



New 200,000 BPD Refinery in Brazil

The refinery will efficiently process heavy crudes into high margin, high demand Euro V specification diesel. This will be achieved by developing an Integrated Site Solution whereby the refinery will be self-sufficient in fuel, power and hydrogen by using modern technology which is both more efficient and cleaner than the more traditional refinery configurations.

GSA^e have been engaged by SARC to act as the 'Clients Engineer' for the Project and to develop the engineering up to and including the 'Basic Engineering Packages' (BEP) for all the refinery utilities and offsites. The main refinery process units are being engineered by the respective licensors, namely Shell Global Solutions and Kellogg Brown and Root.

As the client engineer GSA^e's role is to technically liaise with all the interested parties including all the relevant Brazilian Authorities including National and State Governments, providing continuity between the licensors and to advise SARC on technical issues. Within this role we are also providing significant input in the Environmental Impact Assessments for both refinery and the offshore monobuoys.

GSA^e's role in engineering the BEP's includes offloading / loading facilities, the tank farms, steam and power generation, flares and blowdowns, effluent treatment and disposal and all the usual refinery common services.

- Steam Boilers and the steam and condensate return systems
- Demineralised Water Supply for the boilers and other users.
- Boiler Feed Water systems – deaerators etc.
- Air Compressors and the distribution and control systems
- Nitrogen generators and the distribution and control systems
- Cooling water treatment facilities and Cooling towers
- Waste water treatment for plant waste, process waste, fire water.
- Electricity generation
- Control room for these facilities

As the clients engineer, GSA^e is providing bespoke solutions to ensure that the different technologies operate correctly and efficiently