

# TMP news



## Project Reference Person

Aldo Sammartano

Editor TM.P. S.p.A. Termomeccanica Pompe

Project Developed in-house

Authorisation from the tribunal of La Spezia

N. 5/08 dtd. 02/12/2008

TM.P. S.p.A Termomeccanica Pompe

Via del Molo, 3 - La Spezia - Italy Tel. +39 0187 5521 - Fax 0187 552506

e-mail: pumps@termomeccanica.com - http: www.termomeccanica.com

October 2010, issue 03

## TM.P. supply to SAIPEM for ENGRO Chemical Ltd. - PAKISTAN



Turbine and reduction gear with angular take-off shaft

In recent years ability to provide complex systems and not just machines (in our case pumps) has increasingly become a distinguishing characteristic of the markets in which TM.P regularly operates.

The supply made to the Pakistani company ENGRO, via SAIPEM, is a clear example of this: four vertical pumps, two driven by electrical motors and two by steam turbines plus a reduction gear with angular take-off shaft. This includes a type of supply (steam turbines) which TM.P had not undertaken for many years.

Add to this the complication introduced by the customer's request for us to include in our scope of works several important plant accessories such as the steam condenser, the oleodynamic console for the reduction gears with angular take-off shaft, the oleodynamically controlled check valves on the delivery piping and finally a whole series of components, including various electrical boards, for signal management and system logic. It all adds up to a new experience, which a work team made up for the most part of young engineers has been able to make the most of, demonstrating both their desire to develop and their willingness to tackle unusual problems.

The acquisition of this experience is one of the fundamental elements which may be used in future to increase, as in this case, the consistency of our supply and to offer our customers not just a service, but a real partnership.

The four 100C1PP47 type pumps will be used as cooling water pumps for phase 2 of a plant for the production of ammonia and urea located in Pakistan, in Daharki, in the province of Sindh, just over 600 Km north of the provincial capital, Karachi.

The plant will produce 2,193 MTPD (Metric Tons Per Day) of ammonia and 3,835 MTPD of urea. The two turbine controlled pumps will provide the basic service together with one of the pumps driven by an electric motor. The remaining electrical pump unit will remain on stand-by and will serve as the emergency unit.

The contract, signed with Snamprogetti in December 2007 and valued at over 7 million Euros, provided for the delivery of all the machinery, at our shop, by May 2008 and supervision of the installation, start-up and commissioning.

For plant operational reasons these last phases were developed on an intermittent basis from the start of 2009 onwards, and were completed in August 2010 with the final delivery of the two units driven by steam turbines.



4 units included in the supply

## flash news

New facade and Entrance for the  
Mechanical Industry  
Pole of Termomeccanica



Global Service Agreement  
between TMP and the Italian Navy

At the end of 2009, TM.P., as the representative of a Temporary Business Association formed with two other companies in the naval engineering sector, acquired important orders for the restoration to working order of two vessels belonging to the Italian Navy, that is, the submarine "PELOSI" and the squadron replenishment ship "STROMBOLI". The work required under the contract is being carried out at the Naval Dockyard in Taranto and involves maintenance work on the machinery, systems and apparatus on board, down to the treatment of the hull. The work is expected to take about a year including dry dock.



## TM.P. Termomeccanica Service Sud – Massafra (TA) is ISO14001 certified

TM.P. Termomeccanica Service Sud has decided to embark on the process to obtain ISO 14001 certification because doing so is considered by management to be an important strategic choice for the company. "Environmental management" involves the company in changing its culture and organization, production processes, communication policies and research and development activities. The Environmental Management System (EMS) is conceived as part of the overall corporate management system (including human resources, finance and infrastructure) designed to manage the interrelationships between company activities and the environmental context in which the company operates and is characterized by a cycle of actions oriented towards continuous improvement and inspired by the now well known "Deming wheel" model which requires, for the management of corporate processes, the repeated implementation of four phases:

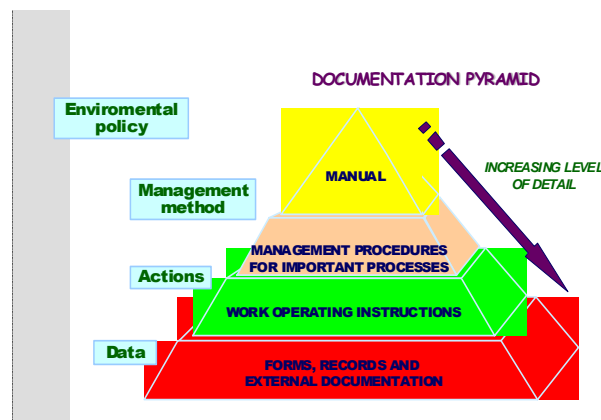
- **Plan:** in which the management system is designed, defining the significant environmental elements and goals (Preliminary Environmental Analysis, Environmental Policy and Planning);
- **Do:** in which the system is implemented in line with the plan (Implementation and Operation);
- **Check:** in which the efficiency of the system is checked by making appropriate measurements and collecting the results (Checks and Corrective Actions);
- **Act:** in which actions are adopted to improve the system (Management Review).

The system has been broken down into four fundamental components:

1. **Structure:** identifies the responsibility centres;
2. **Processes:** identify the critical steps;
3. **Procedures:** describe methods of behaviour;
4. **Resources:** intended as the use of human, financial and technical resources.

In order to obtain ISO 14001 certification, the implementation process was characterized by the following macro sequence:

- **Preliminary Environmental Analysis:** preparatory phase used to identify the indicators to be used to monitor the environmental performance of the company with particular attention to specific environmental aspects/impacts and their significance.
- **Environmental Policy:** confirms the company's commitment to environmental protection, respect for current environmental legislation, continuous improvement, the general principles on which this commitment is based and the resulting strategic decisions.
- **Planning:** understood as the identification of environmental objectives, goals, programmes and finally the desired results, taking into account the starting conditions, environmental policy, legal requirements, the resources available, technological alternatives, the point of view of the interested parties and the commitment to continuous improvement.
- **Environmental Management Manual:** represents an organic collection of guidelines and procedures and operating instructions relating to every aspect of environmental management, the



purpose of which is to describe the processes, objectives, environmental policy, methods for checking on achievement of objectives (Indicators) in order to meet the requirements of the reference standards and the implicit and explicit expectations of stakeholders from the viewpoint of continuous improvement of environmental performance.

- **Verification:** aimed at ensuring that the effectiveness of the environmental management system is maintained.
- **Management Review:** such as analysis of all the elements needed to check that the environmental policy is being complied with, that the environmental management system is being correctly applied, that the objectives have been achieved and that environmental performance has improved.

### A.R.D.E. PROJECT – Searching for Excellence - 2010

Work on the A.R.D.E Project is continuing. In terms of enrichment of the technical professional knowledge, the six month period which has just come to an end has been marked out by the running of courses on **Non Destructive Testing** which will reach their conclusion in the autumn with licences for the application of liquid penetrant, magnetoscopic, radiographic and ultrasound testing methods being obtained. From October updates/training will take place on **Safety at work** and **International contracting**. With regard to the **path to cultural change**, undertaken with the support of the I.E.N (European Institute of Neurosystemics) the work of the Competence Teams has continued. Workshops aimed at strengthening and monitoring the five key competences of TM.P. were held in the Bay of Silence in Sestri Levante and, at the fully attended session which took place on 5 July, the activities and initiatives for future sessions were formally agreed. Among the various elements on offer are training on competences for TM.P. employees organized by the Team Work and Responsibility Competence Teams and the creation of an "internal customer satisfaction" system by the Focus on Company Goals Competence Team. The Initiative Team has also identified and published on the company intranet the monthly prize for the best initiative, to be awarded to the employee who, in the period under consideration, has taken an initiative to improve working activities, and finally the Foreseeing and Solving Problems Team is holding meetings with the managers of the various areas to define a pathway for improving competences.

### A.R.D.E. PROJECT – Searching for Excellence - 2010

Work on the A.R.D.E Project is continuing. In terms of enrichment of the technical professional knowledge, the six month period which has just come to an end has been marked out by the running of courses on **Non Destructive Testing** which will reach their conclusion in the autumn with licences for the application of liquid penetrant, magnetoscopic, radiographic and ultrasound testing methods being obtained. From October updates/training will take place on **Safety at work** and **International contracting**. With regard to the **path to cultural change**, undertaken with the support of the I.E.N (European Institute of Neurosystemics) the work of the Competence Teams has continued. Workshops aimed at strengthening and monitoring the five key competences of TM.P. were held in the Bay of Silence in Sestri Levante and, at the fully attended session which took place on 5 July, the activities and initiatives for future sessions were formally agreed. Among the various elements on offer are training on competences for TM.P. employees organized by the Team Work and Responsibility Competence Teams and the creation of an "internal customer satisfaction" system by the Focus on Company Goals Competence Team. The Initiative Team has also identified and published on the company intranet the monthly prize for the best initiative, to be awarded to the employee who, in the period under consideration, has taken an initiative to improve working activities, and finally the Foreseeing and Solving Problems Team is holding meetings with the managers of the various areas to define a pathway for improving competences.



The editors of this issue are:

- G. Bongiorno
- S. Carret
- E. Conti
- M. De Benedetti
- G. Iapoce
- F. Orsini
- L. Perioli
- D. Sanguinetti
- M. Villa

### 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 employees and suppliers, respecting Environment and complying with expectations of our Shareholders.

