

Alstom develops and produces equipment, systems and services for the railway sector like trains, trams, metro's, signalling systems, infrastructure and services like maintenance and modernisation. With the focus on sustainable mobility, Alstom introduced recently several innovations like the passenger train on hydrogen Coradia iLint and the new e-bus Aptis.

Alstom in The Netherlands operates on a environmental conscious base and targets to reduce CO₂ emissions in its Dutch facilities. The certification has been maintained in 2015 en 2016.



KEY FIGURES

225 employees

2 sites

CO₂ level performance: **5**

ALSTOM ORGANISATION IN THE NETHERLANDS

- Alstom in The Netherlands is one of the major suppliers of rail systems. The company focuses on supplying rail vehicles for local rail transport such as metros, tramways, regional trains but also digital signalling systems for safe and performant railway networks and services for electronic components and signalling equipment. These activities are led by 2 sites: Utrecht and Ridderkerk.

INDUSTRIAL ACTIVITIES AND PROJECT MANAGEMENT

- **UTRECHT – RAIL SIGNALLING SYSTEMS**
 - Head office for the Netherlands
 - Full-solution provider of signalling projects (design, delivery, installation and commissioning)
 - Maintenance of complete signalling systems
- **RIDDERKERK – SERVICE**
 - Service level agreements
 - Parts & repairs
 - Service & commissioning
 - Train modernisation projects
 - Integration projects.

MAIN REFERENCES

- Urban transport
 - 113 trams Citadis in Rotterdam for RET
 - 72 tram trains Citadis in The Hague for HTM
 - 28 metros Metropolis in Amsterdam for GVB
- Signalling
 - ERTMS safety system on the Betuweroute (130 km freight route) and on the Hanzelijn (40km)
 - ERTMS on-board equipment in freight locomotives
 - Interlockings and train detection systems for ProRail
 - ATB, the train safety system on the core rail network
 - On-board ATB in trains
 - Complete signalling system the Rotterdam Metro
 - Complete CBTC systems (Urbalis) for the Amsterdam Metro
- Maintenance
 - Maintenance of ERTMS signalling installation on BetuweRoute and Hanzelijn for ProRail
 - Maintenance of on-board ERTMS for operators
 - Performing parts and repair and supply chain logistics for urban and mainline operators in the Netherlands
 - Preventive, corrective maintenance on rolling stock for various Dutch customers
 - Performing modernisation of rolling stock:
 - maintenance and functional upgrades of 291 multi voltage auxiliary converters for ICR cars of NS
 - FFF IGBT power modules to replace GTO modules in MP 89 (Fr), NS93 (Chi) and Class 323 (UK)
 - Design, production & installation of FFF IGBT traction system on 418 VIRM double deck cars for NS
 - Installation of new HVAC and CVS on 60 Citadis trams in Rotterdam
 - Design, production & commissioning of hybrid traction drive, battery system & CVS for the Prima H3 shunting locomotive.



PROJECTS ONGOING

- Trains
 - In summer 2016, Alstom signed a contract with NS for the delivery of 79 new intercity trains to operate on the HSL and on the core rail network.
- Signalling
 - CBTC safety system (Urbalis) for the Amsterdam metro network, including the new NoordZuidlijn: testing and commissioning of CBTC on trains
 - Conventional signalling system for Rotterdam Metro
 - Betuweroute extension projects with ERTMS on Zevenaar, Havenspoorlijn and A15 line
 - Interlocking projects for ProRail with new iVPI system
 - Development of interfaces to control system.
- Service & Commissioning
 - CBTC equipment for the Amsterdam metro: installation on trains and testing of mechanical and electrical interfacing on train level
 - Design, production, delivery and warranty of the 460 DC traction installations in 85 vehicles for the Metro of Mexico
 - Production of IGBT power & control electronics for 30 hybrid shunting locomotives Prima H3.