PhoenixTM Optic System

Optical profiling system for use in Paint and Powder Coating Oven Processes

A product's eye view thru your paint oven!
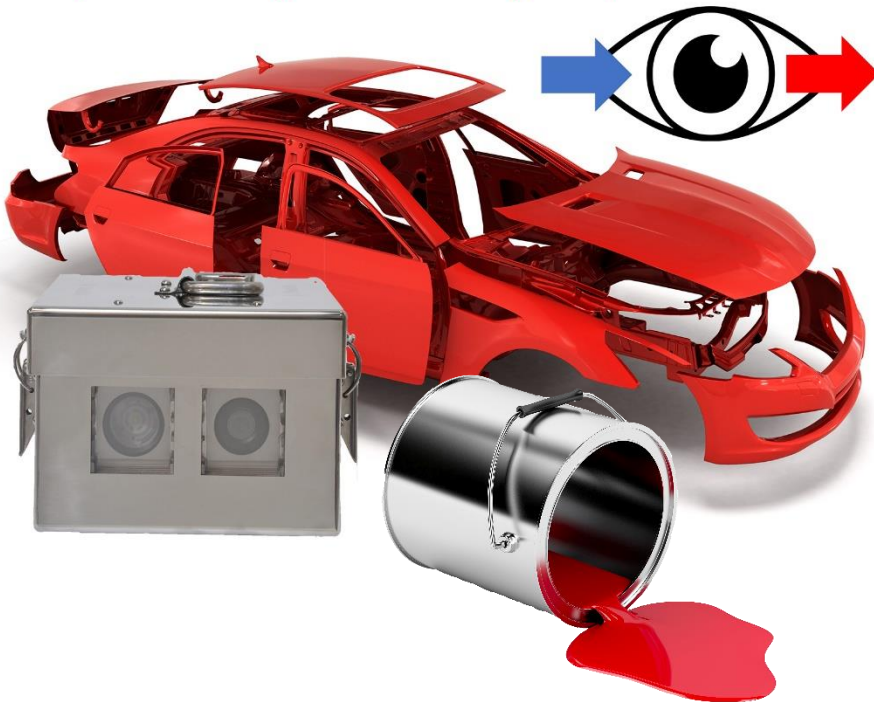
Oven inspection

- Detect oven wall or insulation damage
- Identify product transfer or conveyor issues
- Discover condensate or dirt build up & program clean up schedule
- Discover faulty oven components (fans, ducts, control thermocouples etc)

Coating inspection

- Find source of paint runs /defects
- Identify condensate contamination risks

Direct from the oven during normal production without downtime or lost productivity!

PhoenixTM has complemented its existing range of 'Thru-process' temperature profiling systems with the exciting innovative new "*Optic system*" for use in continuous paint ovens. The unique system allows for the first-time process engineers to view the inner workings of the oven under normal production conditions. Travelling through the oven, with the products being processed, the Optic system gives a product's eye view of the entire paint cure process. The unique Optic thermal barrier has been designed to provide thermal protection for both 4K high definition video camera and high temperature torch, providing an independent light source to ensure picture quality and definition. Provided with an adjustable mount option the optic system can be mounted directly to a car body shell allowing focusing on areas of interest either on the product or wider process. The resulting video "Optical Oven Profile" shows process engineers details of how their process is operating without the need to stop, cool and dismantle the oven. This allows safe routine oven inspection without the problems of costly lost production and days of oven down time. From the video evidence the root cause of process problems, possibly already highlighted by running the PhoenixTM temperature profile system, can be identified accurately and efficiently. Oven structural damage or faulty oven furniture such as recirculating fans, control thermocouples or heater elements can be detected. Buildup of unwanted dirt or condensate can be monitored allowing accurate service and clean down schedules to be planned preventing future unplanned costly line stoppages. Problems with conveyor systems and erratic movement of products through the oven can be identified at the exact location they occur. By monitoring the product surface, paint defects or runs can be detected and the source of the problem identified. See exactly what your product sees travelling though the cure oven.

![PhoenixTM logo - Phoenix Temperature Measurement]

TS64-140-1 PhoenixTM Optic System Thermal Barrier

Thermal Barrier Specification	
Thermal Barrier Part No.	TS64-140-1-2
Heat Sink Part No.	TS00-5002
Max. operating Temperature	300°C / 572 °F
Thermal Duration HH:MM	
100°C / 212 °F	5:24
150°C / 302 °F	2:30
200°C / 392 °F	1:42
250°C /482 °F	1:12
Physical Dimensions	
Height	140 mm / 5.5 inch
Width	208 mm / 8.2 inch
Length	321 mm / 12.6 inch
Weight	9.5 kg / 20.9 lb

High Temperature Torch

4K 32GB Video Camera

AC40-092-1

PhoenixTM Optic System Video Camera Kit
– comprising FireCam 4K ONYX 32GB Video camera, rechargeable battery (x2), USB charger and communication cable. USB mains adaptor. Camera settings controlled from freely downloadable Mobile App.

AC40-093-2

PhoenixTM Optic System High Temperature Torch kit
– comprising robust high temperature torch (960 lumens) with intensity and field of view adjustment. Fitted with user replaceable Lithium battery. Borosilicate lens rated to 500 °C / 932 °F.

AC40-095-1

PhoenixTM TS64 Optic Thermal Barrier Mounting Bracket
Mounting bracket designed for fitting the Finishing Optic Barrier to a car body shell. Aluminium Bracket allows both tilt and rotation of the thermal barrier to allow alignment of camera and torch to view required area of the body shell. Barrier can be removed from the bracket with quick release clamps.

Barrier Mount Bracket

Note: All Products are continually improved, specifications may be changed without prior notice.
Ref: PhoenixTM_Datasheet_Optic System – Finishing 10.4_UK 20200421

Represented by: