

TECNA and ISOLUX CORSÁN will build a bioethanol plant

In line with TECNA's market diversification and Latin America consolidation policy, TECNA and ISOLUX will build a bioethanol plant. The plant will be located in Meta, Colombia, and is owned by BIOENERGY, whose main shareholder is ECOPETROL.

Rio Oil & Gas Expo 2010

TECNA will be present at the Rio Oil & Gas Expo and Conference, the biggest Oil and Gas event in Latin America, which will take place at the Riocentro Convention Center in Rio de Janeiro from September 13th through 16th.

Engineering 2010

The World Engineering Congress is drawing near and TECNA will play a leading role. This event will take place from October 18th through the 20th in Buenos Aires.

CAPÃO BONITO

Successful completion of the assembly and startup of the compression plant project in Capão Bonito. TECNA is currently in the plant operations assistance phase.



Turn Key Plants & Project Management

COLOMBIA BIOENERGY

ISOLUX CORSÁN and TECNA will build a bioethanol plant in Colombia.

In line with TECNA's market diversification and Latin America consolidation policy, TECNA and ISOLUX will build a bioethanol plant. The plant will be located in Meta, Colombia, and is owned by BIOENERGY, whose main shareholder is ECOPETROL.

This project includes a plant for manufacturing bioethanol from sugar cane, with a processing capacity of 2.1 million tons of sugar cane per year, a 40 MV cogeneration power plant from bagasse, or cane residue and other installations for the grinding, distillation and production of vinasse, using raw materials.

This industrial complex will be built in the department of Meta in Colombia, in the municipalities of Puerto López and Puerto Gaitán, a geographical area typically associated with raising livestock that is now being utilized for various types of agricultural production, including sugar cane.



MEXICO PEMEX

Sulfur Recovery Unit (SRU)

The sulfur recovery unit construction project at the Ing. Antonio M. Amor Refinery in Salamanca, Guanajuato, which marks TECNA's entry into the Mexican energy, oil and gas market, is in the detail engineering and critical equipment procurement phase, with the construction phase also underway.

This contract, in joint venture with ISOLUX and TECHNIP, includes detail engineering, equipment procurement, permanent installation materials, manufacturing, transport, civil construction, electromechanical assembly, precommissioning, commissioning, training and startup for the construction of Train A, with an 80 T/D capacity, in a sulfur recovery unit (SRU-2). The contract also includes unit integration in the Ing. Antonio

M. Amor Refinery in Salamanca, Guanajuato, Mexico, for PEMEX Refining, under license from Worley Parsons.



BRAZIL
TBG
Capão Bonito
Compression Plant

Successful completion of the assembly and startup of the compression plant project in Capão Bonito. TECNA is currently in the plant operations assistance phase.

The assembly, commissioning and startup of the Capão Bonito compression plant, with TECNA working together with União

Engenharia, was successfully finished. The general timeline of the project finished on schedule and operations assistance began as agreed upon with TBG.

The Capão Bonito plant will allow TBG to increase its transport capacity in the gas pipeline's southern section, which operates between San Pablo and the state of Santa Catarina.



BRAZIL
AG-TECH
RLAM Hydrotreatment Furnace
Continuing with the increased business volume in Brazil, FLARGENT/TECNA move forward with the AG-TECH project execution for the design and manufacture of equipment to be assembled in PETROBRAS' Landulpho Alves de Mataripe Refinery (RLAM).

Manufacture and assembly work is finishing up, while insulation installation and painting has begun.

This contract includes the design and manufacture of two furnaces for a diesel hydrotreatment unit and a furnace for a hydrogen generation unit, with their corresponding conditioning and fuel regulation modules, to be assembled in the PETROBRAS'

Landulpho Alves de Mataripe Refinery (RLAM) located in São Francisco de Conde, Bahia, Brazil.

BRAZIL
TUM
Juaruna and Coarí Compression Stations

As part of its overall growth in the Brazilian market, TECNA is working in joint venture with GDK on this significant project for Transportadora Urucú-Manaus (TUM), a PETROBRAS subsidiary and operator of the Urucú-Manaus gas pipeline.

The SOLIMÕES joint venture, made up of GDK and TECNA, was hired by TUM to carry out the engineering, skids premanufacturing, assembly, control system and startup of two compression plants in Juaruna and Coarí, situated within the Amazon jungle.

These new compression plants will allow PETROBRAS to increase their gas pipeline's transport capacity which goes through 660 km of Amazonian jungle and supplies the city of Manaus with natural gas from the Polo Arara - Urucú fields, driving economic growth in the region.

Both plants are located within the Coarí/Amazonas municipality, in a location which can only be reached by air or by water, on the Amazonas, Solimões and Urucú rivers. The complexity of this project is

greatly increased due to the logistics associated with transporting materials and equipment by river.

The TECNA-GDK joint venture responsibilities include consistency analysis, engineering support, equipment procurement and assembly, instrumentation, piping, electrical installations, automation and control, facility urbanization, precommissioning, commissioning, and startup assistance.

The project received from PETROBRAS was redesigned to solve some of the problems caused by the project location. Certain modules will be prefabricated in order to diminish on-site activities and accelerate the construction phase and project start-up.

The compression plants include the following systems:

- Entry gas filtering
- Gas compression (SIEMENS turbocompressors)
- Gas cooling
- Combustible gas
- Emergency discharge
- Air compression
- Grease drainage
- Utilities
- Fire safety protection
- Control and safety system

Turn Key Plants & Project Management

BRAZIL **PETROBRAS** **Dehydration Units for** **Platforms P-58 and P-62**

This **PETROBRAS** project awarded to the **TECNA-JARAGUÁ** joint venture, which includes engineering and equipment procurement for two gas dehydration units for platforms P-58 and P-62, is underway.

TECNA is currently developing the basic and detail engineering for

the dehydration modules (TEG) and the technical specifications for the equipment and vessels that are being manufactured by Jaraguá in their San Pablo factory.

Each unit contains the following equipment:

- Glycol (TEG) contactor tower
- TEG regenerator
- Pumps
- Energy recovery heat exchangers
- Activated charcoal and cartridge filters

- Additive injection module
- Interconnectors

This project comes on the tail of dehydration units already delivered to P-34 and PMXL-1 (Mexilhao), making a total of four off-shore units. TECNA is working with in Brazil.



COLOMBIA **TGI** **Compression Stations**

The significant advances in the project that TECNA is carrying out in joint venture with SADEVEN for Transportadora de Gas Internacional (TGI) made an early startup possible in July for the Jagua del Pilar and Curumaní compression stations along the Ballena-Barrancabermeja pipeline.

The joint venture is moving ahead as scheduled on the construction of the San Alberto and Puente Guillermo compression stations which together will allow for an increase of 1,440 MMSCMD in natural gas transport capacity from the recently initiated production fields in Guajira.

This is quite a significant project for Colombia due to the fact that it increases their overall energy capacity with a fuel utilized in industry, homes, and vehicles.



PERU **PLUSPETROL** **EPC 21 contract signed**

PLUSPETROL confirmed their trust in **TECNA's** project development and implementation capacity, as they had done in all previous project phases since 2004, with the signing of an EPC contract in joint venture with **AESA** for the **Malvinas Expansion Plan** project.

The signing took place on June 17th with the participation of Mary Esterman, Jorge Sgalla and Andrés Mabres from TECNA, Eduardo Lascano from AESA and Alberto Moons, Vice-president of Corporate Relations, from PLUSPETROL.

The project includes the installation of a new cryogenic train with a capacity of 520 MMSCFD, a new condenser stabilization unit, two turbogenerators, two turbocompressors, and utilities expansion for the plant and facilities.

This plant is located in Block 88 in the Greater Camisea area, in the Peruvian Amazon Jungle. It is located approximately 500 km east of Lima.

This project for PLUSPETROL PERU is part of an expansion of the Camisea installations in order to meet the new process requirements needed for the planned increases in gas production levels in 2012.

**ECUADOR
PETROINDUSTRIAL
Crude desalination system for Parsons
plant, La Libertad Refinery**

On July 7th, the TECNA - ECUAMEDANITO joint venture was awarded a significant refining contract.

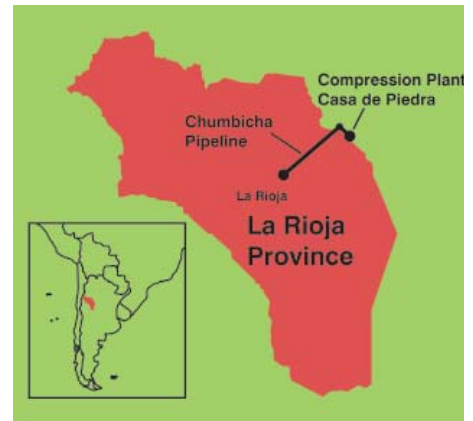
The project includes basic and detail engineering, construction, installation and startup of a crude desalination unit for the Parsons Plant in the La Libertad Refinery, with a desalination capacity of 26,000 barrels per day.



**ARGENTINA
LA RIOJA PROVINCIAL GOVERNMENT**

The ISOLUX - TECNA joint venture continues with the development and implementation of a compression plant and gas pipeline which will contribute to the project for increasing gasification in La Rioja.

Joint venture's participation includes the construction of a 1 MMSMCD compression plant with four gas-powered moto-compressors and the construction of a 78 km, 8" pipeline between the main Recreo-Chumbicha pipeline and the new pressure reducing station (60/10 Bar) near the city of La Rioja. Project scope includes basic and detail engineering, an environmental impact study, equipment and materials procurement, construction and assembly, precommissioning, commissioning and start-up.



**ECUADOR
PETROINDUSTRIAL
PHI furnace
Parsons Plant, La Libertad Refinery**

The TECNA-FLARGENT joint venture is carrying out basic and detail engineering for the procurement, installation and startup of the new PH1 furnace for the Parsons Plant, La Libertad Refinery.

This will form part of the Parsons atmospheric distillation unit, with an installed processing capacity of 26,000 barrels of crude oil per day for processing crude oil at 27.1° API.



Automation & Control

COLOMBIA ECOPETROL

Barrancabermeja Refinery

We have seen continued advances with the migration and updates of the Barrancabermeja Refinery control systems. It is the largest petroleum refinery in the country with a total output of 250,000 barrels per day.

This project includes the update and implementation of a distributed control system, DCS, a safety system, fire and gas system, and existing subsystems such as a vibration and velocity monitoring system, PLC, telemetry, analyzers and UPS's.

PERU PLUSPETROL

Camisea Malvinas - Second Expansion

Engineering and purchasing has begun for the expansion of the control and security system for the second Malvinas plant expansion. This agreement covers design, engineering, equipment procurement, installation, programming and assembly supervision.

Camisea is a natural gas extraction project in the Peruvian Amazon region. This is the first project of its kind in the country. The deposits in the region hold one of the largest non-associated natural gas reserves in Latin America.

PERU BPZ Control System, Precommissioning & Commissioning, Start up and Performance Test for the CX11 Platform Corvina Platform, Talara

Engineering and procurement, as well as applications development, have begun for the control system for the CX11 and BPZ platform.

Project scope includes design, engineering, equipment procurement, installation, assembly programming and supervision, as well as precommissioning,

commissioning, start up and performance testing.

This is TECNA's first offshore automation project.

BRAZIL PETROBRAS Compression Plant Control Systems Juaruna & Coarí

The GDK - TECNA joint venture hired the TECNA automation area for the control and safety system for the Juaruna & Coarí compression plants. This project includes detail engineering, equipment procurement, systems development, testing, and assistance with commissioning and start-up.

BRAZIL TGI Compression Control System Capão Bonito

Work was finished on the control system for the Capão Bonito compression plant. The plant is currently in the test run stage with operations assistance from the automation area. The project scope included detail engineering, equipment supply, systems development, testing and commissioning and startup assistance.

BOLIVIA BRITISH GAS Upgrade of La Vertiente Power Plant's Safety System

Work was finished on the safety system upgrade of the British Gas' La Vertiente plant. This project included the development of basic and detail engineering, procurement, electromechanical assembly, precommissioning, commissioning, and startup assistance.

ARGENTINA TOTAL AUSTRAL Aguada Pichana Norte Engineering, Configuration and Site Services

Engineering and configuration work has begun for the automation of six natural gas production wells.

Scope includes engineering services, software configuration, cabinet integration, FAT testing, SAT testing, and startup.

Cabinet integration and the engineering and configuration of the different well control panels are being carried out on a parallel basis.

ARGENTINA PAMPA ENERGY Combined Cycle Upgrade, Loma La Lata Power Plant

Work at the Loma La Lata Power Plant is in its final phase. In joint venture with ISOLUX CORSÁN, TECNA is responsible for the control system for Pampa Energy's Combined Cycle Upgrade project. The scope includes hardware procurement, engineering services and commissioning and startup assistance for the DCS IA and Foxboro TMR TRICONEX TRIDENT, as well as the expansion of the existing control system.

The project also includes general management, coordination, importation services, administration and logistics.

ARGENTINA PAN AMERICAN ENERGY Expansion of Battery Sites and Manifolds - San Jorge Gulf Oilfields, Chubut

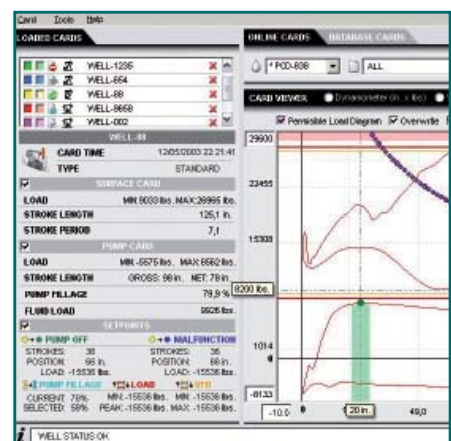
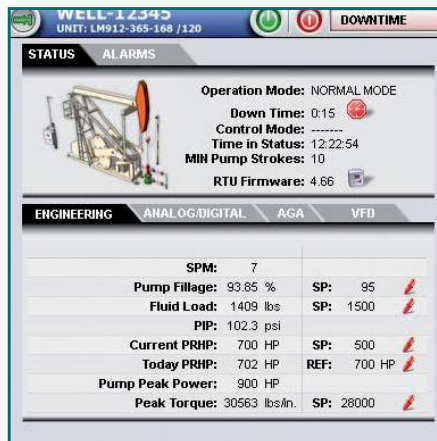
Pan American Energy continues with its installation of new batteries and expansion of existing batteries. They continue to work on developing new applications for the control systems that feed to the SITU (Unified Telemetry Intelligent System). They are also continuing development of software modules for operational support, which are integrated with the SITU.



**BRAZIL
PETROBRAS
Test Well Controller
Mossoró**

Together with Yokogawa, TECNA carried out the engineering, programming, construction and startup for a test well controller, implemented for the first time with a market PLC. This system allows dynamometric charts for on-line protection and control. Among other aspects, it allows the equipment to avoid pump unit or well-bottom equipment breaks, avoid environmental damage, reduce energy costs, and extend the useful life of installed equipment. It also offers FTP and HTTP access to visualize startup, downtime and current dynamometries, together with the torque and downtime reports, production and alarms, as well as other functions. The controller has been programmed to be able to control wells with different types of mechanical pumping equipment (Conventional, Mark II, Air Balance), and also wells with different manufacturers and dimensions.

The prototype was installed at the Alto do Rodrigues Oilfields in Mossoró, Brazil, about 400 kilometers from the city of Natal.



Engineering & Consulting

ARGENTINA ODEBRECHT/YPF

Detail engineering for new flare stack and modifications of units associated with the CCR - CIE project

TECNA is moving ahead with the project execution of a new Continuous Catalyst Regeneration Reformer (CCR) unit installation at the YPF Ensenada Industrial Complex. The final phase of detail engineering for the new flare stack, CCR-associated-units and auxiliary services modification is being performed.

The scope of work includes execution of design control activities, participation in HAZOP, ACR, and SIL sessions and on-site technical assistance during construction and startup.

ARGENTINA PAN AMERICAN ENERGY San Jorge Gulf - Acambuco

With more than 7 years of work on conceptual, basic and detail engineering for the San Jorge Gulf and Acambuco business units' development, TECNA continues providing services for Pan American Energy.

Some of the latest projects include:

- Conceptual and basic engineering for the "Gas Phase VI - Cerro Dragón Natural Gas Complex" project.
- Basic and detail engineering for the Macueta compression plant in the Acambuco area.

BOLIVIA BRITISH GAS Facilities engineering for PMO-6 well

Reaffirming the strong relationship between BG and TECNA, our team is carrying out basic and detail engineering for facilities associated with the Palo Marcado 6 well associated facilities and the flowline to the Palo Marcado battery.

BOLIVIA TOTAL Basic Extended Engineering ITAU Field

TOTAL E&P Bolivia awarded TECNA a contract for the basic extended engineering for the ITAU fields Phase II project, which includes surface facilities and the gathering lines for the ITU-X1 and ITU-4 wells, and the third gas treatment train at the San Alberto plant facilities.



BOLIVIA YPFB Conceptual and Basic Engineering for Río Grande LPG Recovery Plant

Within the framework of YPFB's strategic development plans, the natural gas industrialization business unit awarded TECNA a contract for conceptual and basic engineering services for the new Río Grande LPG

Recovery Plant. Additionally to these engineering services, the scope includes cost analysis and market analysis related to the plant construction and environmental impact studies.

PERU

BPZ

Basic and Detail Engineering for Corvina Platform

TECNA finalized the execution of basic engineering and is currently performing detail engineering for the

CX-11 offshore platform production facilities, located on the Z-1 lot in the Corvina fields.



ECUADOR

PETROAMAZONAS

MAP agreement – EPF detail engineering

Within the framework agreement with Petroamazonas, TECNA is carrying out detail engineering for the “early production facilities” for Petroamazonas.

ECUADOR

PETROCOMERCIAL

Esmeraldas - Santo Domingo - Quito - Santo Domingo - Pascuales Polyduct and Stations Revamping and Repowering

The TECNA - ECUAMEDANITO joint venture has finished basic and detail engineering, including HAZOP and HAZIP studies execution, as well as SIS - SIL and consequence analysis.

Due to the high quality of work done, the client has requested the joint venture to carry out complementary activities.

BRAZIL

PETROBRAS

CARAGUATATUBA

PETROBRAS awarded TECNA a conceptual study contract at the Caraguatatuba gas treatment plant, including debottlenecking studies, and the evaluation of different technical, economic and construction alternatives for the facilities expansion.

SPAIN

CEPSA

Conceptual study for new development in RYF (Algeria)

CEPSA (Compañía Española de Petróleo S.A.) awarded TECNA for a secondary recovery phase upgrade conceptual study at their Rhourde Yacoub field in Algeria. The studies include the analysis of twelve different technical alternatives for the final field development.

Power Generation

ARGENTINA **Combined Cycle Upgrade** **Loma La Lata Power Plant**

The ISOLUX – TECNA joint venture continues their project to upgrade the Loma La Lata Power Plant to a combined cycle.

The current plant has three 123 MW open cycle gas turbines representing 1.4% of installed capacity in Argentina, and is operated by Pampa Energía in the province of Neuquén. The project goal is to take advantage of residual heat from the gas turbines to generate steam through the installation of 3 recovery boilers (HRSG) and a steam turbine with an additional 185 MW of capacity for the Argentine electrical power grid.



The project will increase the capacity of the Loma La Lata power plant by approximately 50% with no additional natural gas consumption.

Currently, this power plant operates with a 32% efficiency level, but it is expected to reach a 50% efficiency level following its expansion.

The project is in its final stages with engineering and procurement activities 99% complete. Assembly of piping and E+I is being finalized; the steam turbine assembly is finished; and the chemical cleaning of the boilers and steam blowing are being carried out.

Once converted to a combined cycle, the Loma La Lata power plant will have an installed capacity of 554 MW.



ARGENTINA **Ensenada de Barragán Thermoelectric Plant**

Turnkey construction moves forward on the Ensenada de Barragán Thermoelectric plant for Energía Argentina S.A. (ENARSA), which will contribute 560 MW to the national interconnected system.

The Ensenada de Barragán thermoelectric plant will be built in the Buenos Aires province, and includes two open-air 280 MW generators.

TECNA is currently carrying out project engineering activities in different disciplines.

An expansion of the plant to combined cycle is planned.

ARGENTINA **Río Turbio Coal Fired Power Plant**

The electrical generation project at the Río Turbio Thermoelectric Power Plant is a turnkey public works project whose scope includes engineering, procurement, construction and startup (EPC).

The generation capacity will be 2 x 120 MW TurboVapor + 2 circulating fluidized bed boilers recognized for their durability and low emissions levels. It will work with Siemens turbogenerators, Foster Wheeler boilers, and coal mined at the Río Turbio mine.

There are currently more than 400 people directly or indirectly working on this project. Engineering and procurement activities continue. The concrete work corresponding to the main boilers, baghouse filters and chimney, air coolers and turbine housing are complete. Assembly of metallic structure for the main boilers (tier 1) has begun.

This will be the second coal-fired power plant in operation and will cover 1% of demand, helping to diversify Argentina's energy matrix.

Operation & Maintenance

BRAZIL

TECNA offers offshore assistance during the Mexilhão PMXL-1 Platform TEG module commissioning.

The assistance during the TEG module commissioning for the Mexilhão PMXL-1 Platform, whose final user will be PETROBRAS, formed part of TECNA's engineering and supply contract with Estalheiro Mauá in Rio de Janeiro, Brazil.

From June 16th through 28th, two TECNA engineers (João Gomes from TECNA Brazil and Fernando Paris from TECNA Argentina) embarked on the Mexilhão platform, located in Bacia de Campos, to offer commissioning assistance service for the Mexilhão platform's TEG system.

TECNA carried out basic and detail engineering and part of the equipment procurement for platform TEG modules. TECNA participated in the installation's commissioning and startup due to the fact that it led work on the TEG unit's process and performance.

During their time on the platform, they verified equipment assembly, piping and instrumentation, formulating a punch list so that the assembler could finalize his work and have the TEG module ready for final commissioning and posterior startup activities.

The Mexilhão platform's function is to process part of the gas that PETROBRAS will extract from the Bacia de Campos fields, whose final destination is the onshore plant in Caraguatatuba, close to the city of Santos (SP).

BOLIVIA **BG BOLIVIA**

Since April 2008, TECNA has carried out operation and maintenance services in the La Vertiente Plant, batteries and other installations for a period of 36 months. There are 41 employees assigned to this contract, having reached June with 24,177 accident-free work hours.

BOLIVIA **REPSOL BOLIVIA**

August 30th is the second anniversary of operation and maintenance service at REPSOL's plants in Bolivia (Margarita, Mamoré and Monteagudo fields). There are 90 employees assigned to this contract, having reached June with 142,756 accident-free work hours.

Nuclear Energy

ARGENTINA

Nucleoeléctrica Argentina **Atucha II Nuclear Power Plant**

TECNA continues with its support for the completion of the Atucha II Nuclear 700 MWe Power Plant Project located in Lima, Buenos Aires Province. Work within the framework agreement with Nucleoeléctrica Argentina continues in the areas of piping engineering, supports and stress analysis, electricity, processes, specialized assistance for the startup of Atucha II and the development of calculation codes for the plant licensing, safety and nucleus design group.

ARGENTINA

INVAP

INVAP has entrusted TECNA with the development of basic engineering alternatives for contaminated sludge treatment in one of its international projects.

INVAP is a technological company which works with nuclear, aerospace, medical and industrial technology development.



Corporate Responsibility

SOLCA 10K Benefit Race for the Fight against Cancer

TECNA participated in the Ecuadorian Cancer Society (SOLCA) benefit race which took place on July 25th in order to raise funds and collaborate with medical treatment for cancer patients.

TECNA showed its commitment with volunteers present at both the 10 Km and the 2.5 Km race.

Internet access for a school in Jujuy

Through the Fundación Aprendiendo Bajo la Cruz del Sur (Learning under the Southern Cross Foundation), TECNA donated a laptop computer to a school located in Loma Larga, Tilcara, Jujuy Province, Argentina. This foundation, through donations from different sources, was able to obtain a satellite antenna, a long-term internet service provider,

and a computer in order to have internet access for the first time in Loma Larga, and have access to emergency services.

Computer donations

Several community organizations received computer donations from TECNA. This was carried out by the Argentine business areas of Systems, Finance and Administration, and Corporate Relations. TECNA has been donating equipment for several years in order to promote equal opportunities, social integration, environmental responsibility, and to contribute to education and a culture of reuse and recycling of technology.

Collaborating with the Balseiro Foundation

TECNA contributed to the Balseiro Institute, with whom it shares the need

to train skilled employees in the area of science, and especially in nuclear technology. This collaboration is in line with one of TECNA's objectives in the area of Corporate Social Responsibility: "(...) contribute to the strengthening of education at all levels". TECNA will be the sponsor of the Technological Business Plan competition organized by the Balseiro Institute together with the National Commission of Atomic Energy (CNEA) and the Universidad Nacional de Cuyo (National University, Cuyo Region).

Touching Presentation by the "Friends of TECNA" Chorus on the Victoria, Entre Ríos bicentennial

The "Friends of TECNA" Chorus was a highlight of the event that took place in the Nuestra Señora de Aránzazu (Our Lady of Aránzazu) Parish on Sunday, August 15th. This event was organized by the League of Mothers, and Commission to Restore our Temple's Paintings, upon celebrating the finalization of the sixth stage of restoration of the parish murals painted in the 1950's by the French Muralist Auguste Fusilier. The first mass in this temple, celebrated 200 years earlier, is considered the founding date of the city.

Children's Day

TECNA celebrated Children's Day by lending a hand. At the "Villa Fernández" school close to Monteagudo (Chuquisaca, Bolivia), the children broke into cheers when they heard that TECNA had sent them gifts in order to celebrate Children's Day.

The same thing happened at the "Juana A. de Padilla" school. The Red Solidaria Argentina (Argentine solidarity network, a non-profit organization that helps link donors with those in need), thanked TECNA for their donation of toys and candy for their "A Dream for Every Child" campaign organized for Children's Day.



Activities in Arabia

TECNA has registered as an EPC projects supplier for KJO (Khafji Joint Venture). This company is capitalized by Kuwait Oil Company and Aramco and operates in the neutral zone (on/off shore) between Kuwait and Saudi Arabia. They are currently participating in a bid on a battery of oil tanks and auxiliary systems.

Aramco, the Saudia Arabian state company has qualified us as a foreign engineering provider which is an important step forward for our regional growth.



Engineering 2010

The World Engineering Congress is drawing near and TECNA will play a leading role. This event will take place from October 18th through the 20th in the La Rural conference center under the slogan "Technology, innovation and production for sustainable development".

Our participatory booth will center on the ideas of overcoming challenges and reaching goals. A large attendance is expected from young engineering students and recently graduated engineers.

Our stand aims to help these students and professionals get to know TECNA.

Together with the commercial exposition, there will be learning opportunities where TECNA will present several papers, including:

Information Technologies Chapter

"Optimization of the Numerical Solution of the Nuclear Reactor Neutron Diffusion Equation" by Matías Rivero and German Theler.

Training Engineers for Sustainable Development Chapter

"The Human Factor and a Preventative Culture", "Why not Sell Safety?" and "HSE (Health, Safety and Environment) Management as a Development Tool" by Enzo Gabriele and Luis Lanziani.

We will also be sponsors of the Energy and Climate Change Chapter and the Youth Forum.

You can read more information about the event and see the complete schedule at www.ingenieria2010.com.ar.

Rio Oil & Gas 2010

TECNA will be present at the Rio Oil & Gas Expo and Conference, the biggest Oil and Gas event in Latin America, which will take place at the Riocentro Convention Center in Rio de Janeiro.

At this edition, which will take place from September 13th through 16th, 2010, the main topic will be "From

Oil to Biofuel: Integrating knowledge and extending our limits".

On September 14th, TECNA will present the paper "Continuous Zero Emissions in a TEG Dehydration Unit" authored by Philipp Albrecht, Martín Raventos and Mario Busina.



“INTEGRA” special project Implementation of new ERP (Enterprise Resource Planning) System

In early 2009, TECNA's growth, geographic scope of its projects, and the management distributed throughout the different TECNA Group businesses made manifest the need for an economic and financial management software integrating all the aspects of TECNA's business activities.

The INTEGRA planning project began, and its main development goal was the implementation of a new ERP software in order to manage financial and economic information related to projects and structure in all TECNA Group businesses.

The main objectives defined for the INTEGRA project were:

- **INTEGRATION:** Have all business information integrated in the information systems, with up to date information, and share this information throughout the organization in order to support decision-making.
- **EFFICIENCY:** Reduce information reprocessing.
- **CONTROLS:** Assign responsibilities, controls and indicators necessary to allow management and continual improvement of specific processes.
- **GLOBAL:** Define a model that can be implemented in all the companies that form part of the TECNA group thus facilitating consolidation of economic and financial information.

The INTEGRA project was launched in July 2009, after having selected SAP as the main software application to be implemented, together with developments of specific interfaces to integrate financial information with other business applications such as CRM, Meta4, Timesheet, Documents Administrator, Engineering Management Systems, and the implementation of Business Object as a tool for business information analysis.

A team of employees representing different parts of TECNA made this project possible. It is currently in the development phase and has successfully completed two of its three stages.

TECNA already manages its economic and financial information with SAP in Argentina, Peru, Bolivia and Colombia with the project in the stabilization phase. The third project phase in the second semester of this year, aims at implementation in Brazil, Spain and Ecuador.

INTEGRA's greatest benefits will be seen next year when the implementations have stabilized and precise and up to date information will be available for TECNA business decisions.





SmartPlant 3D implementation continues

The first stage of the SmartPlant 3D implementation project was successfully finished. Piping and Structures received training and carried out modeling for two modules, obtaining all the detail engineering documentation necessary for this project (drafts, isometric projections, materials lists and materials requirements).

The second stage of this project is currently underway. Users from the areas of Electricity and Instruments have been trained to create the necessary specs and to model in three dimensions with SmartPlant. Simultaneously, the configuration is being checked on to ensure extraction of all required documentation for detail engineering.

Implementation of new software for Materials Management

The SPM (SmartPlant Materials) Project is a new materials management system developed by Intergraph Corporation, which includes aspects ranging from engineering development to assembly and construction of power plants.

This Intergraph system is made up of 4 modules:

- Smart Plant Reference Data (SPRD)
- E&PI (Engineering and Procurement Integration) Module
- MSCM (Material Supply Chain Management) Module
- SM (Site Management) Module

The proposed objectives are:

- The availability of a tool that allows TECNA to generate specifications for use in the generation of 3D models through SP3D.
- Increase quality and efficiency in generation of materials specifications.

- The availability of a tool that allows TECNA to efficiently manage materials with a system specifically designed for EPC projects.

The new technologies launched (SP3D) in TECNA over the last year will be strengthened with the implementation of this software by making initial data entry more efficient and ensuring quality of materials lists and requirements.

The first implementation phase will take place during the execution of EPC 21 - Malvinas Expansion Plan Project, where a SM (Site Management) Module will be utilized for on-site management of materials storage.

New software for Materials Management with TAG

In line with the objectives of Market Growth and Diversification, Organizational Development, and Profitability, TECNA is developing a new system called MTG.

This new system will optimize Materials Management with TAG, both for projects and for engineering proposals. This development will help carry out different types of lists management (machinery, instruments, etc.) and will feed the system in charge of materials purchasing management with all the changes engineering may request.

This system will allow both manual data entry as well as data importation from SmartPlant P&ID and from SmartPlant Instrumentation. It is also designed to support data originating from other sources.

This new system will also collaborate with the integration of software already developed for TECNA.

TECNA Photography Contest

The first TECNA Photography Contest took place in April and May of 2010, with the participation of contestants from the 11 TECNA offices.

There were two categories for photographs: "Where I Live" and "My Work".



"My Work" Category
1st Prize: Alejandro Area
"My daily journey"



2nd Prize: Martín Raventos
"A Patagonian viewpoint"



"Where I Live" Category
1st Prize: Ignacio Sánchez Resco
"A Romanic bridge in Barco de Avila"



2nd Prize: Fernando Alonso
"Nightfall in Madrid"