

VIDEO #2 page 1

SEGMENT 1

OPENING QUESTION:

“WHICH TRUCK CONFIGURATIONS AND COMPANIES USE THESE SYSTEMS”?

Most people imagine one thing when they hear the words autonomous truck and that is that driverless commercial tractors and trailers are traveling on our city streets, country roads and highways coast to coast in the US picking up and delivering commercial freight 24/7/365 a year.

However, the real use of these systems in our current shipping industry is much more complicated than that!

Autonomous systems are being developed for many different types of commercial vehicles and many different operational environments.

Today, we're going to break down what types of truck configurations are and can implement and use these systems safely and efficiently with the current technological infrastructure, which companies are involved, and how these operations work in the real world.”

SEGMENT 2

CLASS 8 LONG-HAUL TRACTORS

“Let’s begin with Class 8 long-haul freight trucks”.

These are the systems most people see in media coverage.

Companies involved in this area include Aurora, Kodiak AI, Waabi, Torc Robotics, Volvo Autonomous Solutions, and there are others.

Most of these systems focus on interstate freight corridors and hub-to-hub operations.

Many operations remain limited to specific routes and operational conditions.

Some still use safety drivers.

Others are beginning limited driverless operations under tightly controlled conditions.”

SEGMENT 3

YARD TRUCKS AND TERMINAL TRACTORS

Another major category involves autonomous yard trucks and terminal tractors.

These vehicles move trailers inside distribution centers, freight yards, and warehouse environments.

Companies such as Outrider, Fernride, and ISEE are active in this space.

Because yards are more controlled than public highways, many experts believe yard automation may expand faster than nationwide over-the-road autonomy.”

SEGMENT 4

PORT DRAYAGE AND TERMINAL OPERATIONS

Ports and container terminals are another important environment.

These systems often operate on repetitive routes inside controlled areas.

Autonomous terminal tractors may move containers between loading zones, parking areas, and staging areas.

This environment is very different from general highway freight transportation.

SEGMENT 5

HUB-TO-HUB FREIGHT

One of the most important concepts in autonomous trucking is hub-to-hub freight.

In this model, the autonomous truck may handle the interstate portion of the route.

Human drivers may still handle local pickup, final delivery, customer yards, and complex urban operations.

This is very different from fully autonomous door-to-door freight transportation.

SEGMENT 6

RETROFITTED VS FACTORY-INTEGRATED SYSTEMS

There is also an important difference between retrofitted systems and factory-integrated systems.

A retrofitted system adds autonomous technology to an existing truck platform.

A factory-integrated system is designed directly into the truck platform itself.

This distinction affects maintenance, safety systems, diagnostics, and long-term operational design.

CLOSING

The autonomous trucking industry is not one system and not one technology.

It is a collection of different technologies operating across different environments with different levels of human oversight.

Understanding the differences between these autonomous operating systems is critical to understanding where the industry stands today.

In our next video, we'll examine the operational conditions and real-world limitations these systems face every day.