









RoDip-3 systems for BMW

Munich-based *BMWAG* has placed orders with ABB Paint Automation GmbH in Germany to install, as general contractor, two new RoDip-3 systems for the pretreatment of car bodies in its Dingolfing works and a new pretreatment plant with electrocoating and drying facilities in Munich. The total

value of the orders is in excess of \in 50 million (US\$ 46 million).

The two projects will be the first to feature ABB's newly developed RoDip-3 system. This economical and environmentally friendly technology offers the automotive industry numerous advantages in the areas of car body pretreatment and electrocoating.

(A description of the first RoDip pilot

installation can be read in *ABB Review* 1/1996.)

The new RoDip-3 installations in BMW's Dingolfing works will pretreat 1200 car bodies for 5-series and 7-series vehicles daily, those in the Munich works 800 3-series bodies daily. The installations are due to start up in the second half of 2001.

ABB to build gas processing plant in Algeria

ABB Lummus Global Inc and Petrofac International Ltd, both of the USA, have won an order valued at US\$ 574 million to design and build a natural gas processing plant for the Ohanet gas fields on the northern edge of the Sahara desert, in Algeria. The order was placed by a consortium led by *BHP Petroleum* of Australia.

The plant will process natural gas into LPG (liquefied petroleum gas) and condensates used in fuel and chemical feedstocks, etc. It will have an output of 27,700 barrels a day (b/d) of LPG, 30,400 b/d of condensate and 665 million cubic feet a day of pipeline quality gas.

Under the terms of the contract, ABB Lummus Global is responsible for the design, procurement and construction of the plant. Production is expected to begin in late 2003.

US\$ 250 million order for Argentina-Brazil link

An order valued at US\$ 250 million has been won by ABB to build the second phase of a power transmission system connecting power networks in Argentina and Brazil. The order was placed by *Companhia de Interligação Eléctrica* (CIEN), Brazil, a company of the Spanish ENDESA Group.

The first phase of this system, ordered in 1998, was successfully taken into operation just recently. The 1000-MW power transmission link comprises 490 kilometers of AC lines and an HVDC converter station which connects the different power frequencies of the two systems. ABB will also expand three 500-kV substations associated with the first phase and integrate the two projects. The link is scheduled to enter commercial operation at the beginning of 2002.

Turnkey order for 400-kV indoor substation in London

ABB has won a turnkey contract to build a new indoor HV substation as part of a program to upgrade the power grid for North West London and The City area. The order, worth US\$ 80 million, was placed by *National Grid* (NGC).

Under the terms of the contract, ABB will supply 18 GIS switchbays and associated equipment, four 240-MVA transformers, and substation and protection and control systems. ABB is also responsible for the engineering design and civil works and for installation and commissioning. The project is scheduled for completion in the summer of 2004.

Due to their compactness and flexibility, ABB GIS substations can be located in the immediate vicinity of load centers for a very efficient power grid configuration.

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421 robots ordered by DaimlerChrysler

DaimlerChrysler Espana S.A. has placed an order valued at € 15 million (US\$ 14 million) with ABB Flexible Automation in Spain for 421 robot systems. The robots are for DaimlerChrysler's Vitoria plant in Northern Spain, in which the company builds the Mercedes transporter 'Vito' and V-class limousines. 90,000 units of a new model planned to succeed the Vito are due to be built at the plant yearly, beginning in 2003.

The new robots will be used primarily for spot and arc welding on the production line for the new model. Both operations require many complex sequences of movement. Other robots will be used in the paint shop.

Besides these 'basic' tasks, the contract calls for a whole series of solutions typical for the automotive industry, involving laser systems, precision measurement and bus interfaces, etc.

BIOTEMP® – one of the year's top 100 inventions

ABB Review 2/2000 featured an article on BIOTEMP*, a totally biodegradable vegetable oil used to cool and insulate electrical transformers. The contamination risk posed by conventional oils when accidentally released can be completely avoided by using BIOTEMP*.

Recently, BIOTEMP® was named one of the year's top 100 inventions by R&D Magazine (Cahners Publishing).

The R&D 100 Awards, dubbed the 'Oscars of Invention' by the Chicago Tribune, recognize the 100 most technologically significant new products and processes of the year. Other winners

in the 37-year history of the award include the Polacolor film, flashcube, the liquid crystal display, the fax machine and the antilock brake.

ABB building technology works to make Ice Hockey World Championship a success

The success of the Ice Hockey World Championship held in the St. Petersburg Sport Palace (photo), Russia, earlier this year was in part a result of building technology installed by ABB. ABB supplied the total technical solution for the multipurpose hall, which has an area of 37,000 m² and seating for 13,000, in the form of a turnkey, all-in-one package. The project covered all of the electrical installations, from the switchgear through the lighting, air-

of the work carried out in this short time.

HVDC Light technology for 40-km subsea link in USA

ABB has won a US\$ 120 million order to supply the transmission system for the HVDC Cross-Sound Cable subsea power interconnection linking Long Island and Connecticut, New York, in the USA.

The order for the 330-MW, 40-km link was placed by TransEnergie US Ltd, a subsidiary of TransEnergie, the transmission division of Hydro-Quebec, Canada. The link is scheduled to begin operating by May, 2002.

Under the terms of the contract, ABB will provide a complete HVDC Light transmission system. The system is made up of high-tech extruded cables buried



conditioning and fire alarm systems to the communication equipment. ABB also delivered the freezing system that produces the ice and maintains its temperature year-round.

ABB's commitment to the project, for which as many as 400 people were sometimes on the construction site, enabled it to be completed in just eight months and handed over on time.

The subsequent success of the World Championship testifies to the quality

under the seabed, with a converter station at each end of the link.

The Cross-Sound Cable subsea power interconnection follows close on the heels of ABB's two most recent HVDC Light installations. The first links Texas, US, to Mexico at Eagle Pass. The second, called Directlink, connects the New South Wales and Queensland, Australia, electricity grids, allowing power to be traded between the two states for the first time.

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