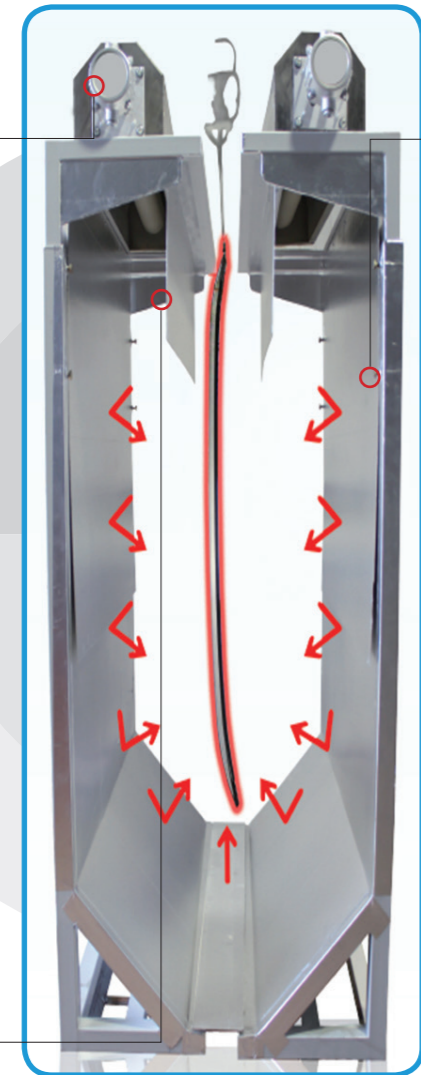
Wave Guide
Optical Communication Wave Induction Technology

Next Generation Convergence/Integration Technology

Energy Exchange & Spreader

Energy Conversion Radiation Technology

Patent Registration :
1004704440000
1009145170000
1004011710000



Optimal Wave Guide

Optimized Guided Wave (Wave Induction) Technology

Patent Registration :
1009354450000

Compatible and fast installation technology

Patent Registration :
1019691310000

Compatibility Fast Installation

Patent pending as to the direct temperature control on painting article by means of radiant wave density adjustment

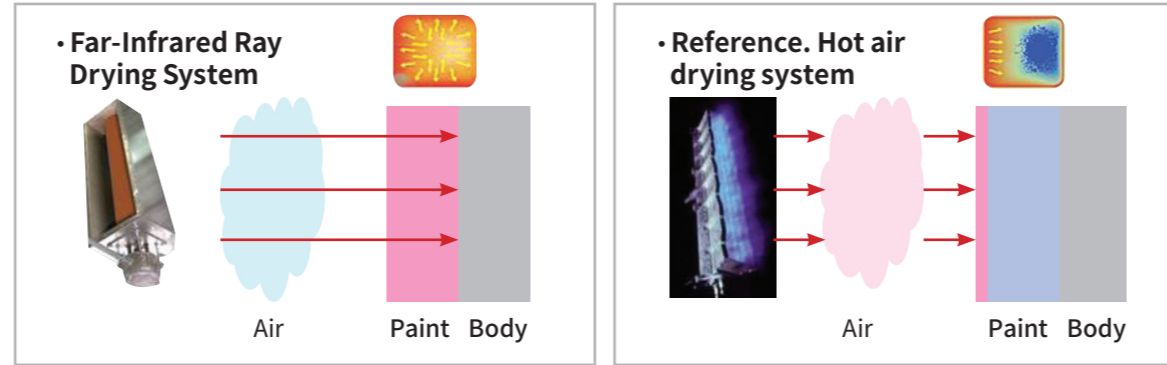
Radiant wave Density Heat Control

Dry Principle and Characteristics of the HSWG UNIT



Characteristics and System Configuration

Characteristics of the Far-Infrared Ray Drying System



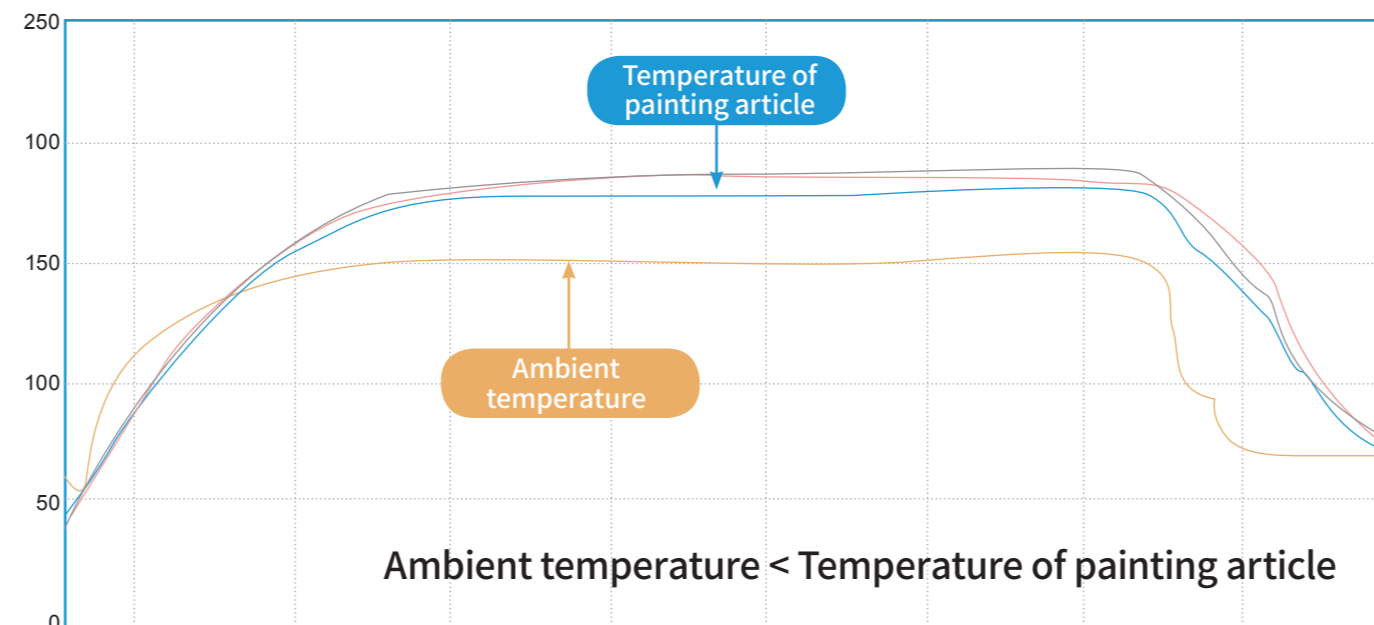
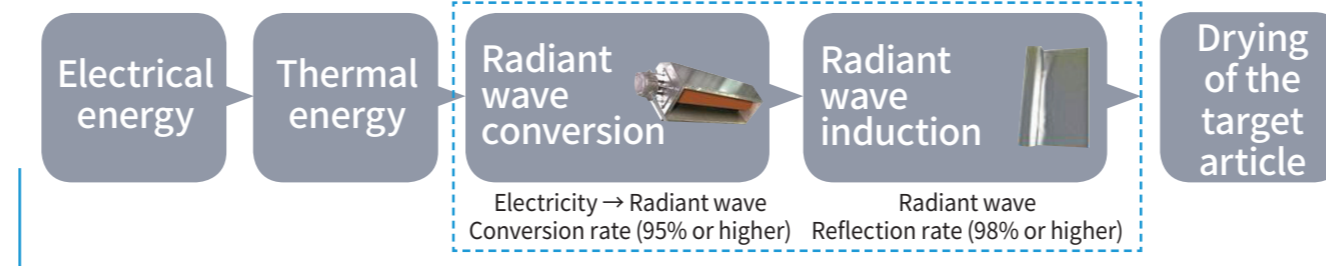
Drying operation cost and time can be reduced.

Selected materials can be directly heated as heat is transferred through radiation, which requires no medium.

Dry quality improved

Both inside and outside can be heated at the same time because of the far-infrared ray characteristics having a longer wavelength than that of the visible light and deep penetration.

System Configuration High-performance radiant wave conversion for which the company retains a patent



HSWG UNIT creates a new value of dryers for the painting industry.

Productivity improvement
30% or higher

Cost saving
Fuel cost can be saved by 30% or higher.

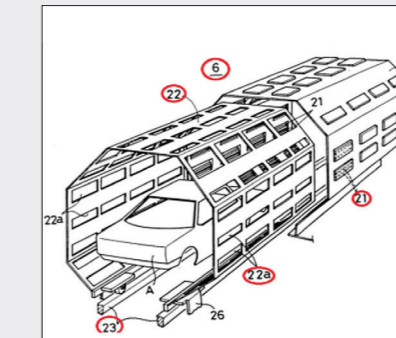
Quality improvement
Defect rate of drying operations can be reduced by 90% or higher.

BMW painting line oven



BMW F30 3-Series Factory Production Tour (1080p HD, 15:00)

Kia Motors India Factory batch oven



- Hybrid: Gas + Electricity (far-infrared ray)
- Reason for application: Even heating for complex shapes with large areas
- Installation work period: Three months for new installations and not applicable to remodeling
- Cost of equipment: Approximately KRW 5 billion (Gas [KRW 2 billion] + Far-infrared ray [KRW 3 billion])
- Maintenance cost: KRW 0.3 billion or more per year
- Applicable line: BMW F30 3-Series

- Electricity (Far-infrared ray)
- Reason for application: Even heating for complex shapes that have large areas
- Installation work period: One month for new installations and five days for remodeling
- Cost of equipment: About KRW 1 billion
- Maintenance cost: Zero per year
- Lines to be applied: Domestic and overseas lines of Hyundai Motor Company
- Lines to be applied: VOLVO Construction Equipment Vendor Line

Before and after construction

