

A black and white photograph of a city skyline at night, viewed from a bridge. The bridge's steel structure is in the foreground, and the city lights are in the background. Light trails from traffic on the bridge are visible in the lower right. The text 'ELECTRIFYING with Avia' is overlaid on the image.

ELECTRIFYING with **Avia**

2024

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01

OUR COMPANY

About us and our history

OUR COMPANY

Founded in 1994 and settled in Madrid (Spain), the roots of **Avia**, Engineering and Design, go back to the last century, with the spanish truck manufacturer *Avia*.

Nowadays we stand as a professional company with experience in the field of engineering and special vehicles with alternative powertrains.

We provide turn-key solutions with custom made transmission systems for comercial vehicles both for individual units as well as fleets.



OUR INSPIRATION

**Our MISSION**

Constantly searching for **new technologies** and their applications

**Our VISION**

Innovation brings a breaking point in our products and advantage for our customers.

**Our VALUES**

Passion
Innovation
Environment
Quality
Commitment

OUR HISTORY

1994

The company is officially established
in Madrid by 3 ex managers of
NISSAN MOTOR IBERICA

1999

First 100% electrical project with an
european OEM company

2001

First FCEV project for the City of
Madrid Municipal Transport

2015

First fleet of BEV cleaning trucks from
16 t to 29 t for Barcelona city council

2020

Launch of our first own product
12 t BEV truck for last mile delivery services

Present

Fully involved in Hydrogen
Mobility Solution

Working in 5 different
Fuel Cell - H₂ projects

EV - Autonomous Driving
applications

New markets
Marine - Mining - Agricultural

OUR FIGURES

+380

VEHICLES MADE

+30

DEVELOPED
PROJECTS

+2000

m² FACILITIES



OUR FUTURE



Focused on **expanding the market** for our products, we seek to improve the quality and efficiency of our designs.

To **offer shorter development times**, for the new markets of Mining, Marine applications, long-distance Trucks...

In the **new technologies** of Hydrogen, synthetic fuels and autonomous driving applications.



02

SERVICE

What do we do?

MARKETS

LOGISTICS

Light Duty



Heavy Duty

MUNICIPAL

City service



Buses

MARINE

Fisher Boats



Port Vessel

INDUSTRIAL

Mining



Agricultural

A COMPLETE SOLUTION



Technology and Feasibility Study



System Development (Electrical, Mechanical , Software)



Manufacturing



Commissioning & Homologation



After Market Service & Warranties

COMPLIANCE SERVICES:

- Testing, certification and compliance process for vehicles or equipment
- Technical advisory for compliance with vehicle design and manufacturing requirements.

CONSULTANCY SERVICES:

- Assistance and support for bid and tender applications.
- Technical and commercial feasibility studies for engineering projects.
- Simulations for electrification of medium-heavy-duty vehicles and buses.



03

THE METHOD

Our approach and work

PROJECT DEVELOPMENT

Full system integration

**Technical
Resources**

Design -CAD CAE
Mechanical - Electrical

Simulation
MATLAB -Simulink

Software
Integral platform

Cybersecurity

**Material
Resources**

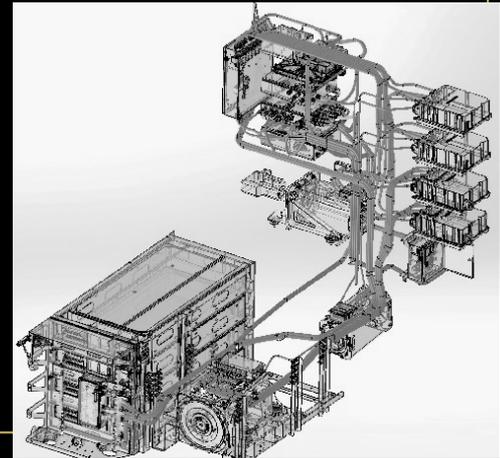
2000 m²
Workshop

Avia's ERP System
to Manage Operations

Supplier network

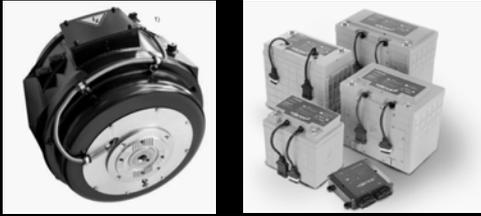
**Human
Resources**

A stable workforce
offers good
knowledge
retention

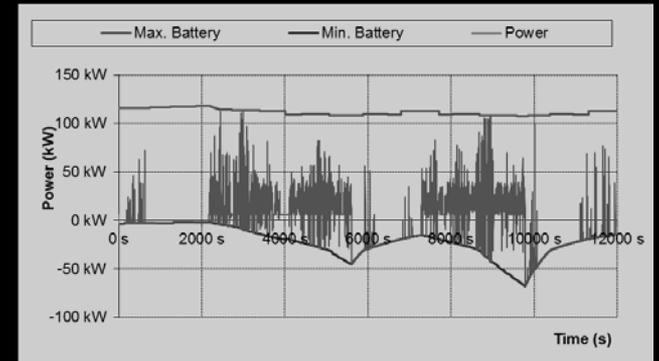
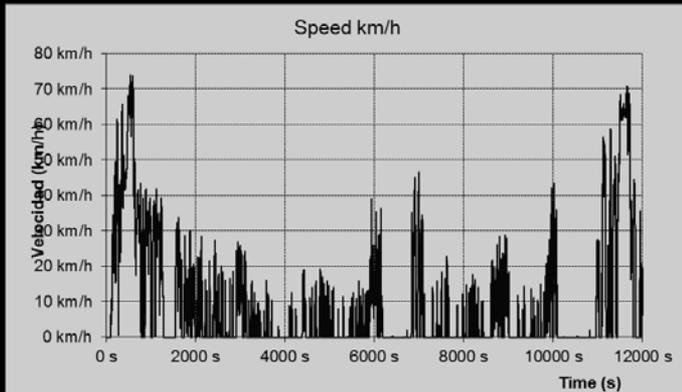


PROJECT DEVELOPMENT

Mathematical simulation models



Internally developed models for simulating vehicle performance during the feasibility validation phase



PROJECT DEVELOPMENT

Design validation and certification services

At Avia, we maintain close collaboration with leading testing centers and technical institutes to coordinate validation tests of our developments.

This includes both the certification of components and systems, as well as commissioning tests for suppliers and customers.



CERTIFICATION SERVICES

HOMOLOGATION

Full development
up to certification
for on-road
applications

**DIRECTIVES**

R10
R29
R100
R134

**TEST
LABORATORIES**

IDIADA
UTAC
INTA
TÜV

**TYPE APPROVAL**

Both European &
National certification
experience



04

SUCCESS STORIES

Our inspiring projects

04

2000



First EV project prototype became a fleet of vehicles working for the City services of Barcelona

CVW 6000 kg / NiCad Batteries



CITYCELL was a European funded project.

First H₂ Fuel Cell application.
Working in a consortium of OEMs and Spanish companies.

Fuel cell/battery hybrid – 60 kW PEM fuel cell
Compressed hydrogen @ 35 MPa



Looking for a Clear Air Policy and in collaboration with the Madrid Barajas airport - Development of a full Airport Ground services in clean technology, using CNG power.

Tow tractor tg-5006 – Tow tractor tg-5006-gnc
Push-back tractor tg-5016-gnc – GPU tg-4120-gnc

Full Hybrid Urban Chassis bus.
Developed for the Spanish coach
builder Castrosua, and later for the
consortium VECTIA-CAF company

More that 100 where built over 15
years of production



Battery & Ucap Hybrid versions / SIEMENS ELFA drive train

04

2015

For the Barcelona city Cleaning services, first 100% Electric fleet to be in operation in Spain.

13 vehicles, from 16t to 29t , full BEV.

Akasol Battery / SIEMENS ELFA drive train
ChaDemo 120 kW charger





SHINE FLEET funded project
from the Spanish Government

A consortium of well established
companies to develop a real
solution for long haul transport
based on Hydrogen.

From the H₂ production – The vehicles & the Fleet operation



Working for the experts in
Autonomous Driving company SAFE AI
To develop an BEV version of the
Caterpillar 725.

A 47t Articulated Mining Truck

400 kWh Battery / 500 kW Drive train

04

2021



Full Electric Port Vessel developed for a Spanish shipyard under development.

483 kWh Battery / Twin 100 kW motors



First own developed project.

Specially designed for the e-Commerce in the big cities where a compact , high capacity, EV truck is required.

GVW 12000 kg
Payload > 5000kg
160 kW / 2500 Nm Motor



We just developed an application for a 7-ton vehicle, with a flexible BEV configuration, adapted to customer needs.

GVW 7000 kg
Payload > 4000kg
140 kW / 950 Nm Motor

CUSTOMERS & PARTNERS



THANKS!

Your partner for alternative **solutions.**

Avia



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