

# GAUSSIN MANUGISTIQUE®

*Creator of global handling solutions*

*Manufacturer of handling and self-propelled systems*



## 8<sup>th</sup> PHILIPPINE PORTS AND SHIPPING 2015

THE PENINSULA MANILA, THE PHILIPPINES  
THURSDAY 12 AND FRIDAY 13 FEBRUARY 2015

*February 2015*





**1880 – Eugène GAUSSIN**  
**Metal constructions**



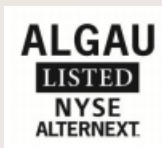
**1961 – Henri GAUSSIN - Industrial trailers**



**1970 – Beginning of the containerization**



**1994 – AIRBUS ( FULL ELEC vehicle)**



**2006 – IPO Listed on the Nyse Alternext**



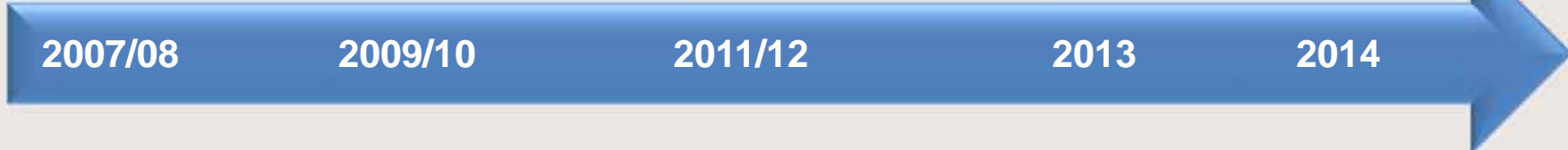


# DOCK IT

## PORT EQUIPMENT



# Product cycle from prototype to commercial launch



Définition & 1st drafts

Prototype  
Industrialisation  
ATT V1

Commercialisation  
Pré-séries V4 et prototype AIV

Série ATT V3  
ATT Lift  
Proto full Elec & Hybrid

Commercialisation  
8 véhicules  
5 POWERPACK





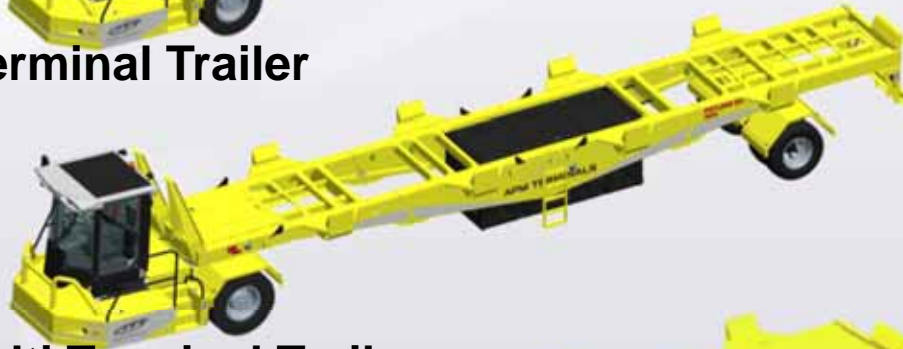
**Terminal Trailer**



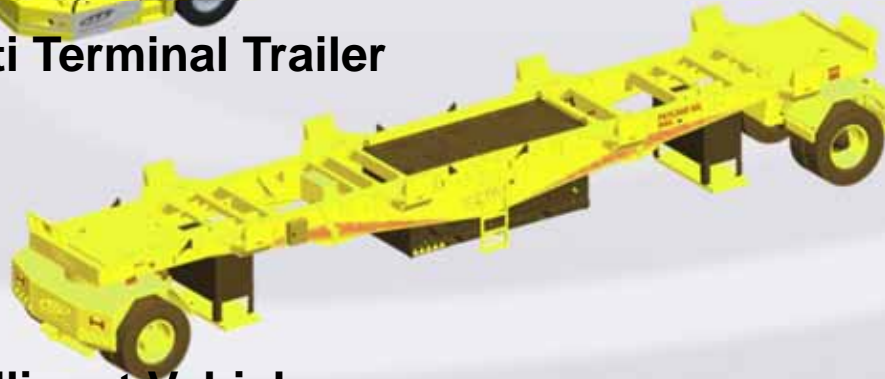
**Automotive Terminal Trailer**



**Automotive Multi Terminal Trailer**



**Automotive Intelligent Vehicle**



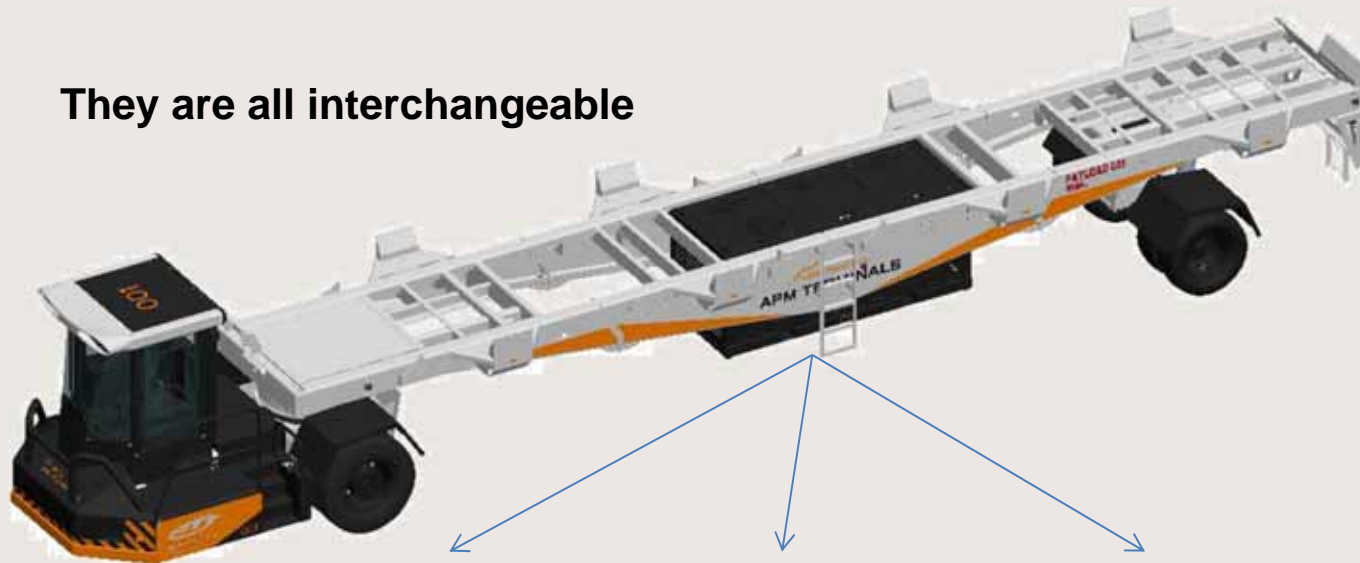
The Power of your dreams...





One vehicle, different type of energy:  
Choose the one you need

**They are all interchangeable**



Hybrid  
(diesel electric)



Full electric  
(Batterie)



Futur energy  
(i.e. Full cell-hydrogen)





## Electric vehicles (ATT and AIV):

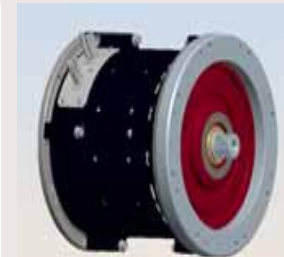
- Power: 250 kW max
- Turning radius: less than 20 m for a U-turn
- Dead Weight: 16 tons
- Capacity: 60 tons
- Container: 20 ft, 40 ft, 45 ft.
- Speed: 25 km/h (loaded),  
38 km/h (unloaded)
- Torque: 2 x 11600 Nm (at wheel)
- High efficiency: 80% from battery to wheel.





## AIV and ATT electric:

- Hydraulic steering system
- Hydraulic suspension
- Electric traction system
- Dynamic and handbrake system
- Automotive components
- Powerpack technology
  - interchangeability
  - ease of maintenance
  - higher availability of the vehicle





In 2013, let's move with ATT® Full Elec  
Faster, safer and cleaner



*In collaboration with Alternative Energies  
and Atomic Energy Commission  
for the development of PowerPack Full Elec.*



Valueur Nyse Alternext : FRO010342329 ALGAU

[www.gaussin.com](http://www.gaussin.com)

GAUSSIN MANUGISTIQUE® is specialized in the auditing of handling procedures and the production of wheeled systems for the delivery and transportation of heavy, large or delicate loads. Founded over a hundred years ago, GAUSSIN, with more than 50,000 handling vehicles across the world, enjoys a strong reputation in the four booming markets of Energy, Transport, the Environment and Raw Materials. GAUSSIN MANUGISTIQUE® has been listed on NYSE Alternext since 16 June 2010.

  
**GAUSSIN**  
MANUGISTIQUE®





## The CEA establishes this partnership through 2 institutes :

- ▶ The CEA (Commission for Alternative Energies and Atomic Energy) is an active partner of the GAUSSIN MANUGISTIQUE Group through 2 institutes :
- ▶ - The CEA LITEN (Laboratory for Innovation in New Energy Technologies and Nanomaterials) ,with more than 50 years of proven experience in batteries and fuel cells for vehicles. The LITEN brings its expertise the GAUSSIN Group to design the Powerpack FULL ELEC and its Battery Management System to guarantee performance and safety
- ▶ - The CEA LIST (Laboratory for Systems Integration and Technologies) has proven experience in robotics, algorithms and simulation software. Their knowledge will be embedded in our AIV©, ensuring the autonomous navigation of the vehicles and enabling to manage the precise berthing operations with ATT© LIFT or AIV© LIFT to the DOCKING STATIONS© or under the cranes (TALK TO CRANE option).





## CEA Liten (Grenoble/France)



Knowledge as a battery cell manufacturers



Motor validation



Battery assembly and management

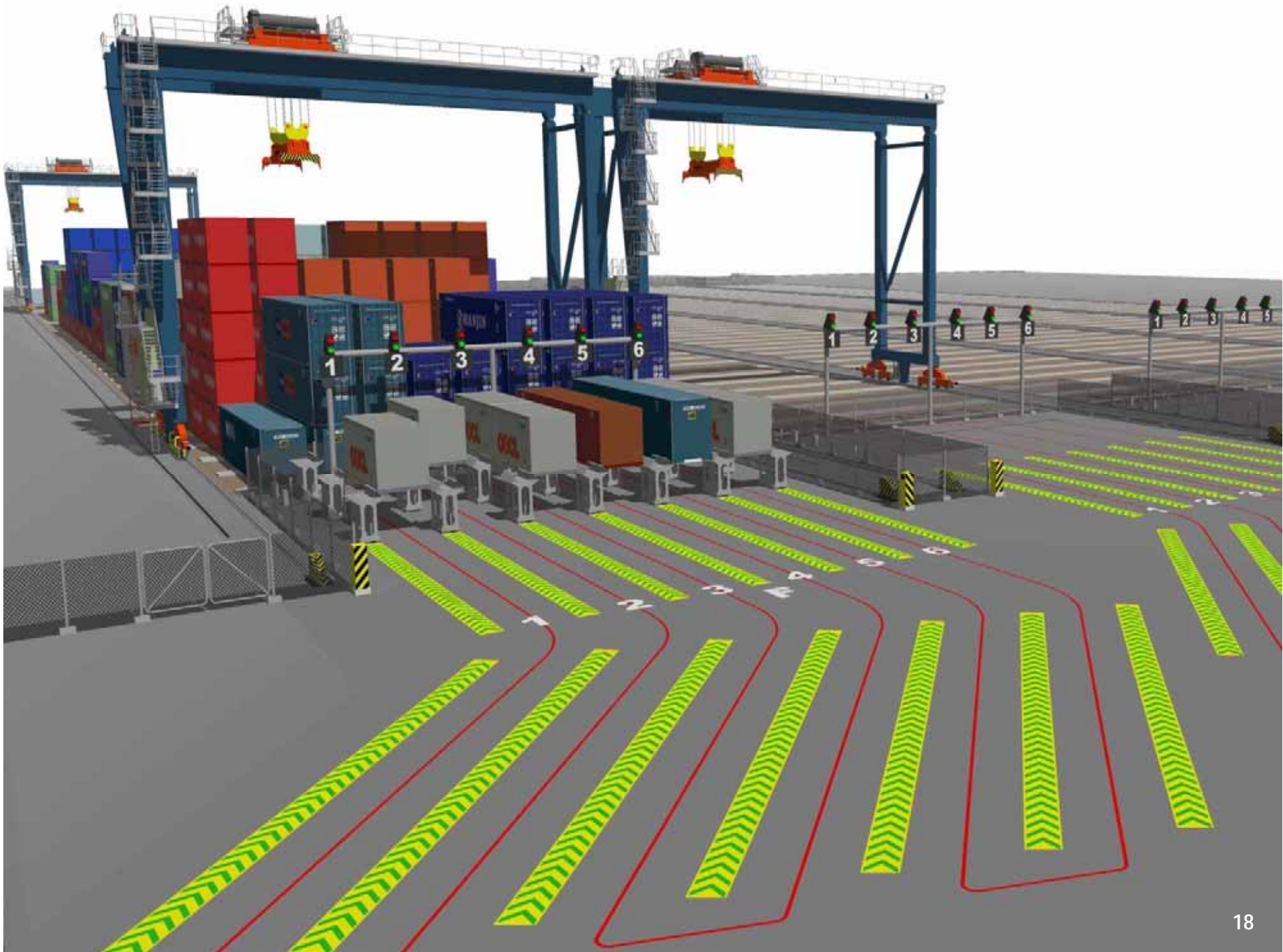


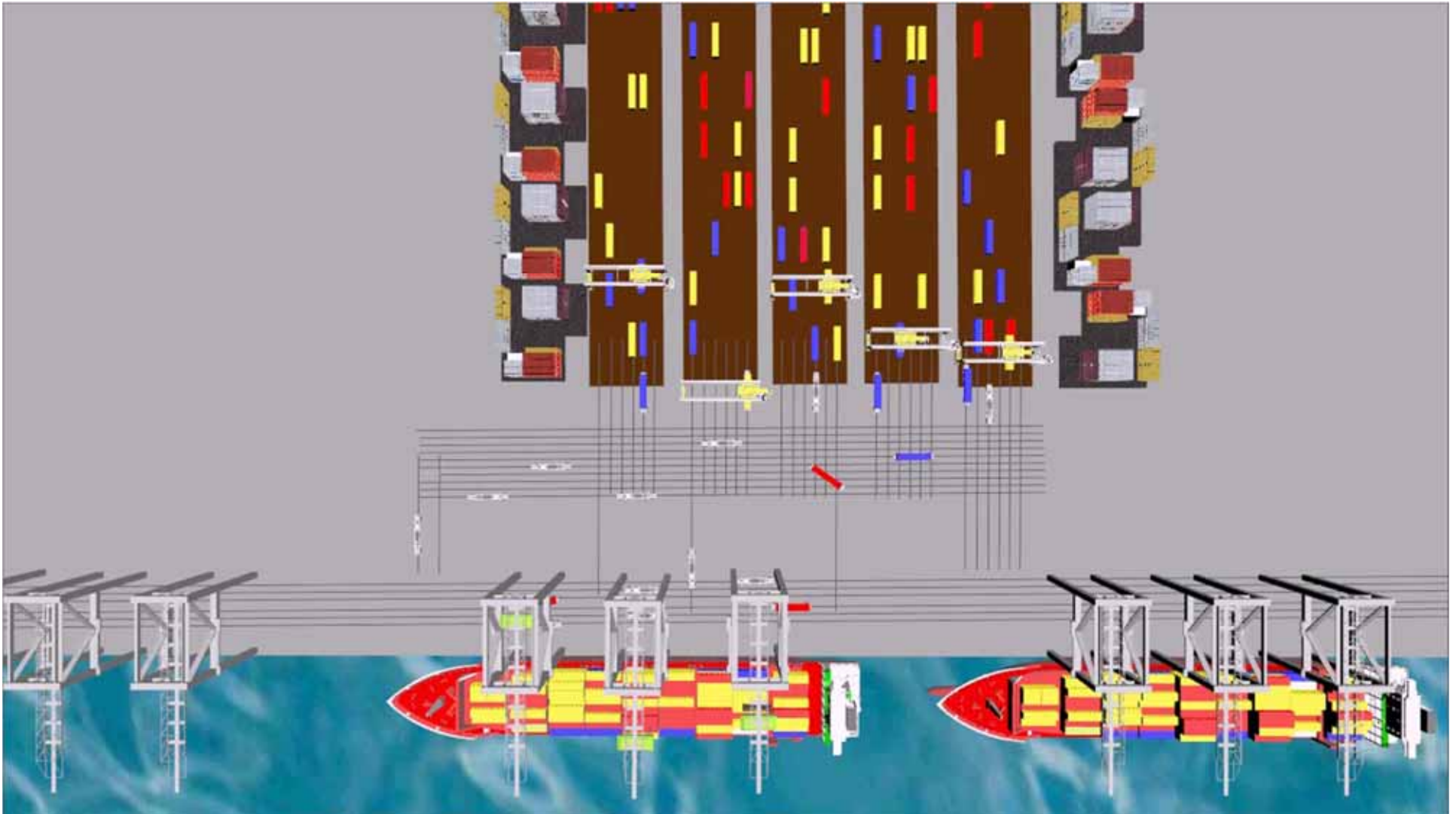














- European leader in intralogistics automated systems

AGV – Automated Guided Vehicles

- 250 sites commissioned in Europe

L'Oréal, Ovest France, Clairefontaine, Heineken, Air France, Nestlé, Pfizer, Bonduelle, Entremont, Sodebo...

- 140 employees based in Rennes

15% of staff in R&D

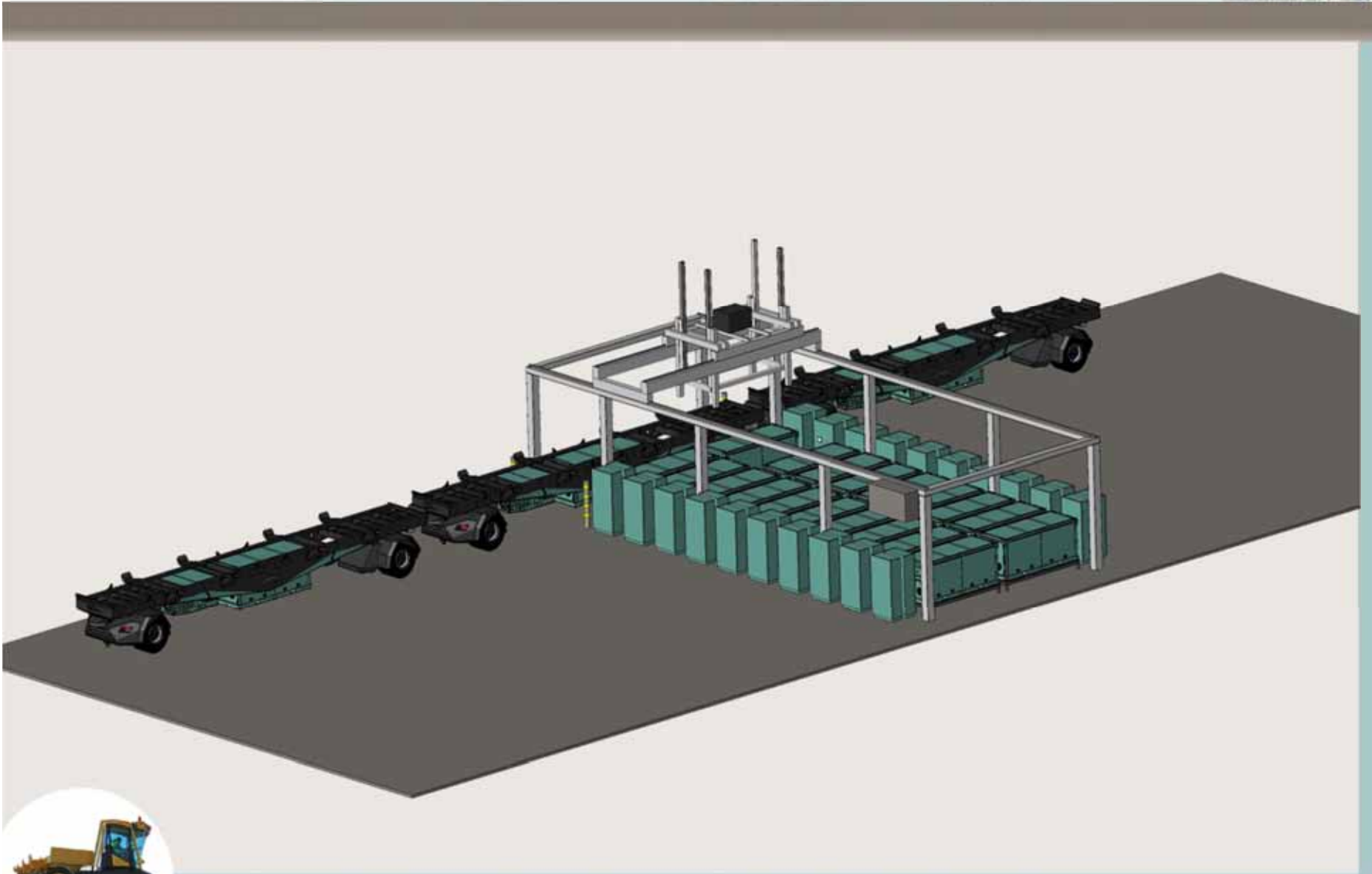
- Dedicated process for *Open Innovation*



## Software AGV Manager ©

- Missions assignment
- Traffic management
- Communication
- Synoptic layout
- Analysys
  - Replay
  - Production indicator
  - Realibility indicator
  - ...

















ATT - AIV range offers proven competitive benefits :  
More Safety  
99 % availability  
OPEX and CAPEX cost reduction

Higher productivity

FULL ELEC POWER PACK

*CONTAINER TERMINAL  
zero noise & zero emissions  
YES WE CAN*





*THANK YOU ! SEE YOU SOON*

*ELVIO SIMONETTI*



**GAUSSIN**

**MANUGISTIQUE®**

*12 February 2015*





## **YOUTUBE :**

**TOC ROTTERDAM** <http://youtu.be/-xPHT1PDD7U>

**ATT FULL ELEC 3D** <http://youtu.be/ukahT8IEsgc>

### **ATT**

Crash test : <https://www.youtube.com/watch?v=BaL60O1Djto>

ITW Benali : <https://www.youtube.com/watch?v=yYcNnoTH-ds>

Flotte ATT chez APMT : <https://www.youtube.com/watch?v=nSIX4yZ0wCw>

ATT V2 en Malaisie chez PTP : <https://www.youtube.com/watch?v=MRUak1xYyvg>

### **AIV**

AIV en 3D : <https://www.youtube.com/watch?v=MOy55me9yog>

AIV à Héricourt : [https://www.youtube.com/watch?v=6IFHDI\\_mtRg](https://www.youtube.com/watch?v=6IFHDI_mtRg)

AIV teaser : <https://www.youtube.com/watch?v=DNzjbDw1AFs>

### **AMTS V1**

<https://www.youtube.com/watch?v=pjD8jYU0zu0>

### **POWERPACKs**

<http://www.youtube.com/watch?v=msY4XeOcOCs>

### **ATT LIFT**

<http://youtu.be/oVDCzpsPsRE>

### **USINE DE PRODUCTION**

<https://www.youtube.com/watch?v=kM9PoSdKnIY>

### **GAUSSIN MTO**

<https://www.youtube.com/watch?v=8ojQtwNqfWk>

