



Val 208 New Generation

Transportation Systems

SIEMENS

Val 208 New Generation: latest fully automated light metro system

25 year experience of reliable and safe unmanned operations



"Unrivalled flexibility
in train operation"



Smart system for smart cities

Val 208 NG is a medium capacity fully automated system bringing major innovations into the APM world and is designed to improve flexibility, performance and efficiency.

Application includes feeder lines required by megapole in connection to their main subway lines and backbone transportation link for small/medium cities.

The new modern Val 208 NG takes full advantage of the latest fully proven technology, enhancing further more its unique and unequalled features with regards to safety, quality of service and flexibility of operation. In order to minimize life cycle costs, its design has benefited of a continuous feedback from the operators and STS operation and service activities over nearly two decades of operation.

Siemens means turnkey delivery

By proposing a complete turnkey system from product design to full realization, Siemens reduces the specification time, limits risks, and optimizes over-all schedule. It commits to the overall system safety

and performance. Customer can focus on system performance and end-user service rather than on technical issues.

An optimized solution for return on investment

Reduced capital costs

For a given traffic capacity, Val's increased train frequency (with train headway down to one minute) allows shorter train length. Val achieves the same capacity as other systems but with shorter and narrower trains.

This is a determining factor for reducing the costs of the infrastructure, the length and the design of the stations, the size of the tunnels and guideways, contributing also to the reduction of time and nuisance during construction. This considerably facilitates implementation in crowded cities where smaller viaducts and tunnels can be used.

Increased revenues

On a segregated right of way, with powerful vehicle propulsion and rubber tire adhesion, Val provides high commercial speed (nearly twice as much as LRT's) and punctuality, thus offering short travel time and high traffic capacity.



Turin Operation Center

Easy connection with other modes of transport is provided by the frequent trains, avoiding dissuasive waiting times at transfer stations, even during off-peak hours. This greatly enhances the attractiveness of the system.

Minimising the Operating costs

At any time, trains can be automatically inserted into or removed from revenue service by simple, remote commands from central control operators.

This translates into unprecedented flexibility for metro operation. The fleet and headway can be adjusted to the optimal transport capacity to match the demand in real time. This, of course, yields a transportation efficiency, since only a minimum of empty places is transported, and is a significant measure of the operator's profitability.

Optimized and sustainable infrastructure

Responding to new environmental requirements, Val 208 NG rubber tired vehicle solution minimizes noise and pollution. It also enables a drastic reduction of energy consumption through regenerative braking and optimized traffic management.

Maximum passenger comfort and safety

Silent and comfortable

Passenger comfort and security is Val 208 NG first priority. Through attractive cabin arrangement, large windows, air conditioning, but also via dynamic passenger information and onboard Internet and CCTV, the user really feels at home.

Accessible

Val 208 NG takes care of families, aging people or disabled people with adequate facilities onboard and in the station.

Rapid and on time

Punctuality and high performance also enhance the attractiveness of Val system concept by providing the traveling public with shortest transit times.

Safe

Val 208 NG fully benefits from the accumulated experience of the Val product line and CBTC technology. More than 2 billion passengers have been transported on Val systems since 1983 with an unrivalled safety record.

"Reduced civil works"



Val 208 NG performances

Technical characteristics

Car length	13 m	42'8"
Width of car	2.08 m	6'10"
Train consist (cars)	2 or 4	
Number of door per car per side - width	3 – 1.3 m	3
Vehicle height	3.27 m	10'9"
Nb of seats	11 up to 27	

Performances

Maximum operating speed	80 km/h	50 mph
Minimum horizontal curve radius	30 m	98'5"
Minimum vertical curve radius	200 m	656'2"
Maximum grade	10 %	
Superelevation	10 %	
Acceleration, service deceleration	1,3 m/s ²	0.13 g
Power distribution system	750 VDC	

Options

Air conditioning, dynamic displays
Multimedia onboard Internet, onboard CCTV, service on demand

Siemens Transportation Systems SAS is the international center of competence for fully automated metro systems and one of the world leaders in Automated Train Control systems.

Its great experience in the implementation of turnkey projects and in maintenance services effectively complements its range of expertise.

STS also carries out the marketing of all Siemens railway products and services in France.

A subsidiary of Siemens France, Siemens Transportation Systems SAS is functionally affiliated to the Transportation Systems Group of Siemens AG.

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