



# The Logistics Operator's Guide to AI Video Analytics

How to Improve Efficiency, Safety, and  
Visibility with Your Existing Camera Systems



ISARSOFT



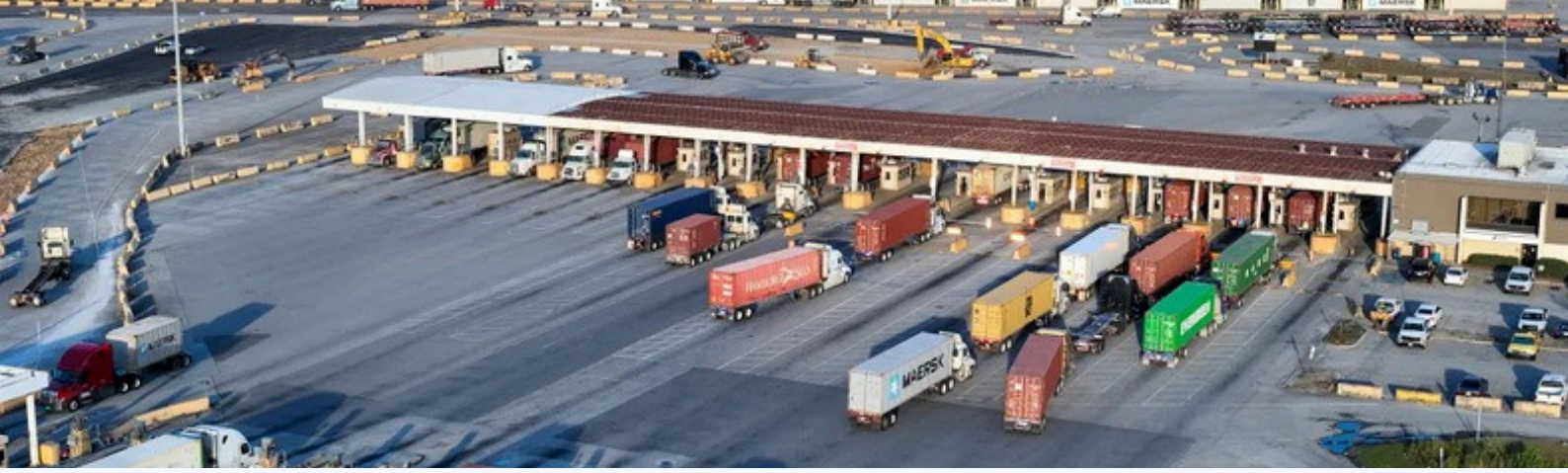
Learn how Logistic Processes can be optimized with Video Analytics



See Proven Results in Action at Port of Algeciras

# Table of Contents

1. Introduction to Isarsoft video analytics	<u>03</u>
2. Logistics Challenges Today	<u>04</u>
• Driver Delays & Queue Bottlenecks	
• Inefficient Yard and Dock Utilization	
• Manual Inventory and Container Tracking	
• Safety Risks in High-Traffic Areas	
3. How Isarsoft Perception supports Logistic Operators	<u>05-06</u>
• Queue Management	
• Loading Dock Monitoring	
• Occupancy Analytics	
• Container Code Recognition	
• Hazardous Goods Detection	
• Security & Employee Safety	
4. How Isarsoft Perception works	<u>07</u>
• Step 1: Camera Integration	
• Step 2: Real-Time Data Transfer	
• Step 3: Smart Anonymization	
• Step 4: Dashboard Insights	
5. How Isarsoft Perception Sets the Standard in Video Analytics	<u>08</u>
• Automatic anonymization	
• GDPR compliance	
• Information security	
• Live processing	
• Seamless integration	
• High accuracy	
6. Case Study: Port of Algeciras	<u>09-10</u>
7. Contact	<u>11</u>
8. Additional Resources	<u>12</u>



# From Cameras to Insights: The Power of Video Analytics in Logistics

*"We are drowning in information but starved for knowledge."*

— *John Naisbitt*

According to Precedence Research, the global video analytics market is projected to grow from USD 15.11 billion in 2025 to USD 94.56 billion by 2034, reflecting a compound annual growth rate (CAGR) of 22.6%. This rapid expansion shows how organizations across industries are embracing intelligent systems to make faster, data-driven decisions.

For logistics operators, this shift represents a major opportunity. Every facility is already equipped with cameras capturing valuable visual data — yet much of it remains untapped. By transforming existing infrastructure into a source of operational intelligence, logistics providers can enhance efficiency, increase visibility, and strengthen safety without adding new hardware or complexity.

AI-based video analytics makes it possible to measure queue lengths, monitor dock activity, and identify safety risks in real time. These insights enable teams to act proactively, allocate resources more effectively, and continuously improve performance across the supply chain.

Isarsoft Perception helps organizations realize this potential by connecting to existing camera systems, processing video data securely, and delivering actionable insights through intuitive dashboards — empowering operators to move from simply seeing to truly understanding.

*No need to add complexity — unlock the potential of the systems you already rely on.*

# Challenges faced in Logistics today



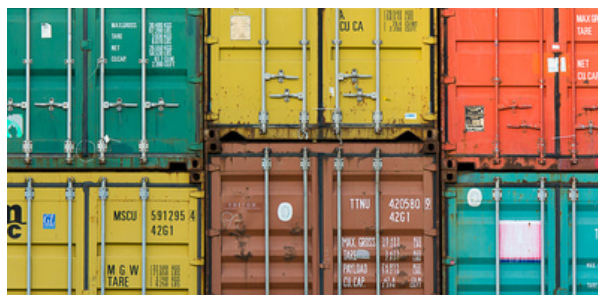
## Driver Delays & Queue Bottlenecks

Congestion at entry gates, loading docks, and inspection points lead to excessive wait times, frustrated drivers, wasted fuel, and poor turnaround times.



## Inefficient Yard and Dock Utilization

Lack of real-time insight into yard activity results in underused or overloaded docks, poor truck dispatching, and missed optimization opportunities.



## Manual Container Tracking

Relying on manual processes or barcode scans introduces errors, slows operations, and limits dynamic response to volume fluctuations.



## Safety Risks

High-traffic areas like forklift zones and loading bays pose collision risks without real-time monitoring and safety protocol enforcement.

# How Isarsoft Perception supports Logistic Operators

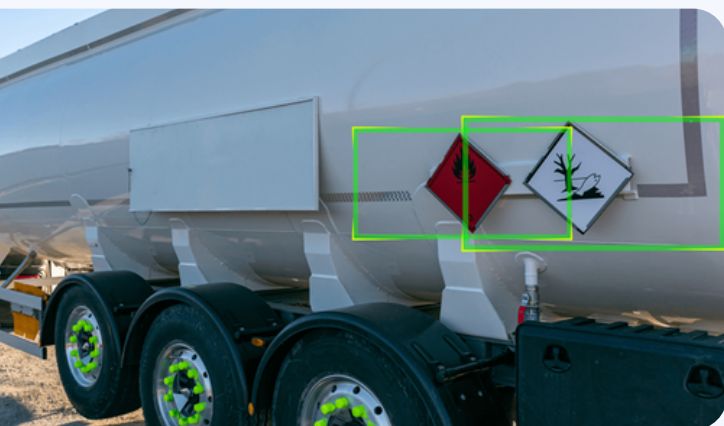
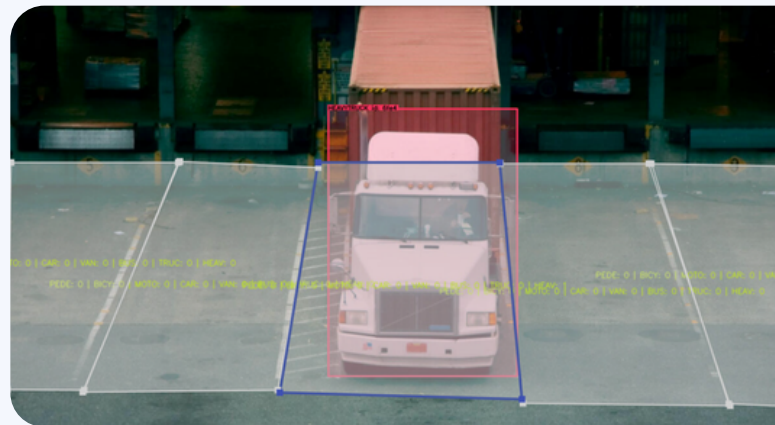


## Queue Management

- Measure waiting times at gates and docks
- Quantify throughput and process times
- Visualize real-time queue lengths

## Loading Dock Monitoring

- Detect real-time dock occupancy
- Recognize license plates automatically
- Measure service times
- Optimize utilization



## Hazardous Goods Detection

- Identify dangerous goods label automatically
- Manage blocking and permission list
- Get real-time compliance alerts
- Integrate external systems



## Occupancy Analytics

- Measure real-time area occupancy
- Identify underutilized and high-traffic zones
- Visualize occupancy trends with heatmaps and timelines

## Container Code Recognition

- Read OCR-based container IDs
- Control digit validation
- Ensure compliance with ISO 6346 standards
- Track inventory automatically



## Security & Employee Safety

- Detect intrusions in restricted zones
- Monitor access points for unauthorized entry
- Ensure PPE compliance
- Alert operators to potential forklift zone collisions
- Identify abnormal or unsafe behavior instantly
- Monitor overall safety performance continuously



# How Isarsoft Perception Works

Isarsoft Perception transforms standard IP camera footage into powerful insights through a seamless four-step process:



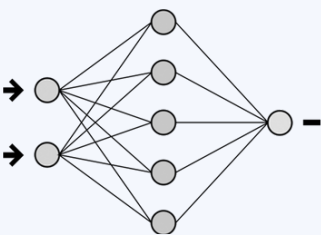
## 1. Camera Integration

IP cameras integrate individually or through existing Video Management Systems (VMS)



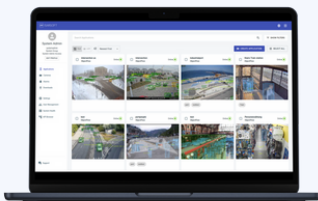
## 2. Isarsoft Perception

Connected cameras stream video data in real-time to Isarsoft Perception



## 3. Smart Anonymization

CNN processes video streams, anonymizing objects while maintaining analytical value



## 4. Dashboard Insights

All processed data displays on user-friendly dashboards with actionable KPIs

# How Isarsoft Perception Sets the Standard in Video Analytics

Logistics operations rely heavily on accuracy, speed, and security. Isarsoft Perception offers intelligent video analytics solutions tailored to meet these needs through real-time insights and privacy-compliant processing.

## ✓ Automatic Anonymization

Isarsoft Perception protects personal identities while enabling operational analysis in high-traffic zones

## ✓ GDPR Compliance

Fully compliant with GDPR and privacy laws, ensuring legal standards without compromising insights

## ✓ Information Security

Regular internal and external controls maintain high security standards for sensitive logistics data

## ✓ Live Processing

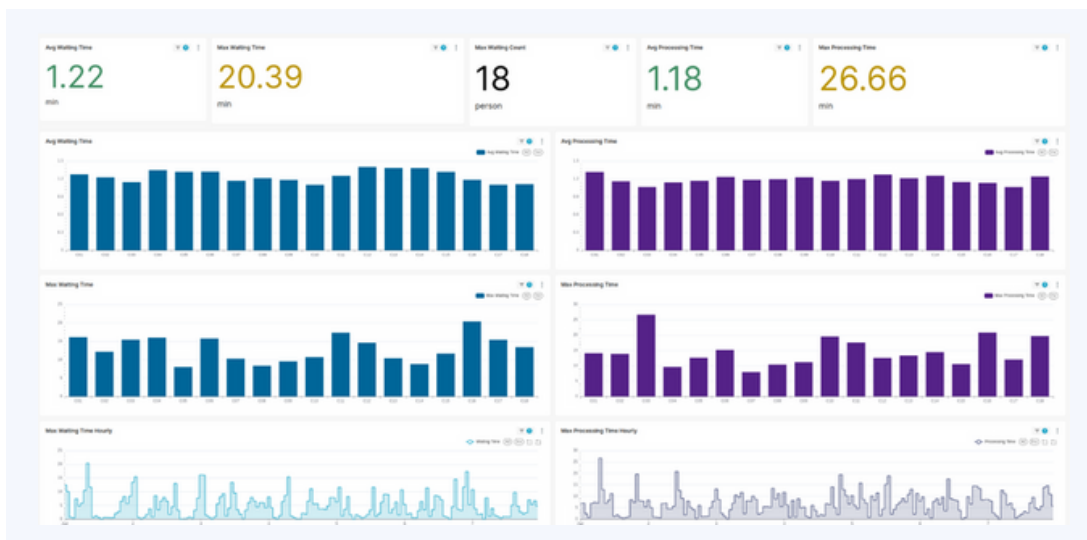
Real-time video processing enables instant KPI generation and faster decision-making

## ✓ Seamless Integration

Compatible with Genetec, Milestone/XProtect, and RTSP/ONVIF VMS platforms

## ✓ High Accuracy

Precise, reliable data enables confident decisions in route planning and resource allocation





# Case Study: Port of Algeciras

## The Customer

Port of Algeciras Bay Authority (APBA) – a leading maritime and logistics hub in Southern Europe, with high operational demands and complex traffic flows across its facilities.

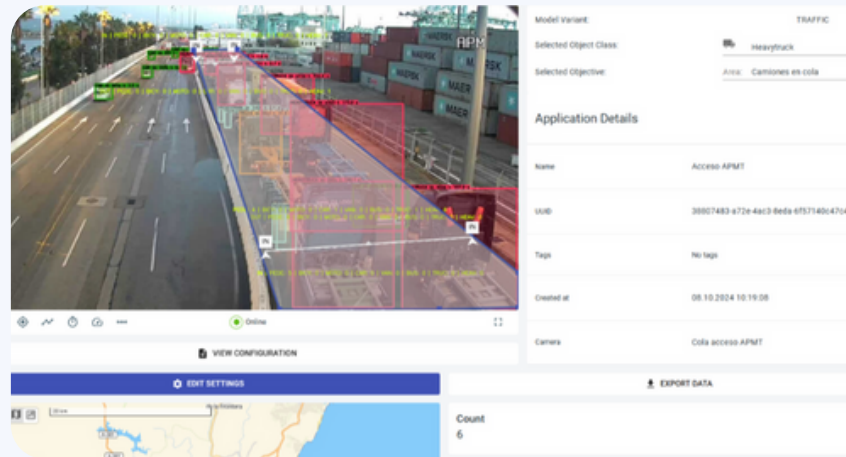
## The Problems

- ❗ Limited visibility over vehicle movements across multiple access points and internal roads made it difficult to manage traffic efficiently.
- ❗ Complex infrastructure layout created blind spots and made it hard to coordinate activities between different port zones.
- ❗ Congestion in key traffic areas led to slower turnaround times and reduced operational throughput.
- ❗ Manual monitoring processes provided delayed or incomplete information, preventing quick decision-making.
- ❗ Lack of centralized insights hindered data-driven planning and proactive management.

## The Solution

To support data-driven port management and improve visibility over vehicle movements, APBA integrated Isarsoft's AI-powered video analytics solution into its existing surveillance infrastructure. This deployment enables non-invasive monitoring of key traffic areas and enhances situational awareness in real time.

The system uses computer vision to detect and track vehicles in real-time and to analyze movement patterns at access points and internal roads.



Isarsoft Perception provides actionable insights through dashboards and KPIs for improved traffic control and decision-making.

## Benefits

- ✓ Zero new hardware investment:
  - Utilized existing video infrastructure
- ✓ Quick implementation: Minimal physical changes ensured rapid deployment
- ✓ Real-time visibility:
  - Enabled proactive traffic flow monitoring
- ✓ Operational improvements:
  - Helped identify and respond to traffic patterns
- ✓ Sustainability gains:
  - Improved flow supports fuel and emissions efficiency.

# Ready to reduce Yard Delays, improve Safety & boost Throughput?

With AI-powered video insights for Logistics –  
no setup, no long-term commitment.



*“Let’s get in touch and explore together  
how we can support you optimizing  
your logistics processes.”*

Konrad Beutel  
Sales

[Book a free appointment](#)



## Additional Resources

- [Enhancing Loading Dock Management With Isarsoft Perception](#)
- [Using Heat Maps to analyze Traffic Flow: The Isarsoft Approach](#)

## FAQs

- [Supported Cameras](#)
- [Supported Video Management Systems \(VMS\)](#)
- [Deployment options](#)
- [Integrations](#)
- [FAQ](#)

