

REFERENCE CASE RAIL



Expert Supervision for Major Railway Improvement and Expansion in Brazil

CPTM required an experienced partner that could provide professional supervision services to help with a major improvement and expansion program of the São Paulo rail system. That's why they turned to TÜV Rheinland Ductor, our project management company in Brazil.

Basic facts	
Client	Companhia Paulista de Trens Metropolitanos (CPTM) (English: São Paulo Metropolitan Train Company)
Timeframe	October 2001 - April 2004
Project location	São Paulo, Brazil
Main services	<ul style="list-style-type: none">▪ Project management▪ Construction supervision▪ Monitoring of fabrication, assembly and factory acceptance testing of trains
Involved regulations/standards	<ul style="list-style-type: none">▪ Brazilian Standards – ABNT▪ IEC▪ DIN

Initial situation and requirements

CPTM is a regional rail company that operates the suburban rail system in São Paulo, transporting around 2 million passengers per day. The company embarked on a major improvement and expansion program to increase transport capacity across São Paulo. As a result, CPTM required professional supervision of the manufacturing, assembling, testing and commissioning of systems and rolling stock to ensure compliance with the strict standards required by modern transportation systems.

Solutions, results

As a leading provider of supervision services for the construction industry with extensive experience in civil works and railway infrastructure, TÜV Rheinland was the preferred choice for CPTM. We provided professional supervision services for all phases of manufacturing, assembling, testing and commissioning of systems and rolling stock.

During the planning stage, we provided approval of manufacturing, planning and scheduling of the different equipment, systems and installation work carried out by manufacturers and installation companies. This involved providing due diligence, analysis, and control and verification of documents and proposing changes as required. As a result, we could ensure compliance with contractual and technical requirements, verification of conformity with the basic design and functional design, compatibility with the civil works and compliance with regulations and standards.

Next, our supervision ensured that manufacturing and installation adhered to the schedule, and the quality and technical requirements outlined in the contract, while reducing environmental impact. We also monitored and approved initial acceptance tests and commissioning, and the certification of payments. In support of the manufacturing of the rolling stock, we monitored fabrication and assembly as well as factory acceptance testing of the trains.

Did you know?

TÜV Rheinland provided CPTM with over 127,000 man-hours.



Benefits for the client

TÜV Rheinland helped CPTM to:

- Improve and expand the capacity of train travel to major centers in São Paulo.
- Comply with the standards required by modern transportation systems.
- Benefit from independent expertise relating to equipment, materials and installation.
- Ensure that work along the Osasco and Jurubatuba stations were carried out while keeping the line operational.

Your contact:

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About TÜV Rheinland:

Founded 140 years ago, TÜV Rheinland is a global leader in independent inspection services, ensuring quality and safety for people, the environment, and technology in nearly all aspects of life.

Industrial services were our first, and remain our biggest, business stream. We ensure that industrial plants and related materials, installations and machinery meet all quality and performance requirements – whether they are regulatory, voluntary or customer based.

We support you at every phase of your industrial project, from design and installation, right through to commissioning, operation and maintenance, helping you ensure the safety and reliability of your assets. However, our services stretch far beyond regular test reports and inspections. We work closely with you to find the very best solutions for your unique requirements, optimizing your value chain and the sustainability of your business.

With extensive construction industry experience, we can help you to reduce risk, prevent construction errors, control budgets and effectively keep your construction project on schedule. From planning to implementation, we can help you ensure the safety, quality and durability of your structural or civil engineering projects around the world.