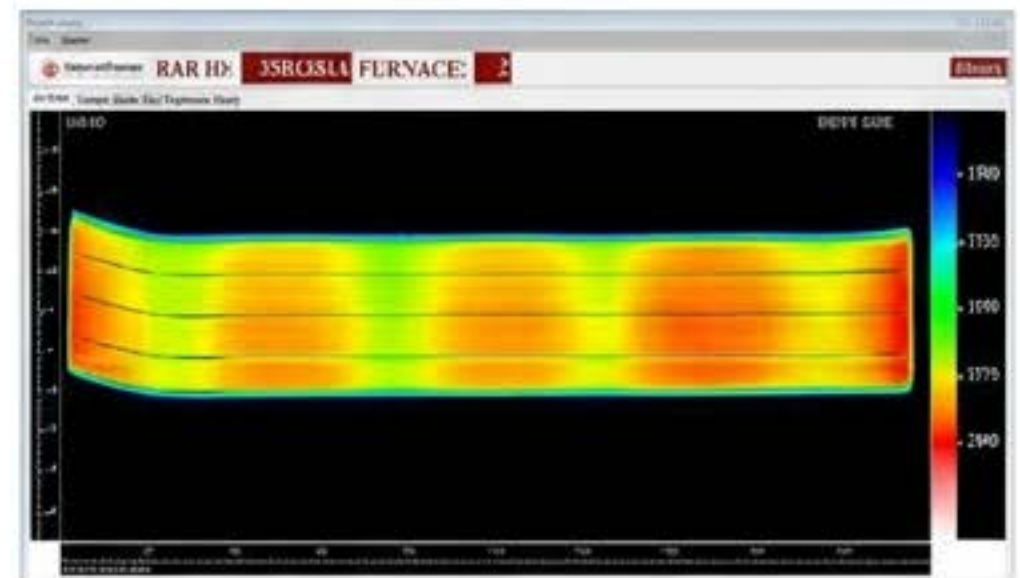


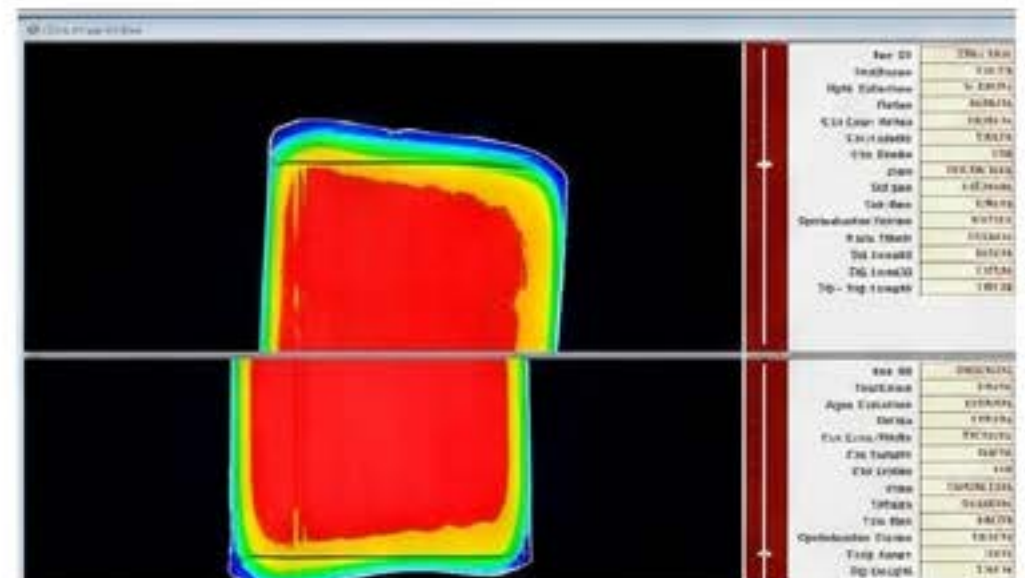
Thermal Gradient Imaging | Technology Overview

How It Works

- Standard industrial line-scan cameras image hot slab/strip as it exits the rehearse or roughing roughing mill
- Full-width and full-length 2D thermal maps of rebar is generated in real time
- Pixel intensity correlates directly to surface temperature via Planck's radiation law – no thermal cameras required
- At reheat furnace exit temperatures (1100–1250°C), radiated energy in the near-IR scan. Wien's law side of the Planck $\sim 0.8\%$ signal change per °C – enabling $\pm 2-3^{\circ}\text{C}$ accuracy without requiring from standard industrial line-scan sensors thermal imaging sensors.
- Accuracy: $\pm 2-3^{\circ}\text{C}$ across the measurement range
- Flexible communications with any L2 System



Full-length slab thermal profile – head to tail, operator to drive side



Crop optimization via thermal imaging – head and & tail shape analysis