Reliable Optical Identification in High-Temperature Environments

OIT High Temperature Identification System in Automotive Paint Drying Applications

The Application

Extreme production conditions prevail in paint drying systems used in the automotive industry. High temperatures, cyclical temperature changes, and the effects of dust and paint place tough demands on materials and technology.

Freshly painted chassis are transported to the drying system on skids. The chassis must be reliably identified despite the extreme environmental conditions.





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The Goal

Normal paper labels cannot be used due to the high temperatures. Instead, code sheets with a punched hole pattern are used. The metal sheets are mounted under the skids and read by a code scanner attached to the system. To ensure reliable identification of the chassis, both the scanner and the code sheets must withstand extreme temperatures.

The Solution

The rugged OIT high-temperature identification system from PepperI+Fuchs ensures smooth processes even at temperatures of up to 500 degrees Celsius. Reliable identification of the chassis is always ensured, even when code plates are dirty. Integrated infrared side lighting ensures optimal contrast for reliable reading. In addition, a large range of numbered code plates makes it possible to assign unique numbers to entire groups.

The Benefits

The code sheets are heat-resistant and have a long service life despite extreme conditions. Simple installation and setup make integration seamless. The system is maintenance-free due to its unique one-piece housing concept.

At a Glance

- Robust, camera-based identification of extreme temperatures
- Durable solution with heat-resistant code plates for temperatures up to 500 °C
- Reliable identification, even when code plates are dirty
- Code plates come in a range of numbers that reaches up to 1 million
- Maintenance-free with one-piece housing, no additional components