



New GT10C gas turbine launched by ABB

The new 30-MW GT10C gas turbine is an updated version of the GT10B industrial gas turbine. It is suitable for power generation, eg in combined cycle and cogeneration applications, as well as for mechanical drives for compressors, pumps, etc.

An important new feature of the GT10C, which achieves an efficiency of 37%, is its dry, low-emissions capability for both gas and liquid fuels. Utilizing ABB's advanced burner technology, NO_x emissions of 15 vppm on gas fuel and 42 vppm on liquid fuel will be achieved.

The GT10C features improved versions of the power turbine and compressor, resulting in a higher pressure ratio and an increased mass flow through the engine. This has resulted in a rise in output of 4.6 MW and an improvement in efficiency of 2%.

ABB wins order for turnkey 480-MW combined cycle plant in Mexico

ABB has been awarded a turnkey contract to build a 480-MW gas-fired combined-cycle power plant in Monterrey, Mexico.

The US\$ 250 million order was placed by the national power utility *Comisión Federal de Electricidad* (CFE).

Under the terms of the contract, ABB will supply two GT24 gas turbines as well as the heat-recovery steam generators, two steam turbines, the air-cooled generators, the overall power plant control system and the balance of plant equipment. ABB will also be responsible for the engineering, civil works, installation and commissioning. The plant is scheduled for completion by January 2000.

The combined cycle plant will feature advanced ABB gas turbine technology with low-NO_x burners. Advantages of this technology include minimized pollutant emissions, a high thermal efficiency and low operating costs.

Singapore subway to get ABB medium-voltage switchpanels

ABB Calor Emag Schaltanlagen AG, Germany, has received an order from the Mitsubishi Electric Corporation to supply the 22-kV medium-voltage equipment for 19 substations for the new North East Line of the Singapore subway. The switchpanels, of type ZX1 with REF542 (SCU), will be

tied into the station control system of a third-party supplier.

Delivery of the 156 switchpanels, valued at approximately US\$ 7 million, will begin at the end of 1999 and last until 2000. ABB Power Pte Ltd, Singapore, will be responsible for installing and commissioning the panels.

ABB Calor Emag won the order in part due to the compactness of the ZX1 and its state-of-the-art technology, in particular the future-oriented installation and protection concept. The switchpanels are equipped with sensors and are insulated with a protective gas that protects the equipment from adverse environments, etc. This has special benefits for substations in tropical countries as well as for installation underground.

Large drives for a nitrogen plant in Mexico

GHH BORSIG Turbomaschinen GmbH has placed an order with ABB Industrie-technik GmbH, Germany, for the supply of electrical equipment for a nitrogen plant in Cantarell, Mexico. The plant is being built and operated by an international consortium comprising BOC Gases, Marubeni, Westcoast Energy and ICA Fluor Daniel.

The order is for four synchronous motors with a total rating of 52 MW, a starting converter of type MEGADRIVE LCI and two converter transformers. The synchronous motors will be used to drive four axial-shaft air compressors.

Commissioning of the plant is scheduled for the end of 1999, after which the nitrogen will be transported by a 80-km long pipeline to the Cantarell oilfield in the Gulf of Mexico, where 80% of the country's oil reserves lie. The national oil company, Pemex, expects to increase oil production by 20% as a result of nitrogen injection.

550-kV gas-insulated substation ordered by China

Following lengthy negotiations, ABB High Voltage Technologies Ltd of Switzerland has been awarded the contract for the delivery of a 550-kV gas-insulated substation and approximately 3000 m of gas-insulated busbars for the Ling Ao nuclear power plant near Hong Kong. The order sum is about US\$ 34 million.

US\$ 280 million order for 500-kV power link between Argentina and Brazil

ABB has received an order to build a 1000-MW power transmission system that will interconnect the electricity networks of Argentina and Brazil. The contract, worth approximately US\$ 280 million, was awarded by *Companhia de Interligação Eléctrica* (CIEN), Brazil. The link is scheduled to start operating at the beginning of 2000.

Under the terms of the contract, ABB will build, operate and maintain a 500-km alternating current power transmission link to join two substations in northern Argentina and southern Brazil as well as a converter station to match the different power frequencies in the two systems.

The cross-border power transmission system will permit both countries to utilize electricity resources more efficiently and

cost-effectively. This contract reflects the increasing demand for regional power interconnections in the deregulated markets of Latin America. The Brazil-Argentina link follows an order, announced by ABB earlier this year, for a 300-km long 500-kV link to connect the power grids of northern and southern Brazil.

Third ethylene plant for Saudi Arabia's growing petrochemical sector

Al-Jubail Petrochemical Company (KEMYA), a joint venture of Saudi Basic Industries Corporation (SABIC) and Exxon Chemical Arabia, has awarded ABB a contract to build a turnkey ethylene production plant at the Al-Jubail Petrochemical Complex, located in Jubail, Saudi Arabia. The total order sum is US\$ 400 million. The new facility, a part of KEMYA's expansion programme, is expected to produce 700,000 metric tons of ethylene per year. Engineering for the new plant will commence immediately. Construction is planned to begin later this year and completion is scheduled for the year 2002.

Under the terms of the contract, ABB will supply the engineering and procure all the equipment and material. The company will also be responsible for constructing the plant and providing technical assist-

ance during commissioning and start-up. ABB will supply the ethylene process technology under a license.

ABB has previously won orders for two ethylene plants in Saudi Arabia for the Yanpet Petrochemical Complex, a joint venture of SABIC and Mobil Yanbu Petrochemical Company.

Ssangyong Cement selects ABB automation equipment for world's largest cement plant in South Korea

South Korea's *Ssangyong Cement Industrial Company* has chosen ABB's Advant Open Control System (OCS) for the automation revamp of Line 7 at its Donghae operation, currently the largest cement plant in the world. It will replace the existing ABB Procontic control system on Line 7, which dates from 1978.

The new system will be installed in stages during planned line shutdowns. Advant Controller 450 was installed during the shutdown in April and May for mechanical work on the cooler replacement. Advant Controller 450 will also be supplied for the control and monitoring of the raw mill and the electrostatic precipitator. All new equipment will interface with the existing ABB MasterBus 300 control network.

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