

Transpole

# Natural Gas Vehicles : CID® is a success

Thanks to a new testing method for natural gas tanks for vehicles, operators are saving vehicle immobilisation time while optimising quality and safety procedures.

Every two and a half years, carbon fibre natural gas tanks for vehicles undergo internal and external intermediate visits, and they are subject to hydraulic retesting every five years.

This test, however, was designed for steel tanks and is poorly adapted to composite materials. It calls for assembly, disassembly and transport which create a non-negligible risk of deterioration and give no reliable information on installation integrity. Finally, this costly test hinders vehicle availability, and is thereby a detriment to operators.

## Searching for an optimised solution

In searching for a new solution, AFGNV (French Association for Natural Gas for Vehicles) called upon various specialists: Gaz de France for its know-how in dealing with high-pressure components, tank manufacturer Ullit, and Cetim for its expertise in the field of non-destructive testing.

## CID®: an optimised solution

Using the practical example of buses equipped to run on natural gas, Cetim perfected a method of testing through detailed inspection (CID®) in collaboration with Gaz de France. This highly complete procedure checks the general installation, the tank assembly, the pressure relief devices, valve, vent line, tanks themselves and the gas circuit. Testing is performed on site, at the bus garage; no cylinder disassembly is necessary and the process only requires a half day per vehicle. Transpole, a major Lille-area public transport network with over 120 NGVs, was a precursor in using Cetim's CID® testing method. This new method of NGV installation testing has added a touch of flexibility to the operation of our fleet by making more of our NGVs available. It also helps us improve our installations design through Datacid database feedback, notes Hervé Roger, Marcq-



en-Baroeul (59) Transpole maintenance manager. Since then, many other networks have adopted the method: Nantes, Nice, Strasbourg, and more.

## OUR CUSTOMER

**Company name:**  
Transpole

**Activity:**  
Urban passenger transport

**Country:**  
France

**Details:**  
110 million annual passengers

## Gaz de France's asset



Gaz de France, through its recognised experience in high pressure, is a major NGV player. For over ten years, it has helped ensure compliance and has contributed to the evolution of the regulatory framework. It has made possible safety testing campaigns and designed and created high-pressure circuits for various manufacturers.

## Cetim's asset

Cetim meets the needs of industrialists and operators through its use of major research and testing means. This way, they can apply the most advanced methods in NDT and in measurement, or develop them in order to improve their products and procedures with a view to a qualification process.

The CID® was approved by a Ministerial decision (DMT/P 32732 of 03/12/03).