



Localization:
São Paulo/Brazil

Project:
Natural Gas Expansion Plan

Client:
COMGÁS - Companhia de Gás do Estado de São Paulo

Start: 08/26/1987

Total Man/Hour: 380.520 m/h

End: 06/30/1991

Cost of Services: US\$ 10,047,700.00

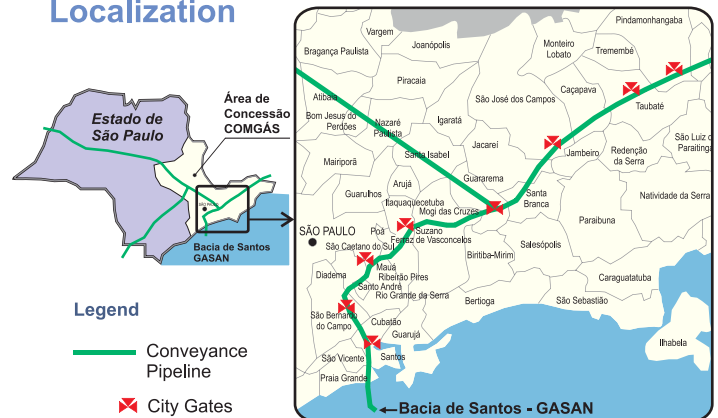
Services: **Implementation Management**

DESCRIPTION OF PROJECT

COMGÁS Expansion Plan comprised the implantation of gas pipelines and "City Gates" for distribution of Natural Gas from Campos/RJ and Santos/SP basins to several municipalities located in the State of São Paulo.

The full distance covers an extension of 325.7 km, and includes delivery sites in the municipalities of São Paulo, Barra Mansa, Resende, Lorena, Pindamonhangaba, Taubaté, São José dos Campos, Guararema, Suzano, Cruzeiro and Capuava. Operating at its maximum capacity, the pipeline can transport up to 1,538,477,628 m³ per year.

Localization



City Gate - Suzano

DESCRIPTION OF ACTIVITIES

Activities comprised management, planning, coordination, control and inspection of supply of ducts and equipment by COMGÁS and quality control of laying and assembly of steel pipelines.

Among the monitored services, the following stand out:

- 1** – Laying, assembly and hydropneumatic tests of approximately 300,000 m of steel pipelines, divided into conveyance pipelines with the following diameters: Ø10"= 28,100 m; Ø12"= 28,000 m; Ø14"= 42,000 m; and Ø 20"= 30,300 m, linking "City Gates" to large distribution rings. The remaining 171,600 m constituted distribution networks of 2", 4" and 6" steel pipelines, in the city of São Paulo.
- 2** – Assembly of City-Gates in Suzano, Capuava, Cubatão and São José dos Campos, for a total outflow of 1,700,000 m³/day;
- 3** – Underwater Ø 14" concrete-coated steel pipeline crossing Billings Dam Reservoir over an extension of approximately 250 m;
- 4** – 1,100 m long, Ø14" inclined pipeline assembled adjacent to Henry Borden Hydroelectric Plant in Cubatão;
- 5** – Asphalt pavement restoration in some 70,000 m² of streets and avenues;
- 6** – Installations of valves and pressure reducing stations, 30 units, including tests;
- 7** – Loaded interconnection of new sections with existing pipelines;
- 8** – Installations of coupling pipes by non-destructive process (Boring Machine);
- 9** – Non-destructive welding essays by X-rays and ultrasound.

