

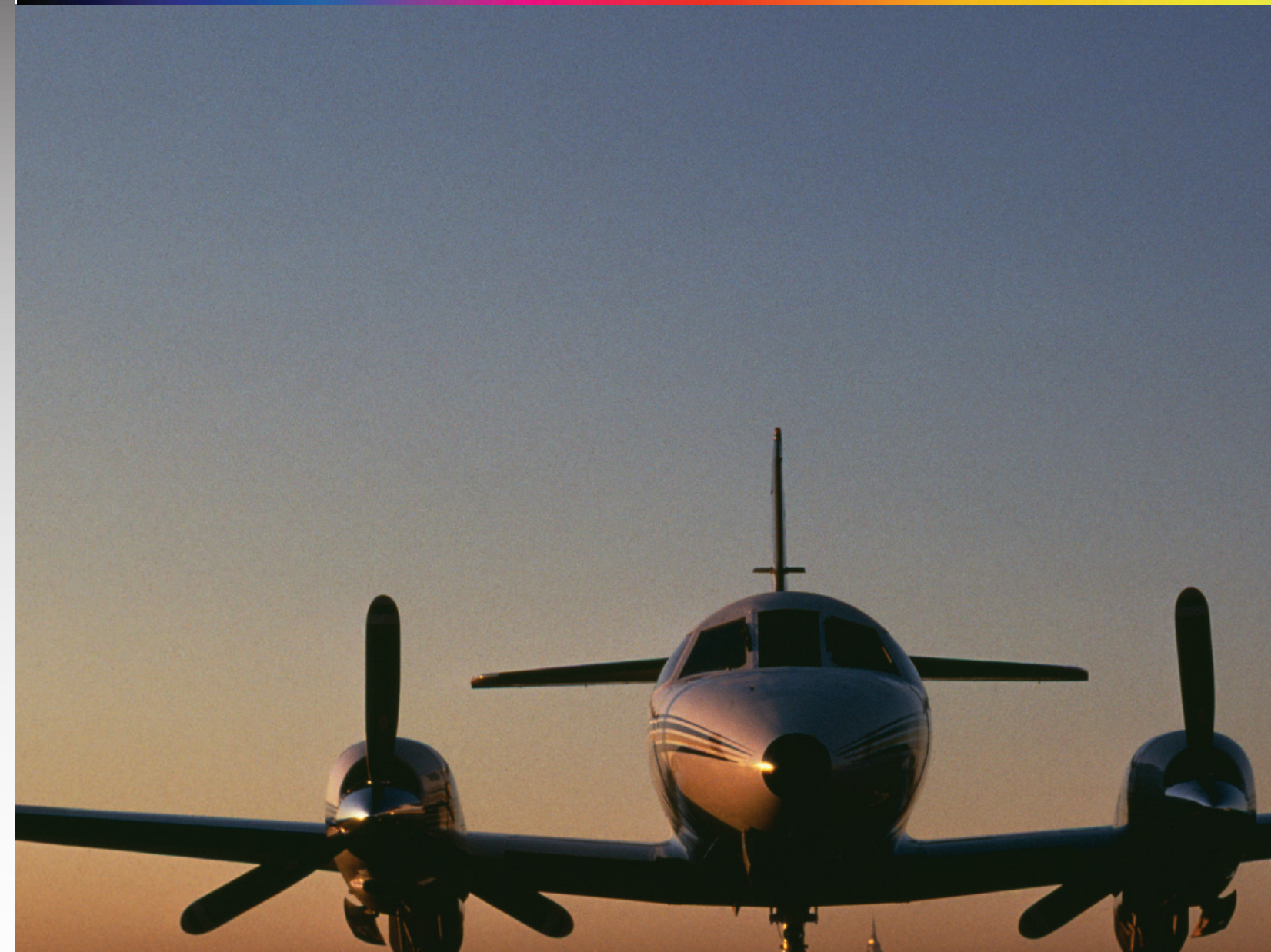
Specifications

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| Application | Hot Mill Coiler | Cold Mill Coiler |
|---|--|--|
| Temperature Range: | 150 to 600 °C 300 to 1110 °F | 50 to 350 °C 120 to 660 °F |
| System temperature measurement accuracy: | ±1 % C / ±1 % F above 200 °C / 390 °F | ±1.5 °C (50 to 150 °C) ±1% C (150 to 350 °C) ±3 °F (120 to 300 °F) ±1 % F (210 to 660 °F) |
| System temperature measurement drift with ambient temperature: (Imager & Control Processor, ° indicated / ° ambient) | 0.2 ° indicated / 1 ° ambient (°C or °F) | |
| System thermal resolution (rms value): | less than 0.2 °C less than 0.36 °F | less than 0.15 °C 0.27 °F at 122 °F |
| Field of view (H° x V°) (Factory option): | 32 x 24 | |
| Single Pixel FOV: (single pixel, distance: target ratio) | 570 : 1 | |
| Focusing range: | 0.5 m / 19 in to infinity | |
| Ambient temperature range (Imager, operating): | 5 to 50 °C / 40 to 120 °F | |
| Ambient temperature range (With cooling system): | 5 to 85 °C / 40 to 185 °F | |
| Dimensions (w x h x d): | 258 x 305 x 330 mm / 10 x 12 x 13 in (fitted inside protective enclosure) | |
| Weight: | 4.5 Kg / 10 lb (20 kg / 44 lb including protective enclosure) | |
| Sealing: | IP65 / NEMA 4 | |
| Vibration: | 0.5 mm, 10 to 60 Hz; 3g, 60 to 300 Hz | |
| CE Certification: | EN 61326: 1999 B | |

| Optional Local Interface Unit | |
|--------------------------------|---|
| FTI CP: | Real-time local processor and power supply/signal connection to imager |
| Power Supply | 85 to 264 Vac; < 200W |
| Ambient Operating Temperature: | 5 to 45 °C / 40 to 110 °F |
| Dimensions (W x H X D): | 600 x 380 x 210 mm / 23 x 15 x 8 in |
| Weight: | 29 kg / 64 lb |
| Sealing: | IP65 / NEMA4 |
| Options | |
| Touchscreen: | For local process visualisation and control |
| Inputs/Outputs | Up to 3 modules from a choice of 5 |
| Digital Inputs: | Up to 8 channels through a single module |
| Digital Outputs: | Up to 16 channels of relay outputs through two modules |
| Analogue Inputs: | Up to 8 channels through a single module |
| Analogue Outputs: | 1 channel of current output per module; 4 channels of voltage output per module; up to 2 analogue output modules may be fitted (both modules must be of the same type - either current or voltage) |

All accuracy specifications:
a) are stated for 30 °C / 86 °F indicated ambient temperature
b) % specifications are "% of reading" and apply to measurements in both °C and °F



Aluminum Strip Processing System

LAND

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Non-Contact Temperature Measurement Solutions



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The information you want...the way you want it. Following extensive consultation with some of the world's leading Aluminum producers, the LAND Aluminum Strip Processing System has been designed to give the maximum amount of information in an intuitive, user-friendly interface.

System Overview

The LAND Aluminum Strip Processing System with its unique Coil Tracking software is set to revolutionize product quality and process control in the aluminum coiling industry, with the introduction of 2-dimensional temperature profiling independent of alloy type.

The LAND Coil Tracking software* eliminates the complex setup and configuration requirements of using a thermal imager in the aluminum coiling industry. With the configuration of as little as two key parameters, the software is able to detect the coil as it is formed and track its position throughout the coiling process. Coils can then be analyzed to generate temperature data for product quality tracking and process control.

Product Traceability

Automatic storage of temperature data from each coil for subsequent analysis.

Plug & Play Setup

Automatic detection and tracking of the optimum measurement position.

Process Control Variables

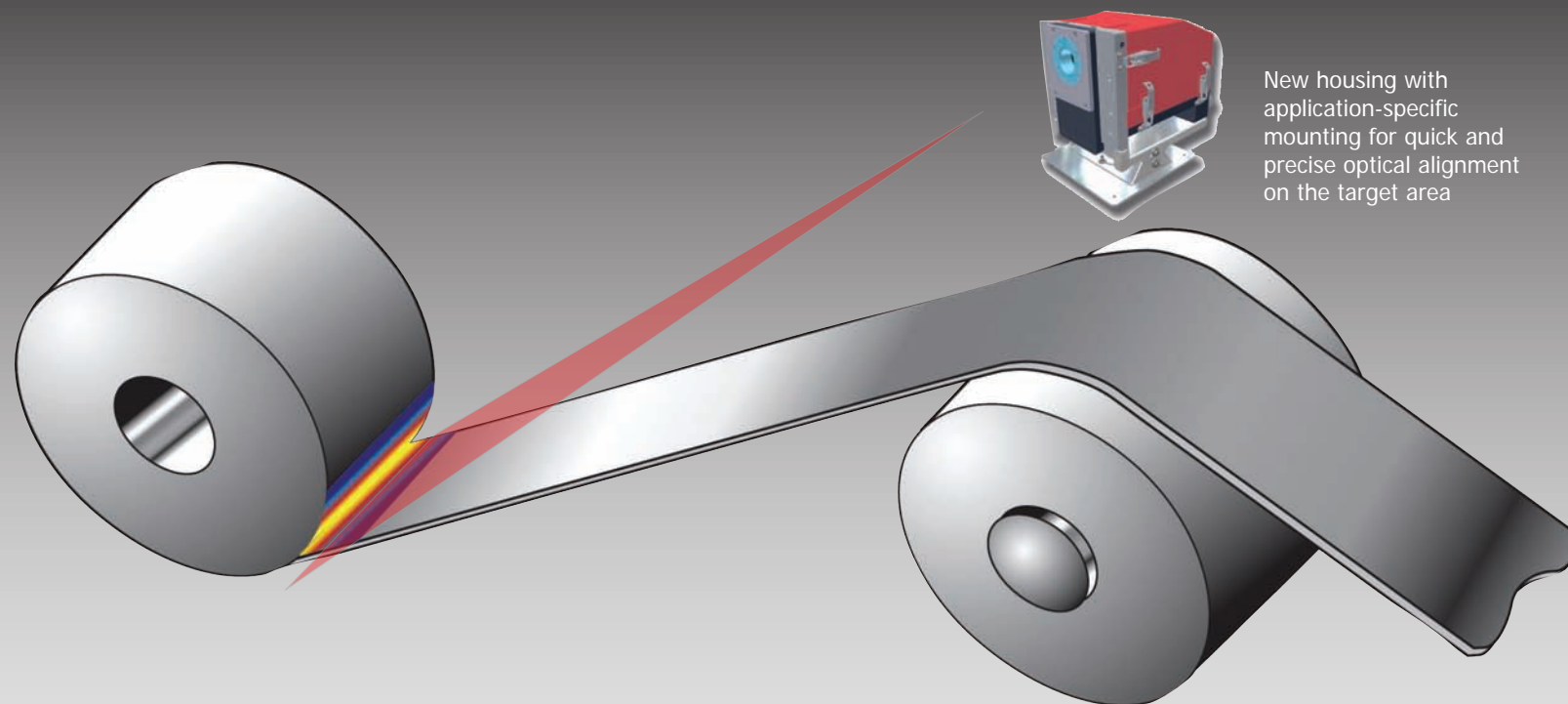
Improved product quality via multiple configurable control parameters.

Data Exchange

Processed data can be transferred via a simple cross-platform TCP/IP protocol or an optional OPC server.

Fully Configurable Alarms

Can be triggered if any part of the strip exceeds the safe rolling temperature. This minimizes the risk of lubricant ignition. Individual zone alarms, or center versus edge temperature alarms can be configured to alert operators instantly to product quality issues.



New housing with application-specific mounting for quick and precise optical alignment on the target area



Real time live thermal image

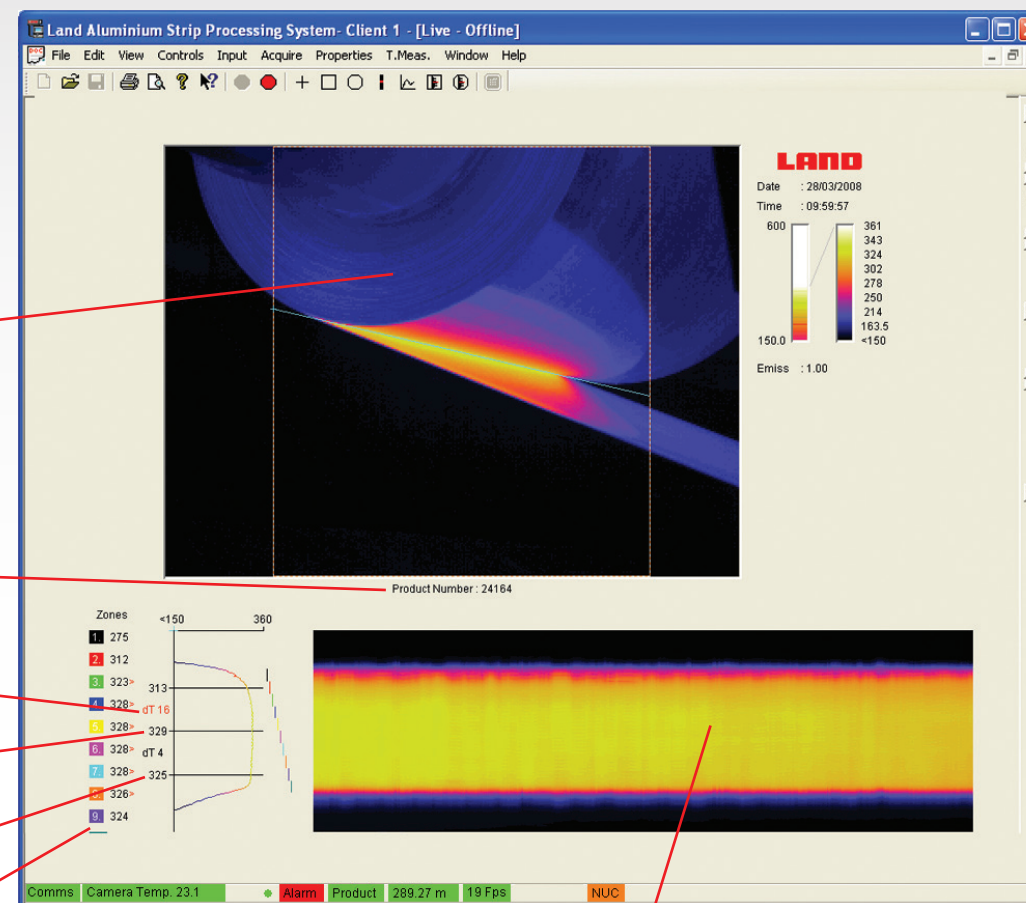
Product stored using Coil ID number or Date/Time

Strip edge to Centre Alarms

Automatic calculation of strip centre temperature

Automatic calculation of edge temperature

Up to 10 user-defined control zones (with alarms)



2D thermal map for intuitive post-production analysis

System Benefits

- **Quality Control** - detection of product quality issues prior to despatch: increased product traceability
- **Process Control** - accurate temperature compensation of critical thickness gauges - speed control based upon coiling temperature
- **Plant Safety** - accurate monitoring of temperatures prevent ignition of lubricant; operators no longer have to manually prod coils

* Patent pending

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