

# VINCI Construction : Ventilation and smoke extraction of Alger Subway



## Contact:

EKIUM  
5 allée des droits de l'Homme  
69673 BRON  
France

Phone: +3(0) 4 72 81 50 50

## Founding year:

1990

## Employees:

600

Solution  
Partner

SIEMENS

Automation

Solution Partner : **EKIUM**  
Customer: **VINCI Construction**  
Segment : **Transport**



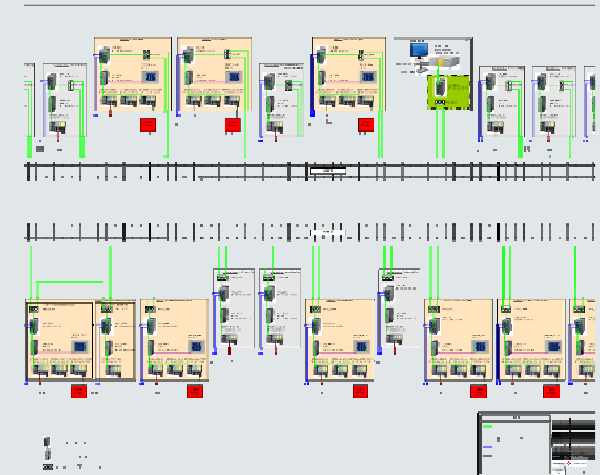
## Requirements of the customer :

- The purpose of this project was to ensure ventilation and smoke extraction of metro stations and inter-stations for the section "Haï el Badr – Tafourah Grande Poste" from the Alger underground line 1:
  - Limitation and control of fire and smoke propagation
  - Facilitate passengers evacuation and the rescue intervention
  - To ensure the evacuation of smokes generated by a disaster and limit its spread into the station or the tunnel



## Short description of the solution:

- 2500 inputs / outputs,
- 20 safety automation systems S7-315F,
- 10 touch panels ,
- 9 firefighter boxes,
- 1 WinCC Operator Station,
- Ethernet network Profinet ProfiSafe in Optical Fiber



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## Implementation by the Solution Partner :

- Studies and realization of functional analysis
- Reliability, maintainability, availability and safety studies
- Studies, realization and test sof prototype before the implementation for all the installation
- Studies and development of automation and supervision
- Studies and realization of the command-control electric equipments
- FAT reception en site with all the equipments
- IVC type shipping packaging and setting containers
- Establishment of transit and clearance documents
- Equipment connections on site
- Realization of reflectometry test
- Realization of synchronization tests
- Realization of running tests on site
- Training of operators and maintenance teams



## Benefits for the customer :

### Key numbers of the subway line 1 :

- Length of the line: 9 km
- Number of stations : 10
- Exploitation : 18h/24, 7j/7
- Commercial speed: 32 km/h
- Maximal speed: 70 km/h
- Exploitation intervals: 108 s.
- Number of trains (steel-wheeled) : 14
- Capacity of transport: 42 200 pphpd