

# 1st International Workshop to Push Forward Your Trolleybus System

## New systems for Italy

- Axel Huysmans, Sales engineering
- Salzburg, April 20<sup>th</sup> 2006



# Van Hool Bus and Trailer Manufacturer N.V.

- **Founded 1947 in Lier-Koningshooikt Belgium**
- **Workforce: 4.300**
- **Annual Production:**
  - **1.600 Buses & Coaches**
  - **4.000 Commercial Vehicles**  
**(Trailers + Tank containers)**
- **Export: 80%**
- **Turnover: 485 Million Euro**







## Van Hool: Factory grounds (ca. 430.000m<sup>2</sup>)

# Van Hool Citybus product line



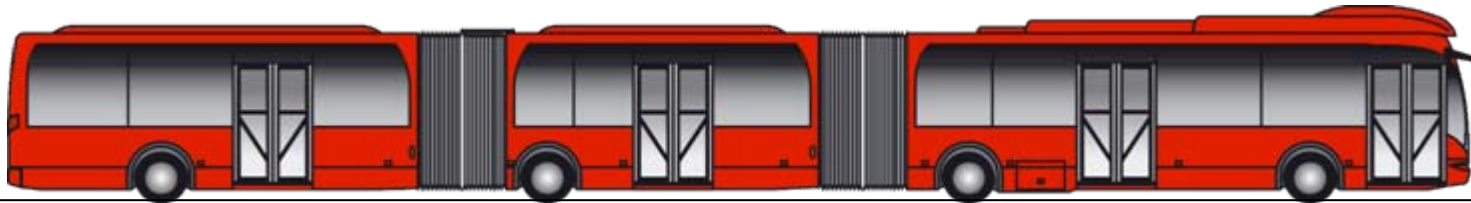
**A308**



**A330**



**AG300**



**AGG300**

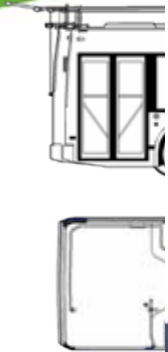
driven by  
**emotion**  
enhanced • environmental • efficient  
public transport





# Van Hool: Custom made Products

A Solid Product Range + Van Hool's Flexibility  
=  
Custom made Products



- Gas (LPG, CNG)
- Hybride
- Fuel Cell
- Trolley

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# Experienced in trolley since 1985



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**VANHOOL**

**UIP**

# Trolley Lecce

- City of Lecce
  - South of Italy
  - 100.000 Inhabitants
  - No existing trolleybus infrastructure
- The project
  - Infrastructure : Sirti & Imet
  - Vehicles : Van Hool & Vossloh Kiepe
  - Vehicle type : Solo
  - Fleet : 12
  - First vehicle : 2006/2007





# Trolley Lecce: The Vehicles



- Modern & Dynamic Look
- Extended Windows
- Flush Sides
- Removable panelling
- New traffic lights





# Trolley Lecce: The Vehicles



Streamlined interior

- Bended Stanchions
- Glassed Partitions
- Smooth Airducts
- Large headroom
- Spacious feeling
- Pleasant & airy Atmosphere

# Van Hool A330T Lecce



- IGBT Converters
- Multifunction display
- 240 kW
- CAN bus controlled:
- 80 kW Euro 4
  - Interface
- Airco
  - Diagnostics
- Disc Brakes
- 3rd Brake
- Kneeling
- Automatic ramp

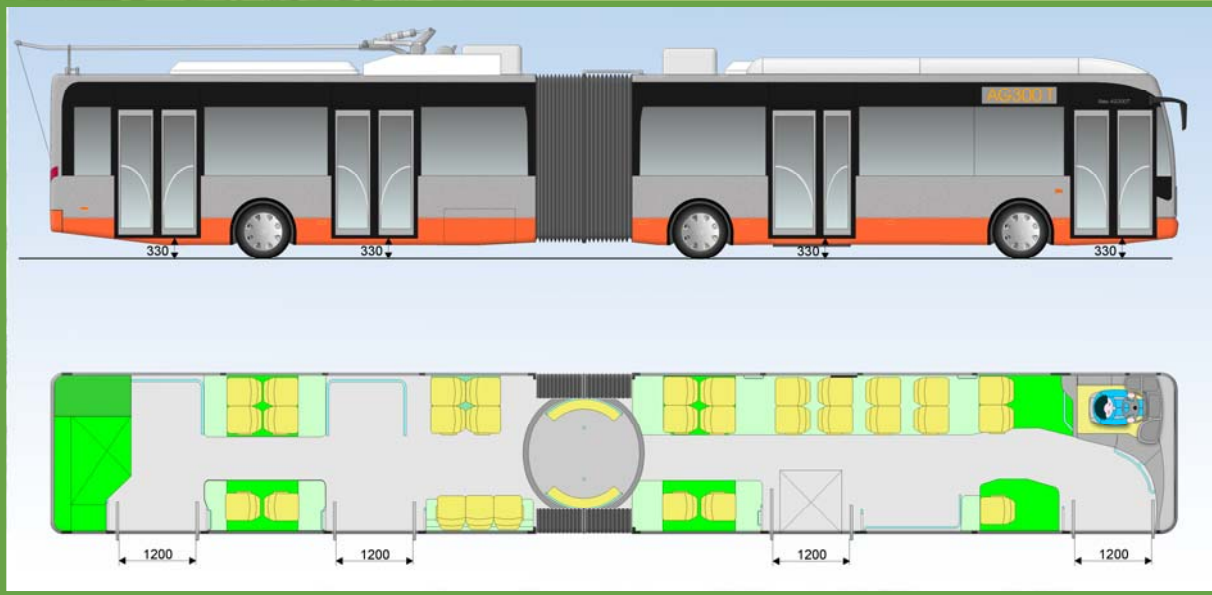


# Trolley Genova

- City of Genova
  - North of Italy (Riviera)
  - 650.000 Inhabitants
  - Trolleybuses in service since 1938
- The project
  - Vehicles : Van Hool & Vossloh Kiepe
  - Vehicle type : Articulated Bi-mode
  - Fleet : 17
  - First vehicle : 2006



# Van Hool AG300T Genua

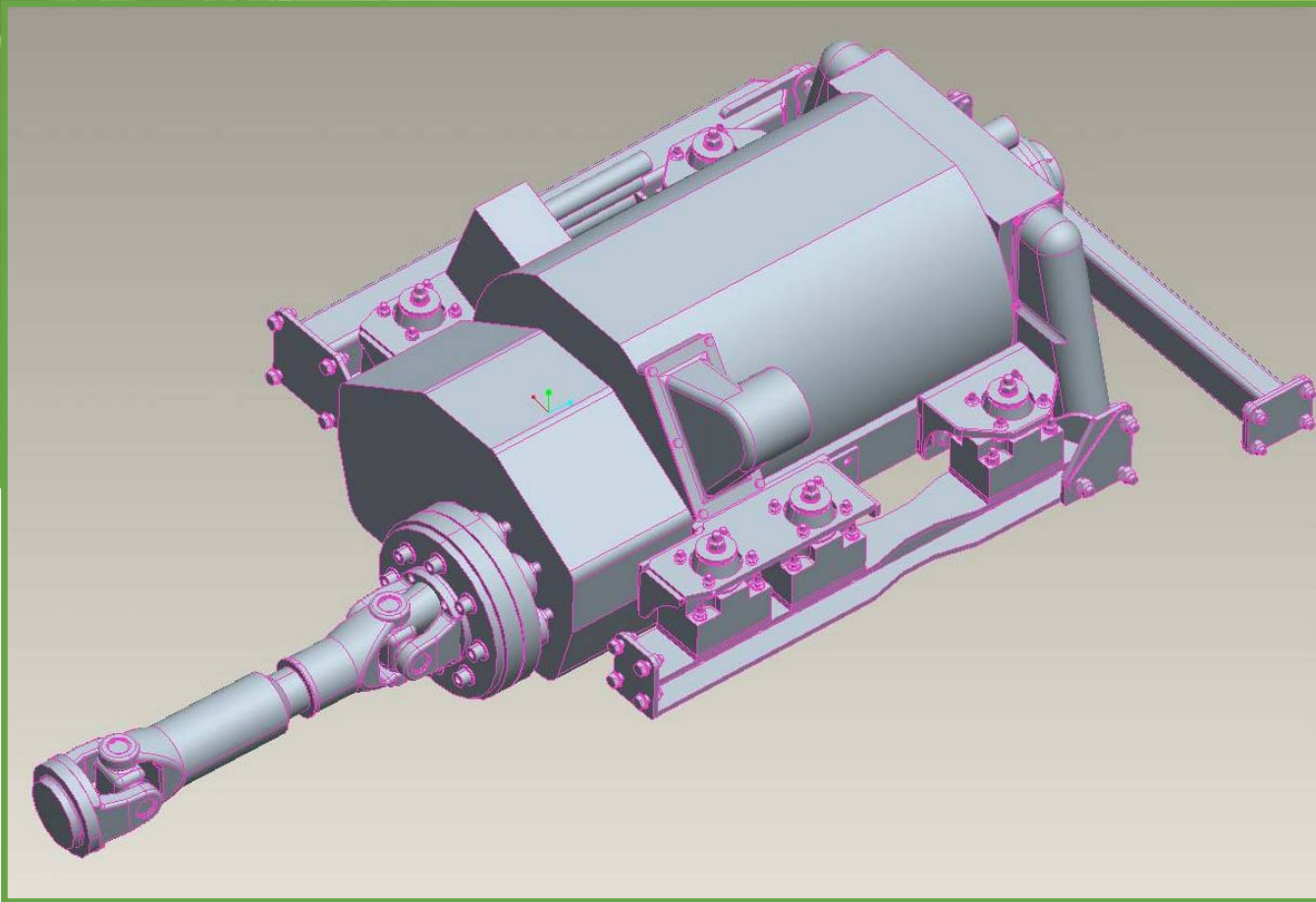


- IGBT Converters
- 240 kW
- 170 kW Euro 4
- Airco
- 4 Doors
- Super Single
- Fixed 3<sup>rd</sup> Axle

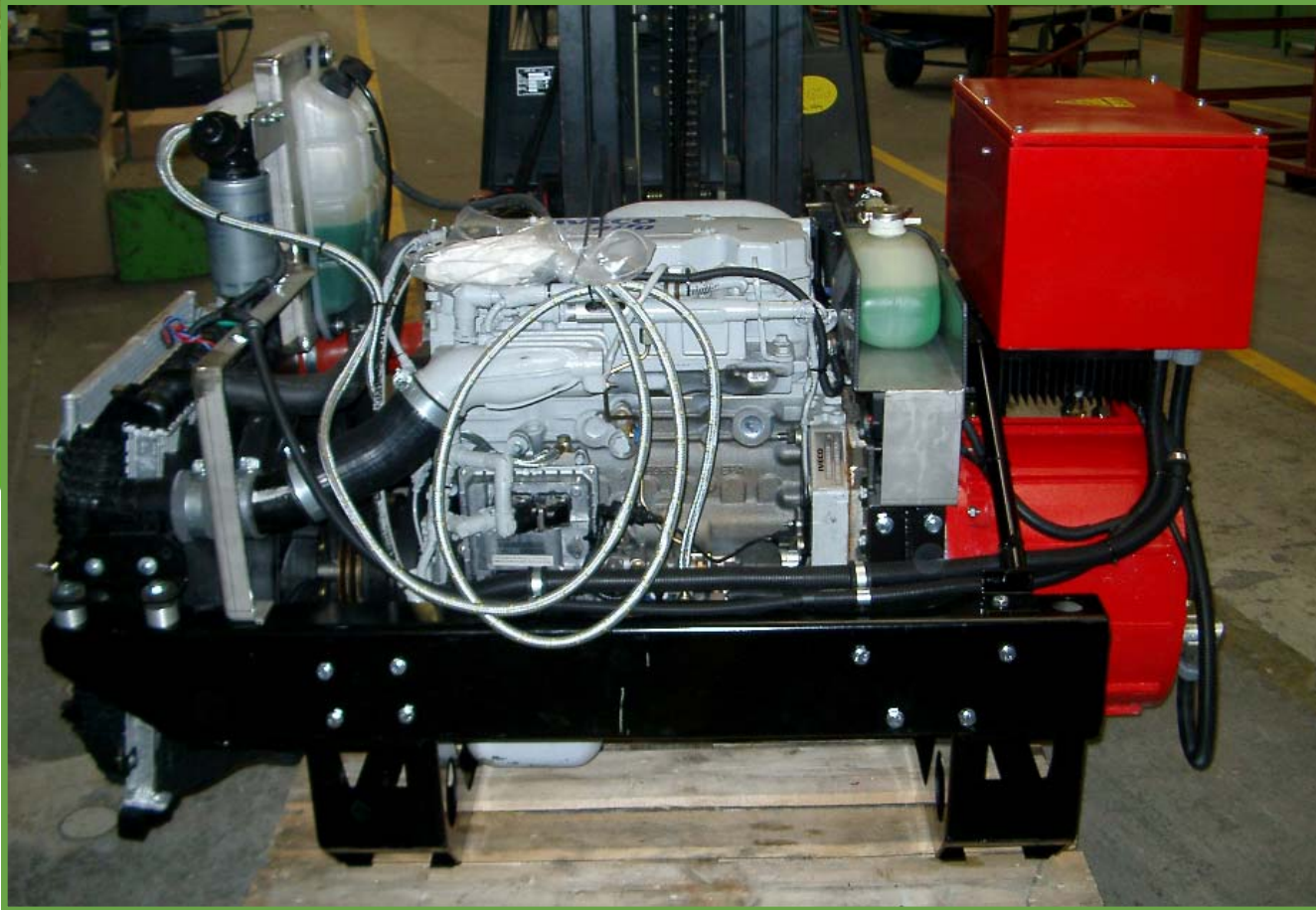




# Trolley Genua: The Motor



# Trolley Genua: The APU



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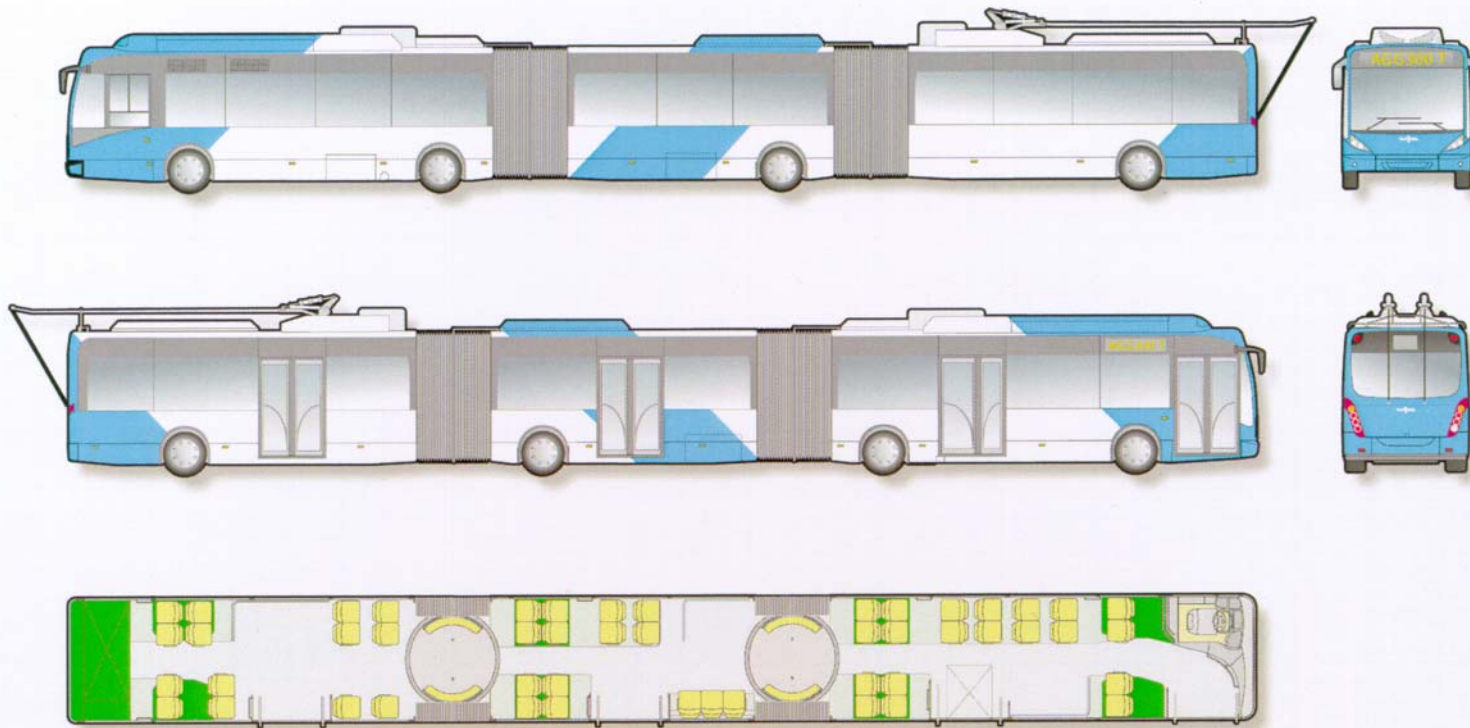
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Electrical Systems



# Future Projects



# Van Hool AGG300T



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# Van Hool AGG300T



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Electrical Systems

# Van Hool Trolley: Summary

- Trolley concepts

- Sound concepts for both solo & articulated trolleys
- Vehicles based on standard product range
- Tested and reliable technology
- Simple design

→ Commercially Interesting

- Van Hool's Strengths

- Experience
- Flexibility
- Good cooperation with strong partners







Thank you,  
for your attention

