



Did you know that **70%** of human decision-making is based on sight?

# Ripik AI: Redefining Steel Industry via Vision AI



Ripik AI combines cutting-edge data science and engineering to deliver rapid, transformative results.





## Redefining the Metrics of Intelligence



Intelligent insights for  
Optimal process  
control



Real time alert for  
Reducing time to act



Visual aided postmortem  
analytics for Deeper  
understanding of process



24\*7 Visual anomaly  
detection for Catching  
more deviations

## Our clients in steel





# Raw Material Monitoring



## Real time Granulometry:

Detects oversized coal and coke particles, identifies screen damage, and optimizes particle size for better energy efficiency and sinter permeability.



## Foreign Particle Detection:

Real-time foreign particle detection & bunker-level monitoring for Early detection of any possibility of Belt & Chute Damage.



## Moisture Detection in Raw Material:

IR cameras and AI enable real-time moisture monitoring in coal, coke, sinter, and other materials, triggering automated alerts when limits are exceeded.



## Volumetric Analysis:

Optical and LIDAR technology provide precise volumetric measurement of materials, with real-time alerts for low volumes or irregularities.





# Blast Furnace Monitoring



## Burden Mix Optimizer and Data Warehouse:

Provides the optimal burden mix (sinter, pellet, ore, fluxes) based on input chemistry and costs, with a data warehouse identifying the best operating parameters.



## RCA module for etaCO:

Real-time root cause analysis and corrective recommendations for drops in etaCO help maintain high levels and reduce coke consumption in the furnace.



## Hot Metal Silicon Prediction:

AI-ML predicts hot metal silicon for upcoming casts based on raw materials and process parameters, recommending PCI/RAFT adjustments to stabilize silicon levels.



## Tuyere Monitoring:

Real-time monitoring of the tuyere and raceway detects abnormalities, enabling early identification of issues like tuyere sticking, lance off-centering, and lance choking.



## Ladle infrared Thermography & level Monitoring:

Real-time Infrared thermography and ladle level monitoring prevent refractory wear, reducing equipment damage, production loss, and safety risks.



# Equipment Monitoring



## Sinter Belt Monitoring:

Real-time sinter belt monitoring detects burner issues and hotspots, optimizing permeability and stabilizing gas flow for improved efficiency.



## Ladle Monitoring:

Real-time ladle monitoring ensures proper hooking, preventing slippage and enhancing safety and efficiency by reducing disruptions.



## Ladle Refractory Monitoring:

IR cameras monitor ladle refractory for real-time hotspot detection, enabling quick operator response and analysis of stored images.



## Conveyor Belt Monitoring:

Immediate detection of cracks, tears, edge damage, belt swaying, and other damages, allowing for prompt maintenance and repair.

# Safety and SOP



PPE Monitoring



Digital Geofencing



SOP compliance



# Get in touch today!



## India

601, 6th Floor, World Trade Tower, C-1,  
Sector-16, Noida-201301  
☎ +91-8101600600



## USA

1390, Market street, Suite 200, San  
Francisco, CA, 94102  
☎ +1 (209) 245-8540



## Europe

Strawinskylaan 3051, Atrium Building  
4th Floor, Amsterdam, 1077 ZX  
☎ +49 911 4947 0749

✉ [hello@ripik.ai](mailto:hello@ripik.ai)



**Scan this QR code  
and get started!**