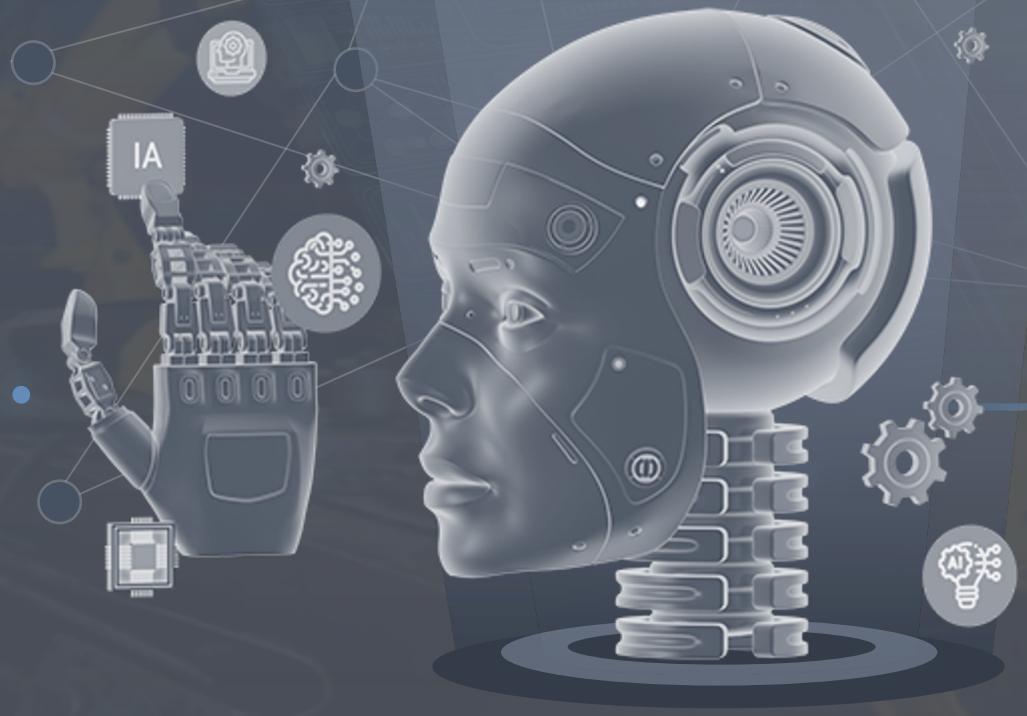
RIPIK.AI

Vision

We transform how people operate factories



Ripik.AI

Introduction to Ripik.AI

We drive the **end to end journey** from conceptualization to adoption of **cutting edge softwares that move KPIs** in manufacturing companies

Our team of **30+** comprises of Ex **McKinsey**, Ex **IBM**, Ex **Google** engineers, toppers from **IIT, PhDs from MIT**

Our products are creating **millions of $$ of value** to the leading companies in India. Several products are **patent pending**

Godrej & Boyce Mfg. Co. Ltd.

DCM SHRIRAM

ADITYA BIRLA GRASIM

Piramal

We are a certified **ISO 9001/27001** organization as well as **SOC 2 and GDPR compliant.** We are also a **NASSCOM partner organization**

Our client's trust and certifications is a testimony to our capabilities

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Ripik is the AI partner of choice to India's most prestigious companies

- No. 1 steel player
- No. 1 pharma player
- No. 1 paint player
- No. 1 cement player
- No. 1 EPC player
- No. 1 furniture player
- No. 1 aerospace player
- No. 1 aluminum player

We are internationally and globally certified

Industry Partnership

NASSCOM®, Confederation of Indian Industry, FICCI, ICC Indian Chemical Council

Cloud Partnership

aws, Google Cloud, Azure

Awards & Recognition

G2, Inc42, MLelevate 2022

Certifications

ISO 9001:2015 Certified Company, ISO 27001:2013 Certified Company, GDPR, AICPA SOC

Ripik Vision

We have built a core proprietary platform based on our computer vision expertise to solve unique use cases which are most valuable in manufacturing

A

Raw material particle size detection

B

Core process optimization using video analytics

C

Finished good inspection

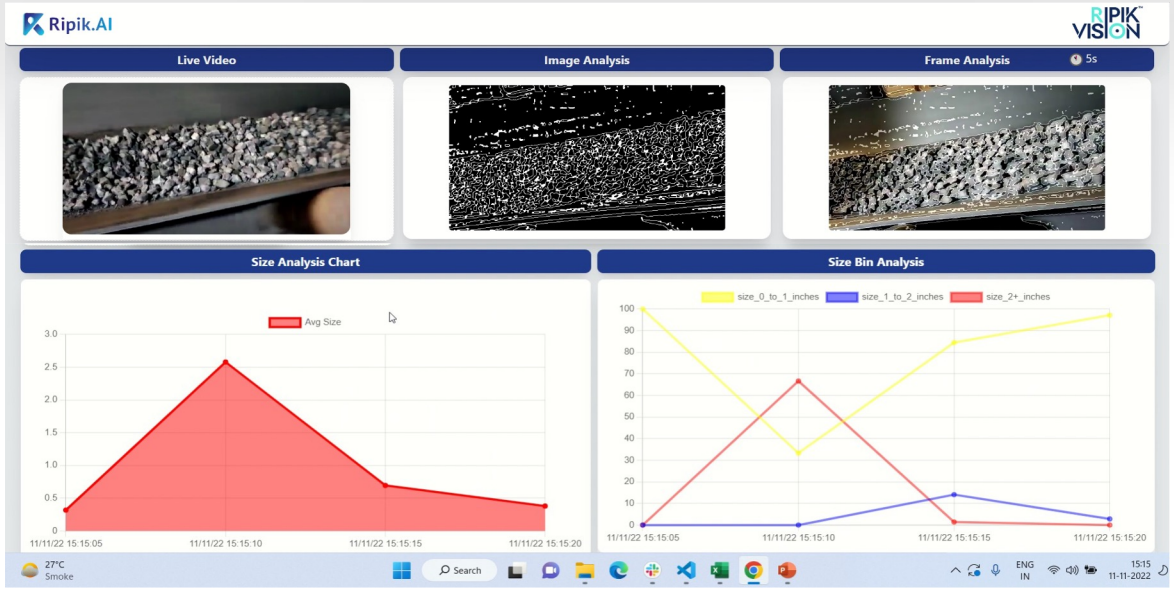
D

Worker safety related use cases

A1. Coke particle size detection in steel

Case Example at Tata steel, India's largest Steel Manufacturer

Key logic in inspection of raw material



We built an algorithm to **detect the average particle size of coke** to help in better fuel rate control in Blast Furnace

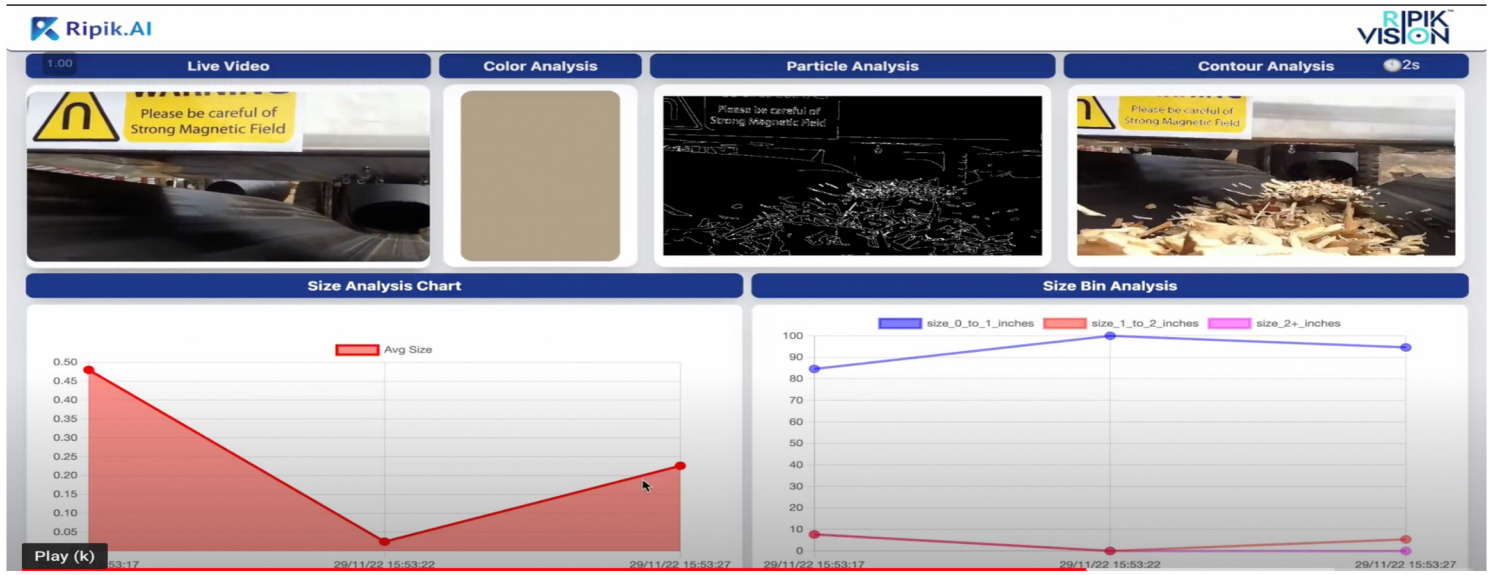
Impact

- **Real-time visibility** of size of coke
- **2% reduction in** fuel rate in Blast Furnace

[Tool link]
[Tool recording link]
[Ripik Vision Coal link]

A2. Wood chip size detection in pulp and paper

Case Example at a leading India pulp and paper company



We built an algorithm to **detect the average particle size of wood-chips** to help control appropriate **cooking time in digestor**

Impact

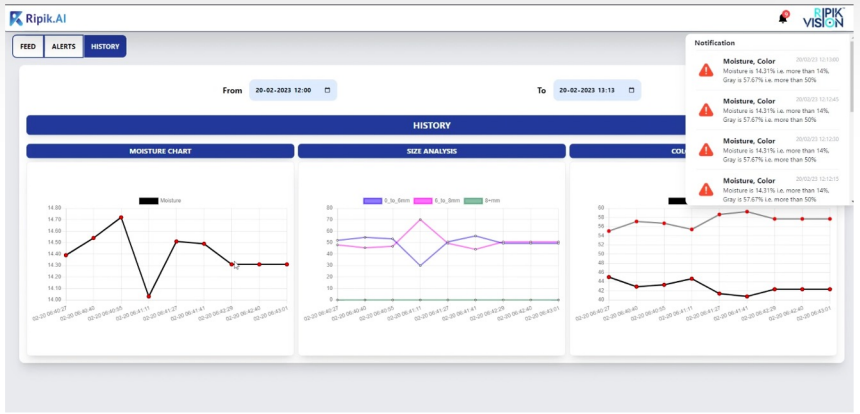
- **Real time identification of wood chip sizes**
- **Hence appropriate cooking time in digester**
- **Leading to improved yield and reduction in chemical consumption**

Ripik Vision Woodchip link

A3. Coal particle size detection for boiler in power plant

Case Example at captive power plant of IMFA, one of India's largest Power Plant

Key logic in detection of coal size, moisture levels, and color analysis



We built an algorithm to **detect the average particle size of coal, moisture levels, and grade (Grading mix of coal) in fluidized bed combustion boilers** for ensuring good efficiency of operations and reliability of these boilers

Impact

- **Real-time size detection and distribution of coal particles** to avoid large particles going into the boiler
- **Real-time indication and** calibrated analysis **on moisture level**
- **Color analysis (Grading mix of coal) in real-time and automated alerts** for any deviation from ideal profile for immediate redressal by the plant operators

Detailed document
Tool video

B1. Fuel rate improvement in cement kiln

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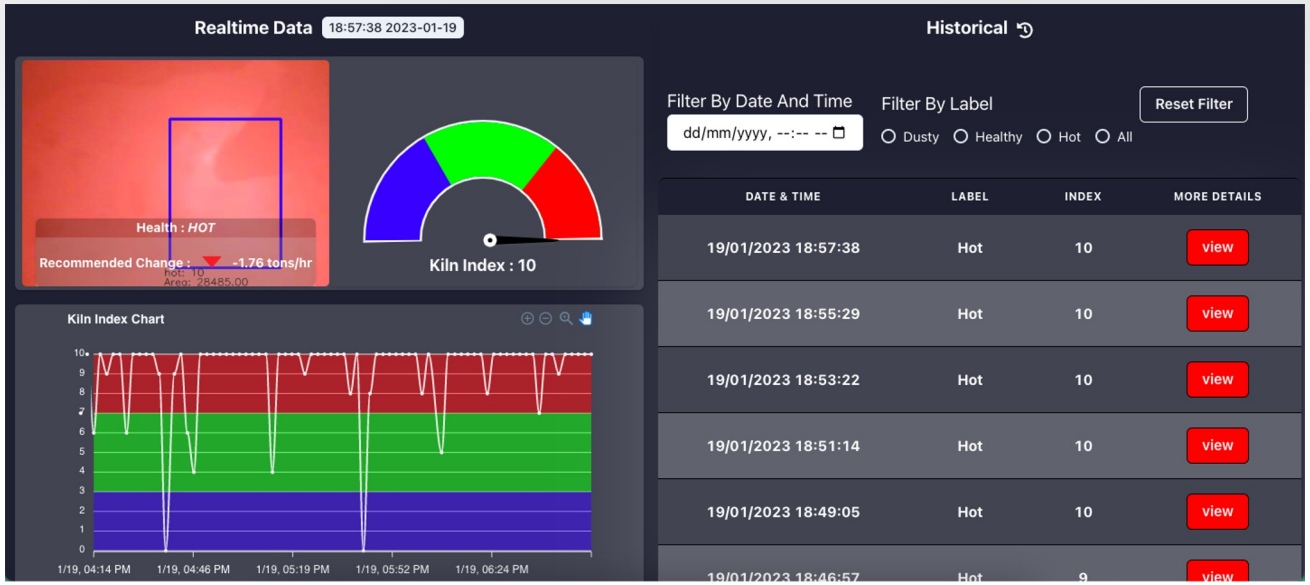
Case Example at Ultratech, India's largest cement player

Key logic in Monitoring of Equipment



We built a **core algorithm to classify images** as Dusty, Healthy or Hot, based on which standard SOPs were created for material rate and fuel rate control

Impact

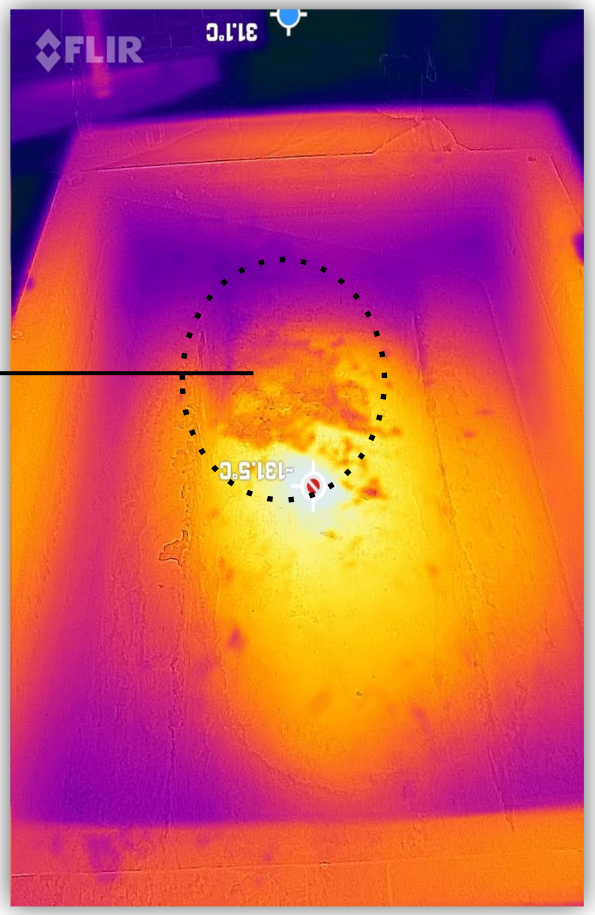
- **Better visibility** into kiln conditions to preventing jammin
- **3% reduction in fuel rate** through better control

Tool recording link

B2. Optimised mould heating in aluminium player

Case Example at Vedanta Aluminium

Moisture Visible



Optimizing Mould Heating

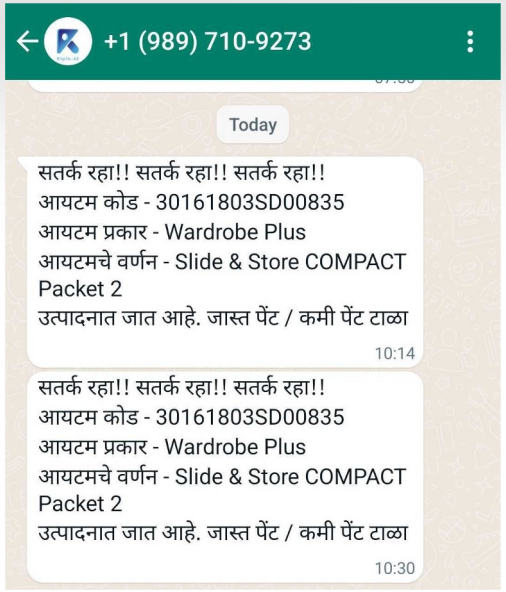
Present preheating time for each mould is 3 minutes because we cannot visualize the amount of moisture in each mould.

We aim to reduce the preheating time for mould with no moisture content, hence increasing the productivity.

C1. Paint quality monitoring and alert in steel almirahs

Case Example at Godrej interio, India's largest furniture company

Key logic in inspection of finished goods



We built an algorithm to **detect under paint and excess paint** instances to **prevent customer complaints** and reduce excess paint consumption

Impact

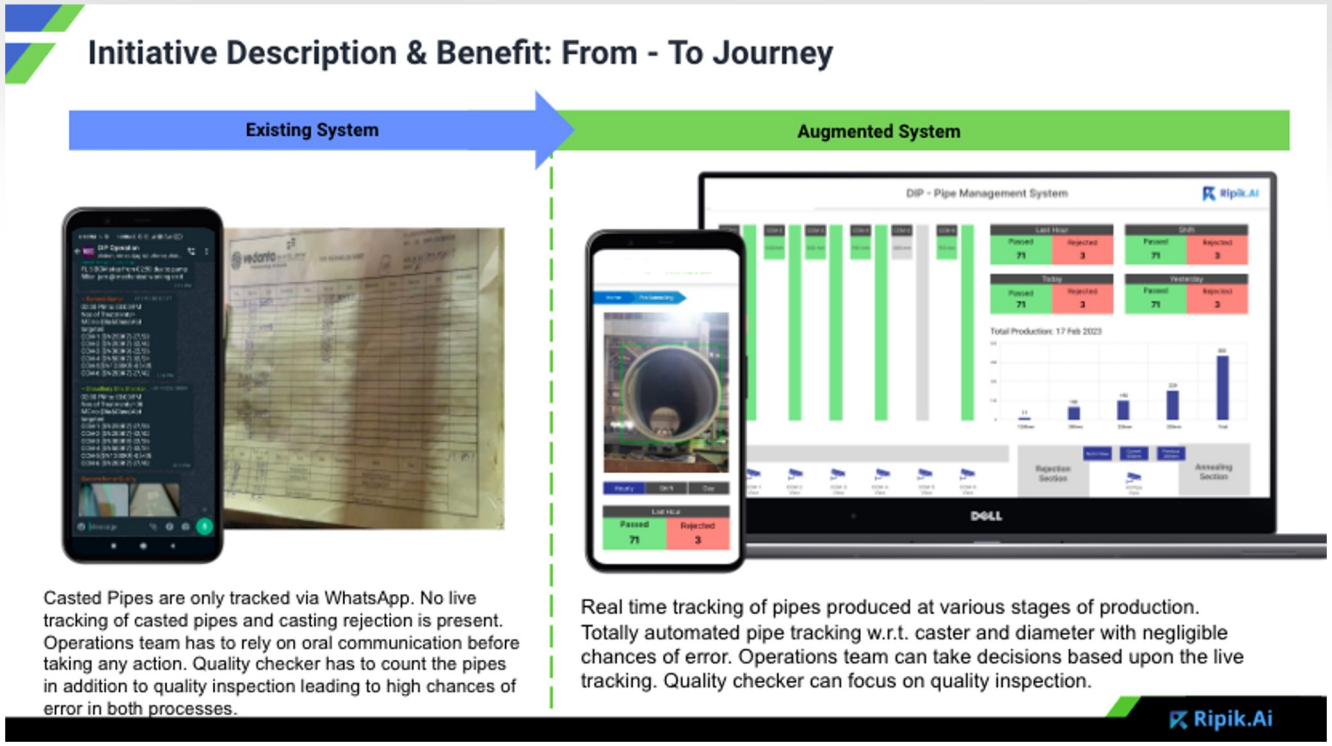
- **Automated inspection** of finished panels
- **30% reduction in** customer complaints
- **50% reduction in instances of excess paint** reducing paint consumption

Tool link

C2. Ripik Vision led monitoring and tracking of pipes

Case Example at Electrosteel

Key capabilities of Ripik Vision in monitoring and tracking of pipes in real-time



Impact

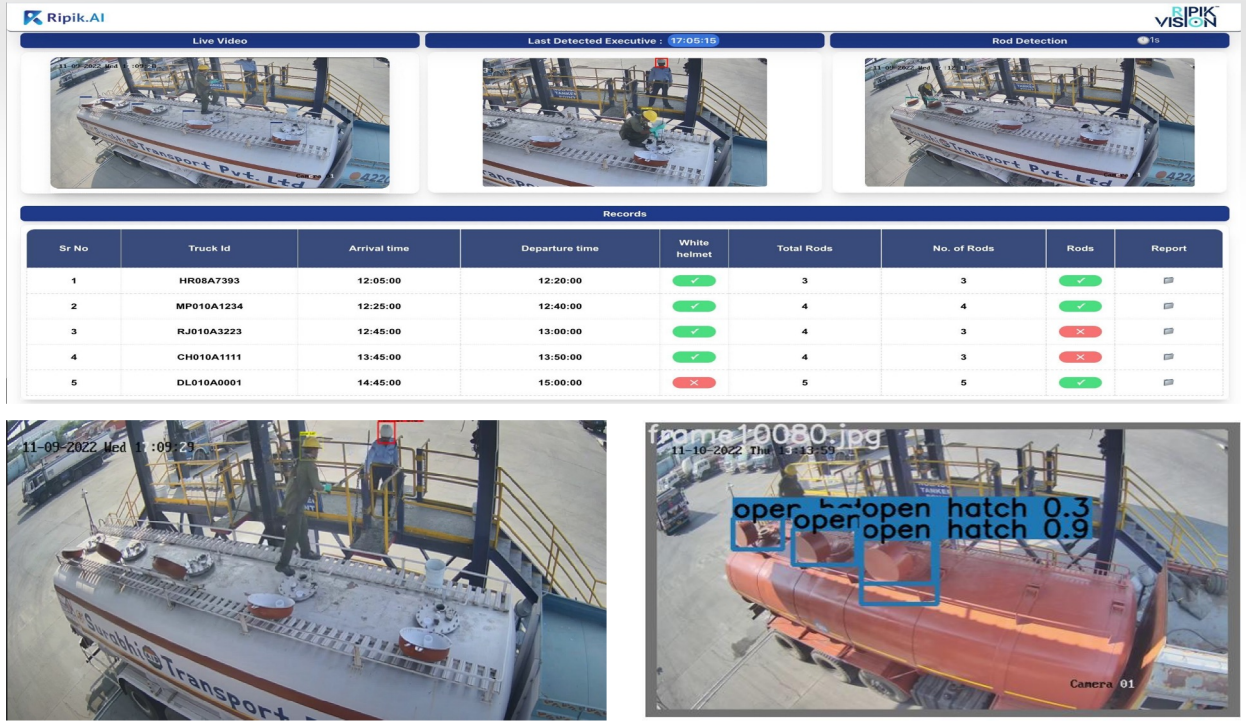
- **Real time tracking of pipes** produced at various stages of production.
- **Totally automated pipe tracking** w.r.t. caster and diameter with negligible chances of error.
- Operations team can take decisions based upon the **live tracking.**
- Quality checker can focus on **quality inspection.**

Detailed document
Video link

D1. Worker safety and compliance detection

Case Example at Asian Paints, India's largest paint company

Key capabilities of Ripik Vision in evaluating RM inspection compliance



Impact

- Detect **company executive presence** during the **entire RM inspection process**
- Detect if RM sample is taken from each hatch of the tanker
- Evaluate the **safety of the inspection process** and provide real-time alerts for unsafe conditions

Video link_hatch detection
Video link_helmet detection
Video link valve detection

D2. Worker activity monitoring

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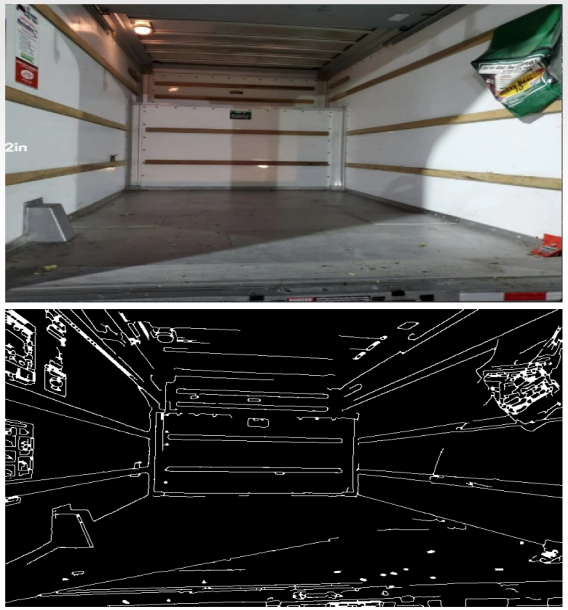
Case Example at Asian paints, India's largest paint company

Key logic in inspection of truck and loading patterns



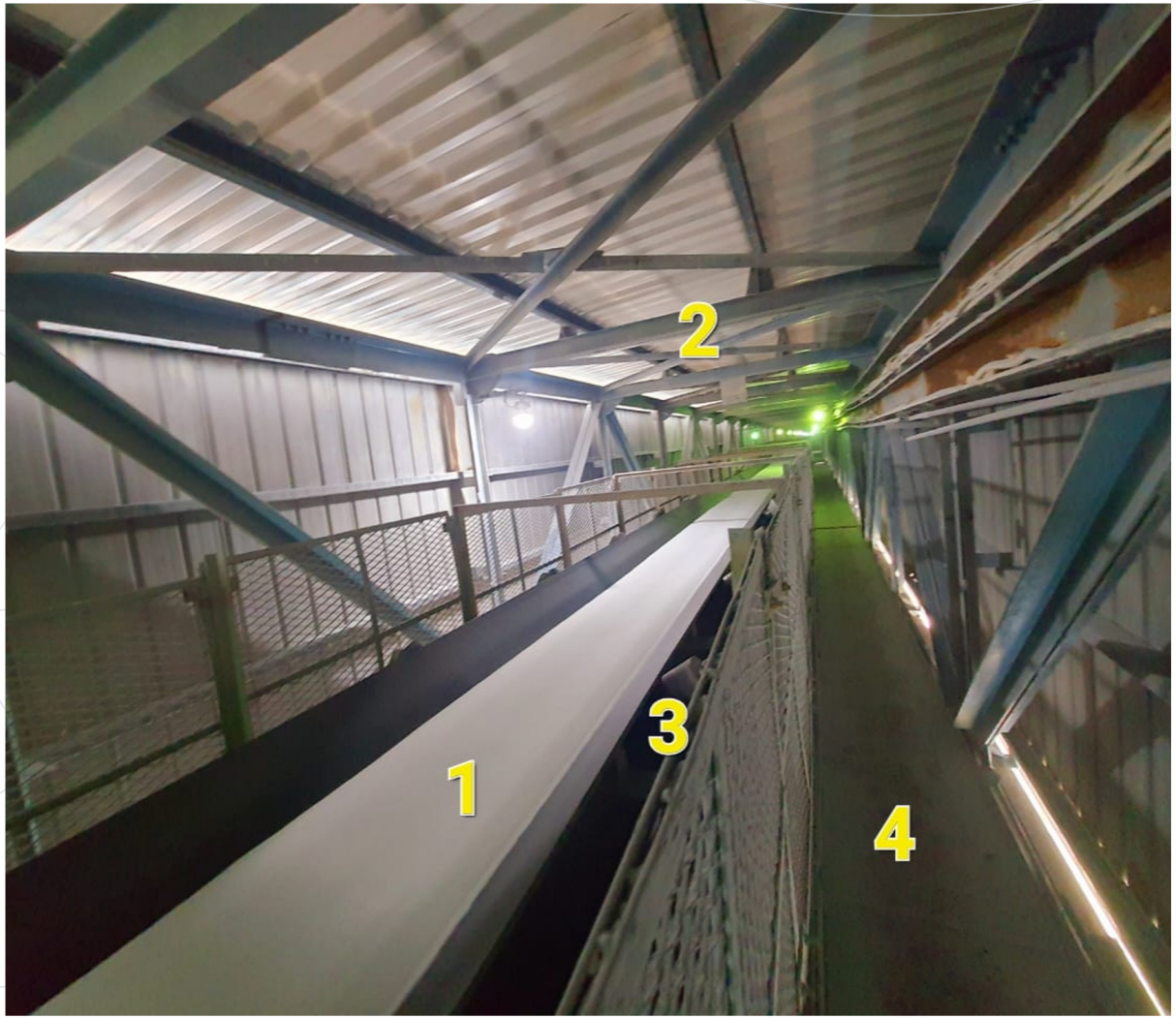
Anomaly detection in Truck interior

Real-time loading pattern evaluation

Impact

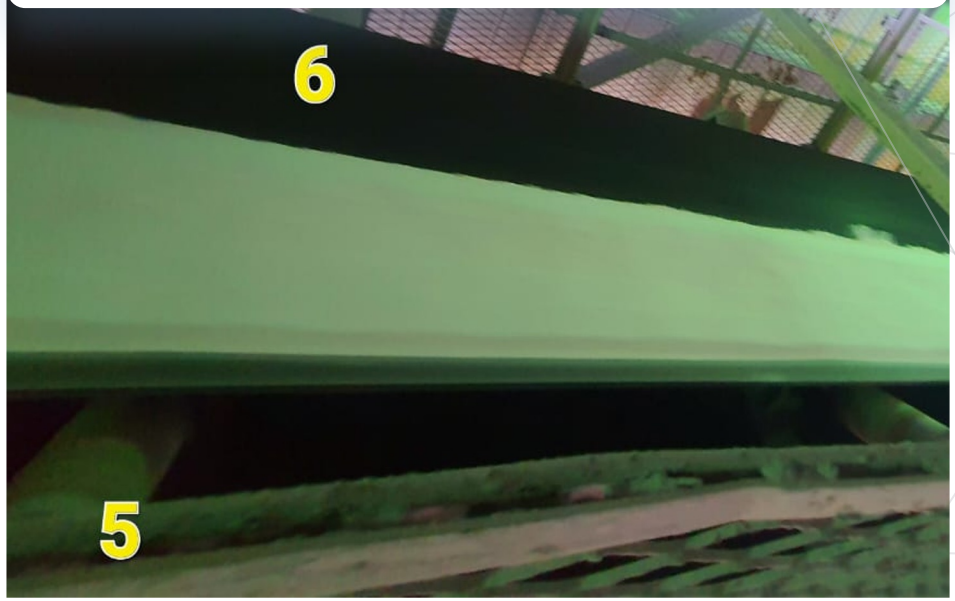
- **Real-time truck inspection** and evaluation of loading patterns
- **5% reduction in** paint volume damage per ton of paint transported

D3. Fire and other hazard detection in a factory



Computer Vision based Conveyor Belt Vigilance

Primary Objective: Fire/Smoke Detection
Secondary Objectives: Overflow, Spillage, Crack, Dust Detection, Misalignment Detection
Additional Benefits: Vigilance over belt, gearbox and motors.



THANK YOU!

Please let us know for further questions. It is our privilege to partner with you.
We look forward to the journey.

www.ripik.ai | hello@ripik.ai