

TMPnews

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Termomeccanica Pompe consolidates its presence in the national and international Oil & Gas markets

TMP supplies pumps for the Orsk Refinery

Within the development and the refurbishment program of the Orsk refinery, located in the Southern Ural region of the Russian Federation, Termomeccanica Pompe was awarded in May 2014 the supply of two new pumps for "OJSC Orsknefteorgsintez".

The pumps are API 610 BB3-type (Termomeccanica PF 100.7 model), one pump with a 320 kW electric motor and the other with a steam turbine.

The pumps rotation speed is 2980 rpm and the performances requested are as follows: a flow of 161 m³/h and a head of 519 m.

The working pump will be coupled to the steam turbine while the pump coupled with the electric motor will be left in stand-by, ready to start in case the steam dedicated to the pump is not enough to guarantee the performances requested.

The pumps have been designed to comply with API 610 standards as well as with TR CU certification, a certification related to the technical regulations that establish the minimum mandatory health and safety requirements for products to be imported in the Russian Federation.



Orsk Refinery (Orsknefteorgsintez plant)

This project has presented various engineering challenges related first to the fact that the pumps are to be installed in an existing refinery with already defined spaces, then to the fact that they have to run in critical ambient conditions.

In fact, differences between wintertime and summertime temperatures in the region are quite considerable.

The above-mentioned requirements have therefore led TMP to dedicate substantial resources in engineering activities to tailor to this specific project not only pump components (the company had, for example, to perform the verification of various pump components through structural analysis) but also auxiliary and electrical components, such as electric motors, steam turbine, mechanical seals and sealing systems.

The complete tests of the pumping units using the

job electric motor were carried out at the end of May 2015 in the La Spezia in-house test center.

The erection and installation of the first pump (with electric motor) is scheduled for July 2015 while the erection and installation of the second pump (with steam turbine) is scheduled for September 2015.



Complete skid of the first BB3 pump (with electric motor) being prepared for shipment

New pump job for BP plant in Oman

Termomeccanica Pompe acquired last March a new contract from Petrofac U.A.E. for the supply of 28 API 610 centrifugal process pump of VS1-VS4 type, complete with electric motor and double pressurized mechanical seal with flushing Plan 53B.

The pumps are to be installed in the Central Processing Facility of the Khazzan gas project in Oman.

The Khazzan tight gas field project represents the first phase in the development of one of the Middle East region's largest unconventional tight gas accumulations, which has the potential to be a major new source of gas supply for Oman for many decades. Indeed, the gas processing facility will have a capacity to process one billion cubic feet of natural gas per day (equivalent to 28.3 million cubic meters).

The end user, BP plc (ex British Petroleum), operates in the energy sector, above all in the oil and natural gas markets, where it represents one of the four major world players along with Royal Dutch, Shell, ExxonMobil and Total.

The delivery of the supply is planned for the end of 2015.

Termomeccanica confirmed for the maintenance of rotating machines in the refinery of Sannazzaro de' Burgondi

The Termomeccanica Pompe Group, through its controlled company Termomeccanica Service Sud (Massafra-TA), has been confirmed for another 3 years, with the option of a further 2 years, for the maintenance of the rotating machines of the ENI refinery of Sannazzaro de' Burgondi. This renewal represents an important challenge for Termomeccanica Pompe considering the refinery in question is the "#1" of the ENI group in terms of efficiency, quality and safety. Indeed, the refining capacity of 200 000 barrels/day and the conversion index of 70.2% place Sannazzaro de' Burgondi amongst the most efficient refineries at European level.

The new contract, awarded this time directly to Termomeccanica Service Sud, is in continuity with the first 3-year contract, handled jointly with the La Spezia mother company. During the first contract, the group gave an important contribution to the efficiency of the Refinery thanks to its engineering and production structures as well as its capacity to answer quickly and with quality to the customer's requests.

Today, approximately 36 Termomeccanica workers operate at Sannazzaro in collaboration with ENI personnel and manage the installed base of over 3000 rotating machines that need to operate 24 hours a day, 365 days a year. Termomeccanica Service Sud is currently operating inside a 430 m² warehouse equipped with a bridge crane and machine tools. By the end of September, the warehouse will be extended with the addition of a new structure of over 200m², also equipped with a bridge crane. Such structure will be dedicated mainly to the upgrading of the machining department thanks to the addition of a boring machine, a vertical lathe and other horizontal lathes.

The total investment for the Termomeccanica Pompe group exceeds 300.000 euro and will allow the structure to become technologically autonomous for almost all the maintenance operations to be performed on site.

With regards to safety, one should highlight the total absence of accidents over the past 3 years. In fact, the company has invested a lot into safety, not only implementing a specific training program for its site personnel (which starts from the qualification to perform work in confined spaces and environments subject to chemical risk) but also guaranteeing the continuous presence of the Health & Safety Manager on site.

Termomeccanica Pompe takes part for the first time to Moscow's International Oil & Gas Exhibition

This year, Termomeccanica Pompe exhibited for the first time at MIOGE through its Bare-shaft Compressors Division.

The exhibition, whose 13th biennial edition took place at Moscow's Expocentre on 23 -26 June 2015, represents the largest and most recognised Oil and Gas trade event in Russia and Central Asia. As such, the exhibition attracts buyers and key decision makers from all sectors of the Russian Oil and Gas market.

The previous 2013 edition, for example, supported by the Russian Ministry of Energy, Rosneft, Gazprom and IGU (International Gas Union), registered over 20,000 visitors and counted amongst its exhibitors key local and international companies such as Transneft, GE Oil & Gas, Yokokawa, Petrofac, etc.

MIOGE 2015 allowed TMP's Bare-shaft Compressors Division to introduce to the local market its new series of gas compressors, the NG and SCG series.

Indeed, the division, who boasts more than 40 years of experience in the air-ends screw compressors business and is the Italian leading supplier in the market, has recently extended its product range and launched a gas compressor line to serve the Oil & Gas, Refining & Petrochemical, Power Generation and General Utilities markets.

The gas-ends NG and SCG series are able to manage many different types of gases, namely natural gas, methane, biogas as well as many others such as hydrogen and vinyl chloride, which are listed amongst the most "complex" ones.

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Our mission

To contribute to the success of our customers through our experience and know-how. We pursue this goal giving the utmost consideration to the hard work and commitment of both employees and suppliers, respecting the environment and complying with the expectations of our shareholders.

We think outside the box for you



Chose a unique partner for your unique needs



Compressore modello NG300

Order for the Saudi Arabian Power Generation market

Termomeccanica Pompe (TMP) acquired last month a contract in Saudi Arabia for the supply of pump packages for the Conversion of Qassim Extension II and III Simple Cycle Plants to a Combined Cycle Plant.

The customer is NCC Ltd (National Contracting Company), who belongs to the Rezayat Group, while the end-user is SEC (Saudi Electricity Company).

The conversion is based on 3 blocks (A,B,C), each in a 4 GTG + 4 HRSG + 1 STG configuration, with their associated auxiliaries and related Balance of Plant (BOP).



Qassim Power Plant – current extensions II & III

The GTGs (Gas Turbine Generators) are GE make 7001EA model, with a capacity of 55-70 MW each, while the HRSG (Heat Recovery Steam Generators) are CMI make, unfired, dual pressure, vertical type. The STGs (Steam Turbine Generators) are Fuji make dual pressure STGs of a 130MW capacity each.

TMP's scope of supply is the design, engineering, manufacturing, assembly, testing ("at manufacturer's workshop") and delivery of the following pump packages, complete with all material and accessories for "an efficient, safe and trouble free operation":



TMP pump MESBD model

• Nine Boiler Feed Pump (BFWP) packages, TMP Barrel Type MESBD 150.7 model

Each BFWP package consists of:

- electric motor (4160 V – 1450 kW – 60 Hz – 2 poles)
- DFE type variable frequency drive
- basket type suction strainer
- local instruments, gauges & panels
- lube oil system
- supervision for erection, commissioning and start-up
- training of SEC personnel

• Six Condensate Extraction Pump (CEP) packages, TMP Axially Split Casing Type 200DD52 model

Each CEP package consists of:

- electric Motor 4160 V – 430 kW – 60 Hz – 4 poles
- basket type suction strainer
- local instruments, gauges & panels
- supervision for erection commissioning and start-up
- Training of SEC personnel

Delivery will take place from the 10th to the 13th month from order placement.



TMP pump DD model

Termomeccanica increases its La Spezia's Test Center electrical power

In order to keep up with a more and more demanding market, even with regards to the electrical powers at play in the plants where its pumps are installed, Termomeccanica Pompe has launched this year a project to increase the maximum test power of its test center.

The project provides for the creation a second line of a maximum power of 15MW at 50Hz in addition to the existing line of a maximum power of 10MW at 50Hz. The second line's maximum power at 60Hz will remain the same as the current line's, i.e. 4.5MW.

To implement such project, the electric line, that starts from the Termomeccanica's substation and goes to the test center and to the entire La Spezia's facilities through underground tunnels, will be doubled. The doubling of the electric line includes the installation a control panel from which the two lines will branch out: the current one (10MW) and the new one (15MW), both at 6kV.

The new line will require the laying of 3500m of cable (of a 240mm section) and the interfacing of a transformer with that will allow to supply the range of voltages necessary to the motors of the pumps which will be tested at the test center.

The two lines will be made available to the Test Center thanks to the installation of another control panel which will be located near the center.

The investment made is relevant both in financial and operational terms: taking into consideration only the cables, transformer and control panels, the investment value is around 300K€ and works will require approximately 1500 man hours.

The objective is to have the new plant up and running by the beginning of 2016, trying to reduce to a minimum the interferences on normal operations of both the test center and the entire facilities.