

VIDEO SOLUTIONS SERVICES

IMPROVING WORKPLACE SAFETY
USING VIDEO SURVEILLANCE AND ARTIFICIAL
INTELLIGENCE

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KONICA MINOLTA VIDEO SOLUTIONS SERVICES



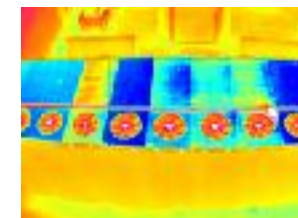
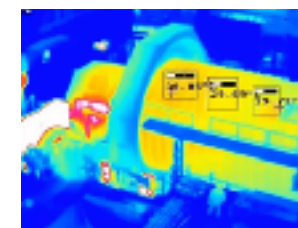
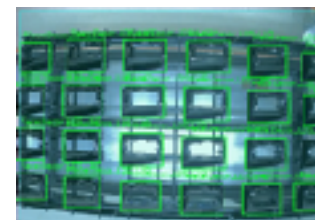
Hardware

VMS
Platforms

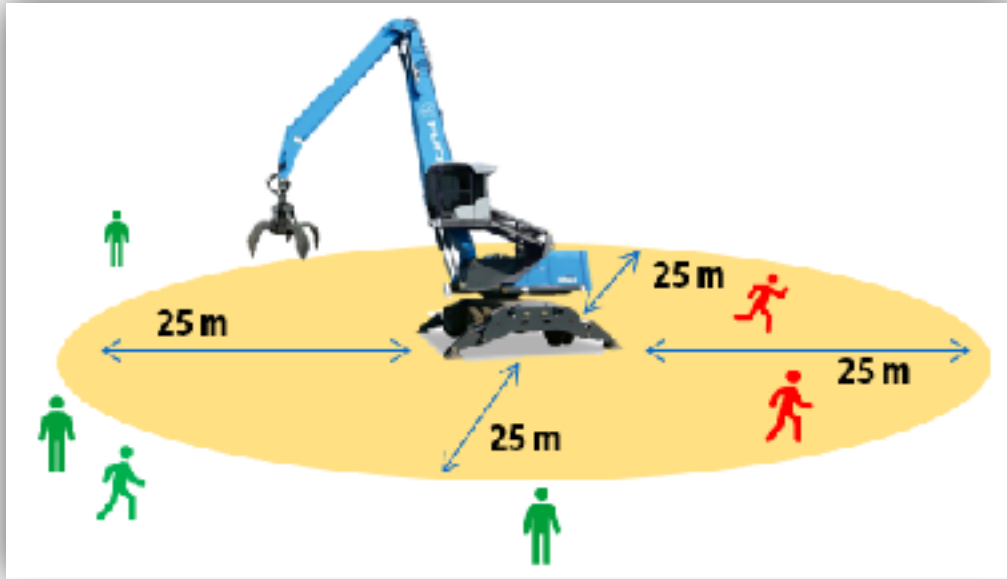
Standard
Video
Analytics

Advanced
Video
Analytics

Thermal
Imaging
Solutions



AI SOLUTIONS FOR HEALTH & SAFETY SCENARIOS



Monitoring safety distances



Monitoring the use of protective equipment

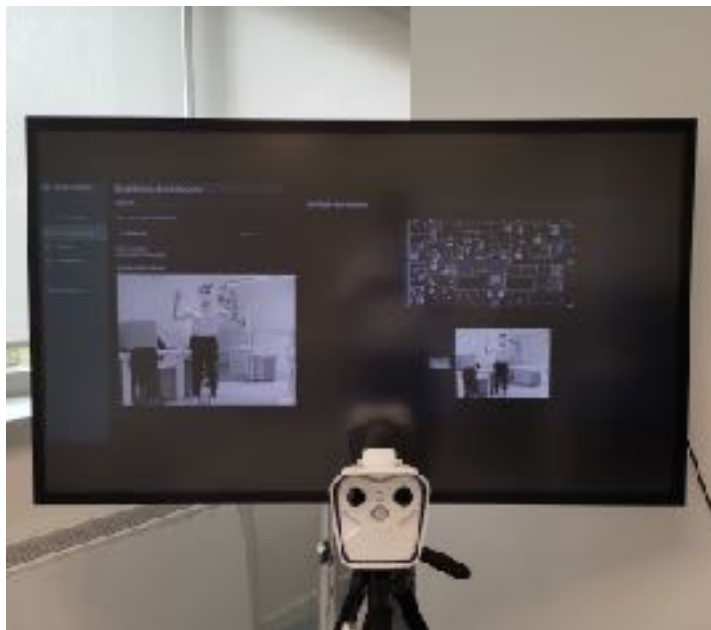


Thermal imaging

- Automatic detection of people not wearing personal protection equipment (masks, glasses, helmets, safety vests, gloves and others) to timely react and solve the issue.
- The application analyses subjects in front of a security camera and report a violation if personal protection equipment are not worn
- Fully customizable solution to match customer needs



SMART MIRROR SOLUTION



- Smart mirror installed at the entrance of industrial facilities in order to perform PPE check
- The solution allows faster checking of the PPE at the entrance of the facilities, a reduction of resources dedicated to the checking of the PPE at the entrance and increase awareness about the safety measures to the employee

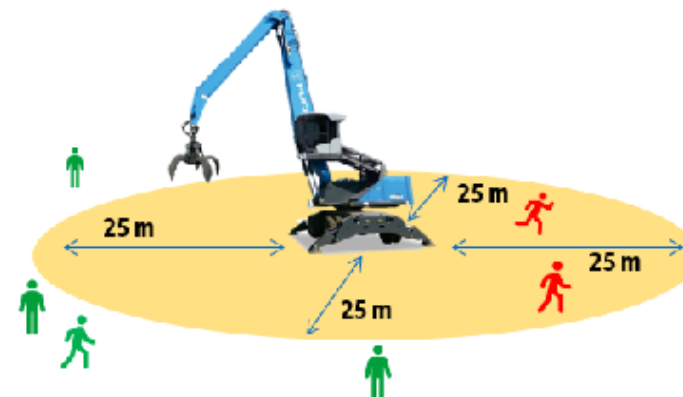
SMART MIRROR SOLUTION



- The solution is integrated with control access equipment

SAFETY FIRST WITH MACHINE PERIMETER MONITORING

- Artificial intelligence enables perimetral detection of humans in restricted areas where special machine handling grabbers are involved in different actions with potential life threatening consequence.
- The solution helps mitigate work accidents and potential harm situation in proximity of heavy utility machines offering **high accuracy of human detection for up to 25 meters radius around machine grabber**



- Life-threatening scenario where a person might be out of the operator's sight

SOLUTION DIAGRAM

Equipment mounted inside operator's cabin



Processing box

- Camera body
- Mini-server
- Data switch
- Power supply

Signaling box with LED and buzzer



Equipment mounted on the body of the grabber

- Optical sensors
- Mounting accessories



Micro-server



Data switch



Camera body



Camera body



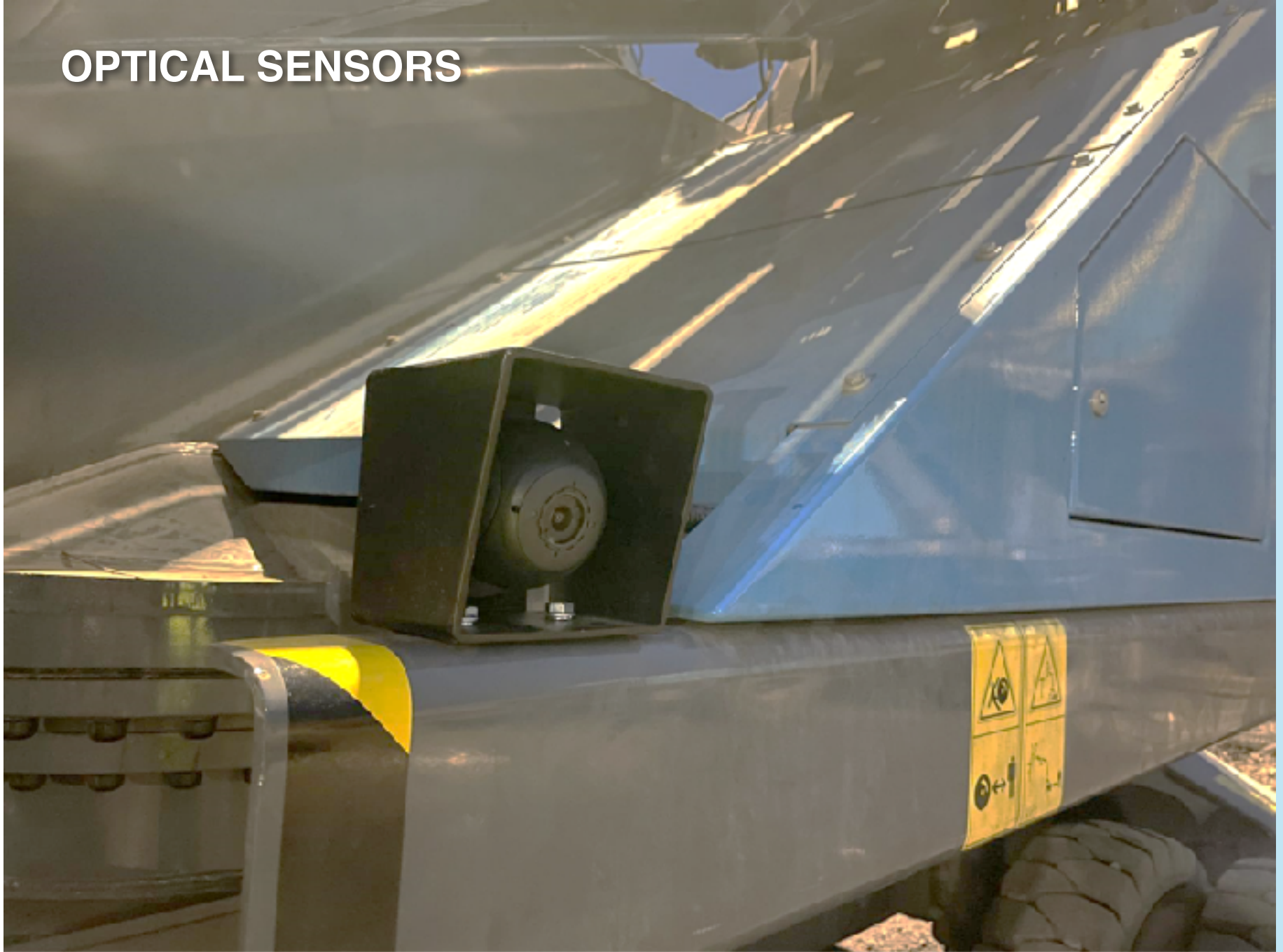
Optical sensors with mount



Optical sensors with mount

OPTICAL SENSORS

- Optical sensor with metal enclosure for protection



OPTICAL SENSORS

- Optical sensor with metal enclosure for protection



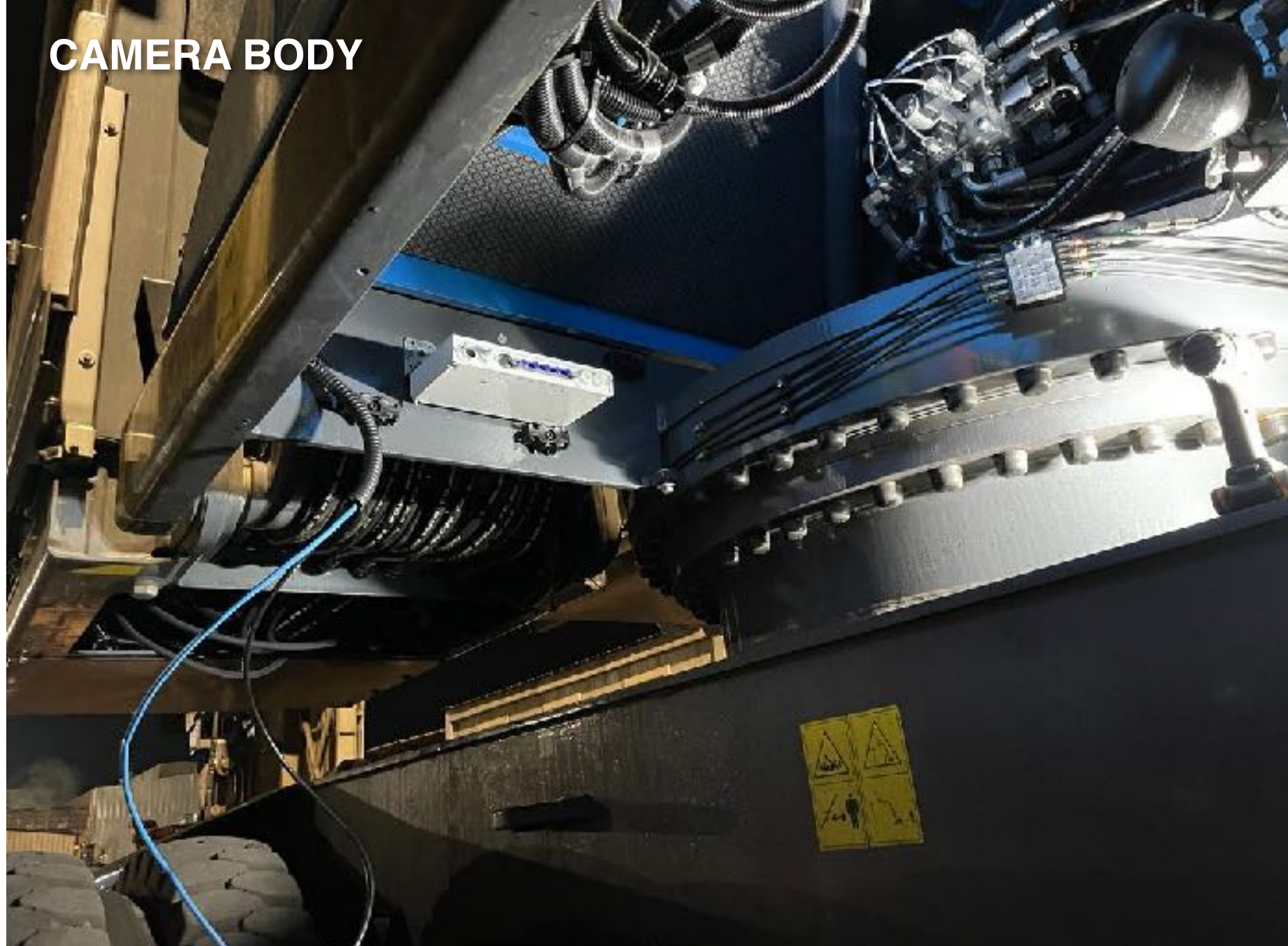
OPTICAL SENSORS

- Optical sensors with metal enclosure for protection



CAMERA BODY

- Camera body mounted in a protected area



PROCESSING UNIT

- Custom box designed to operate in challenging conditions



SIGNALING



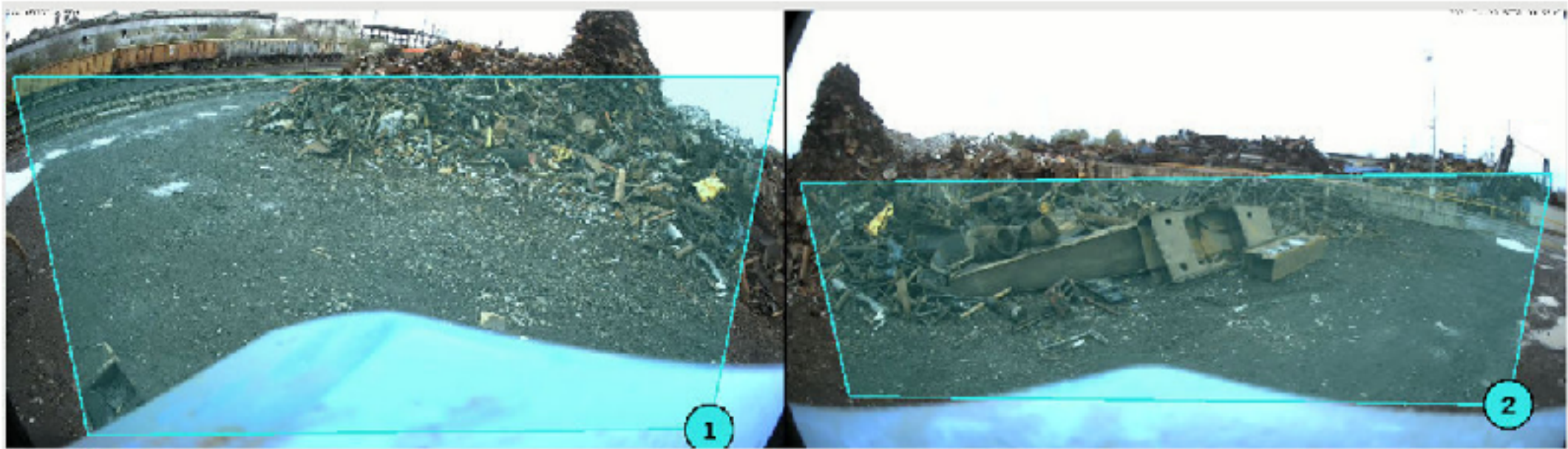
- Signaling box with LED lights and buzzer



ARTIFICIAL INTELLIGENCE APPLICATION DETECTION AREAS



ARTIFICIAL INTELLIGENCE APPLICATION CUSTOM DETECTION AREAS



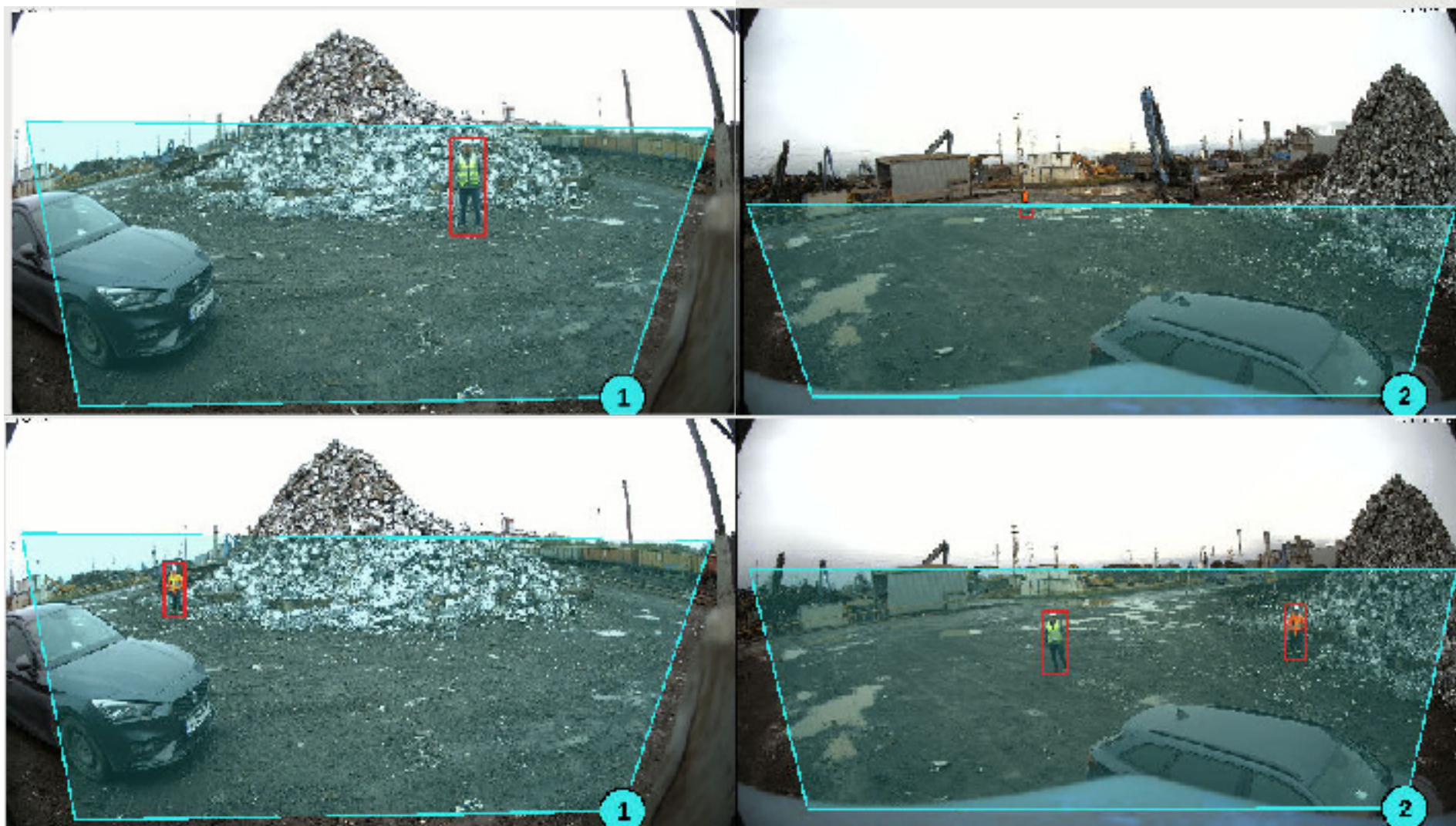
ARTIFICIAL INTELLIGENCE APPLICATION SAMPLE DETECTIONS



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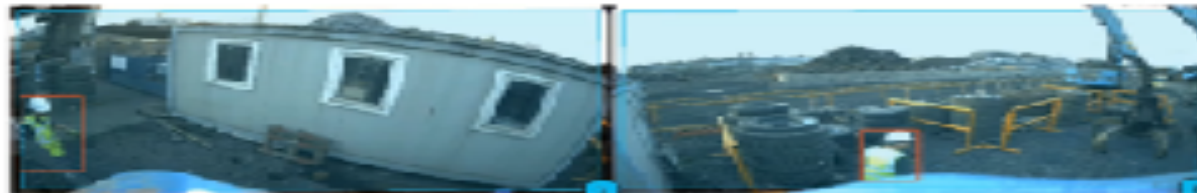


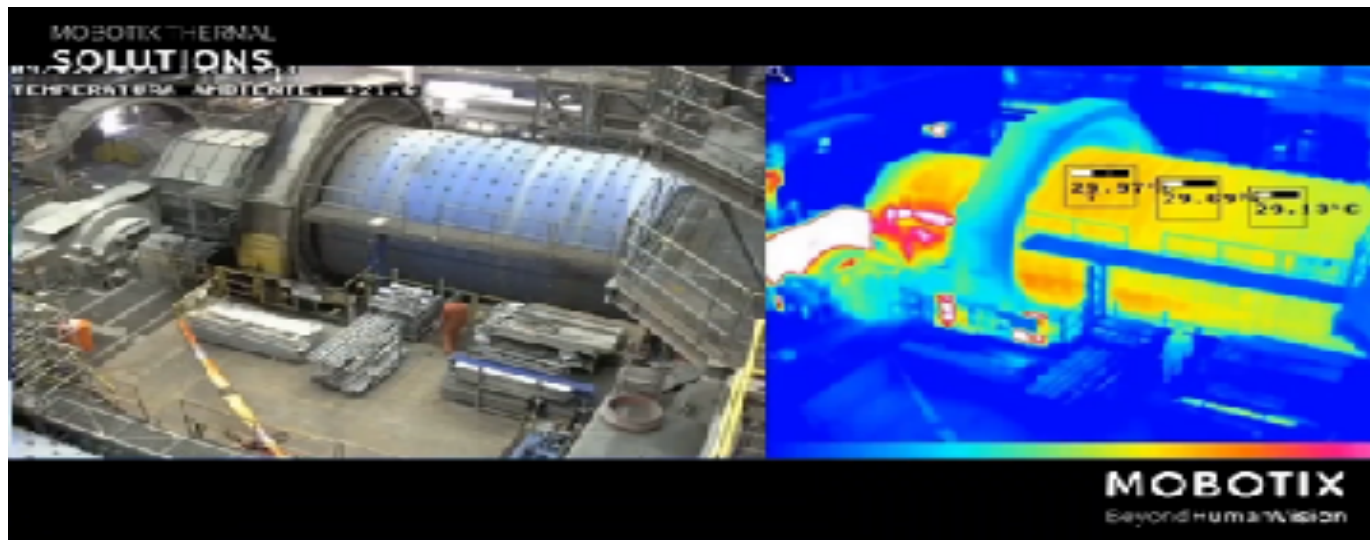
ARTIFICIAL INTELLIGENCE APPLICATION SAMPLE DETECTION



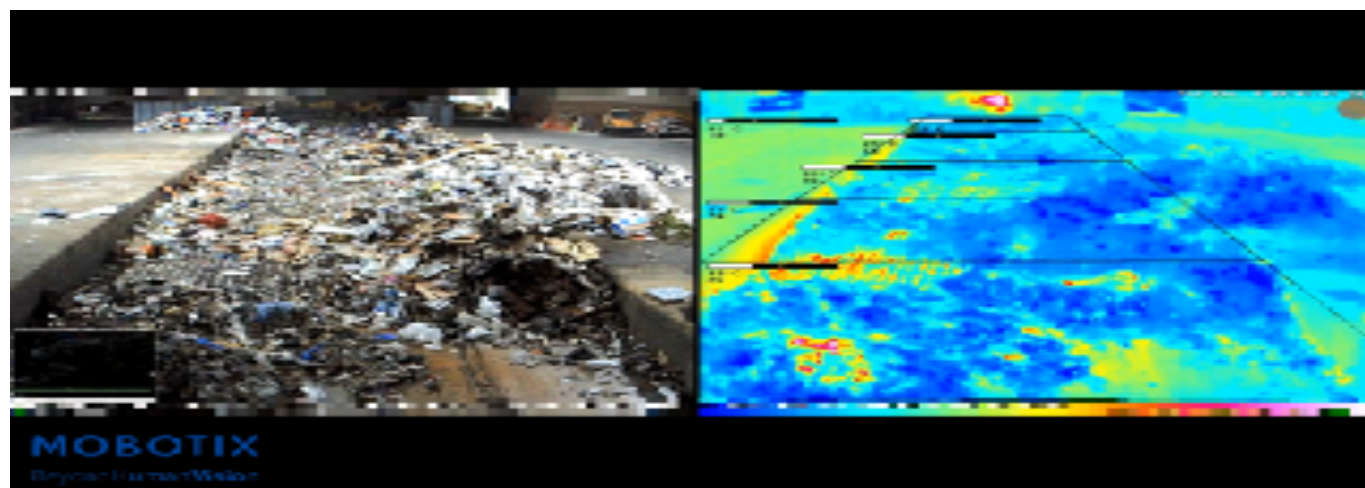
ARTIFICIAL INTELLIGENCE APPLICATION DEMO VIDEO

Giving Shape to Ideas





Predictive Maintenance



Early Fire Detection



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