

POWER

512 MW INTEGRATED GASIFICATION COMBINED CYCLE

Isab Energy S.r.l.
Priolo - Siracusa - (Italy)



**COMPLETION
DATE 1999
(Start-up) 2000
(Perf. Test)**

PROJECT DESCRIPTION

512 MW Integrated Gasification Combined Cycle Plant located close to the ERG Refinery in Priolo. The plant includes:

- 130 t/h asphalt, visbroken tar, heavy oil gasification unit based on Texaco License including syngas scrubbing, carbon recovery and grey water treatment, syngas cooling and conditioning (removing of H₂S), oxygen Claus sulphur unit
- 512 MW combined cycle power plant consisting in No.2 gas turbines Ansaldo Siemens V94.2, No.2 Heat Recovery Steam Generators, No.2 steam turbines and No.2 water condensers.

The combined cycle power plant is fed with the syngas produced in the gasification unit.

FOSTER WHEELER ITALIANA SCOPE OF WORK

The Consortium Foster Wheeler Italiana-Snam Progetti was awarded the project. FWI scope of work includes feasibility study and basic design of the whole IGCC, engineering of gasification unit, soot recovery, heavy metals recovery, waste water pre treatment, sour water stripping, fire fighting, metal cake storage, interconnecting, electrical substations and distribution, DCS, ESD system, EMMS, laboratory equipment, management and coordination of the CC power plant, dynamic simulation of the plant. Common scope of work includes documentation for authorizations and permits, noise study, project directorate, all construction and erection works, pre-commissioning activities, commissioning and start-up, testing.

The Consortium has operated the Plant until the demonstration of the Minimum Performances.