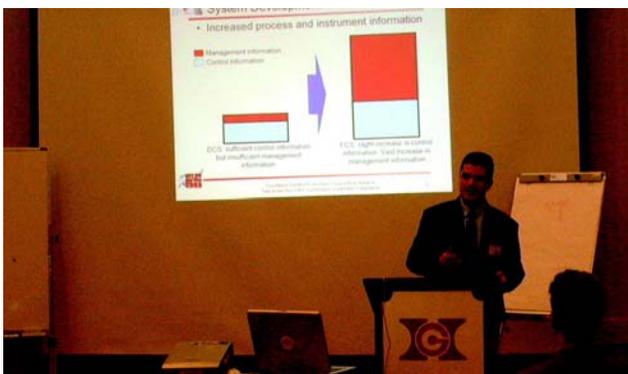


Foundation Fieldbus End User Council 2003



In September, Smar participated in the Foundation Fieldbus End User Council 2003 (FFEUC2003), held in Australia and New Zealand. Foundation Fieldbus End User Council is an organization set up by end users to provide education and information for the pro-active development of this emerging technology. This is where end users have a real role to play and Foundation Fieldbus achieves its full potential by their involvement. There are Foundation Fieldbus End User organizations in Australia, New



Peixoto's presentation in New Zealand

Zealand, Italy, Singapore, Japan, Latin America, North America and Western Canada.

In FFEUC2003 Smar was represented by Alexandre da Silva Peixoto, Applications Engineer from the International Division. From September 5-12, Peixoto led presentations in Auckland, New Zealand; Sydney, Melbourne, and Perth, Australia. The presentations described a complete project of a Crude Load Platform Control & Monitoring System based on Foundation Fieldbus.

The FFEUC2003 was an opportunity to put Smar in the loop, showing the customers that the company has been working with Foundation Fieldbus since the beginning and it is prepared to provide Foundation Fieldbus solutions with its products and field proven experience.

The main attendees of these events were end users of companies interested in this process automation technology. For more information about the Foundation Fieldbus End User Council visit:

<http://www.fieldbus.org/EndUserSupport/EUHome>

Application Engineer Exchange Program

Alexandre da Silva Peixoto will stay at the Krohne facility in Australia for six months. At Krohne's request, Smar sent Peixoto to promote System302 throughout Australia and train Krohne employees on the system technology.

Peixoto is an electrical engineer, responsible for project design & implementation, commissioning & start-up, technical support and Foundation Fieldbus training courses to Smar representatives and customers worldwide.

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"1st LAB" Factory Acceptance Test

Smar has successfully finished the Factory Acceptance Test (FAT) for the 1st LAB project. This is a large project with 4,193 I/Os - 1,321 of those being Foundation Fieldbus. The plant's Linear Alkyl Benzene production is completely controlled by Smar's System302. With 45 cabinets (representing a 30% reduction in the expected amount of cabinets for a conventional DCS), in groups of 3 panels, the control and supervision of all processes in the plant is performed. Some processes include:

- Basic Regulatory Control
- Complex Regulatory Control
- Compressor Operation Control
- H2 (Hydrogen) Generation Plant Control
- N2 (Nitrogen) Generation Plant Control
- Burner Management System
- Furnace Control
- Electric Motors Control
- Tank Monitoring
- Interface with Emergency Shutdown System
- Interface with several Modbus Package Units

The FAT covered 100% of the I/Os and functionality of the system. Divided in two parts, each part of the FAT took three weeks, which represented a reduction of 100% in comparison with the estimated time to complete a FAT with a conventional DCS.

The tested system has 147 Foundation Fieldbus H1 networks, divided in 249 segments. All H1 networks are connected to Smar's DF51 redundant linking devices and controllers. Every single element in the system is redundant

to ensure extremely high availability of the system. The 13 workstations, HSE network and all power supplies are 1:1 redundant, with automatic and bumpless transfer.

All process control is executed inside the Field Devices. The FAT tests proved that field control is not only achievable, but also offers more reliability and performance.

The system also features a complete Asset Management Package using Smar's AssetView, and an extremely powerful auto-tuning feature, accomplished by the transparent integration of the Expertune Package.

Full diagnostic coverage from the field devices to the power supplies were also successfully tested with excellent readings.

The Smar team is very proud to once more deliver a state-of-the-art system, not only meeting all of the customer's requirements, but exceeding them.

Once again Smar's SYSTEM302 is delivering solutions EVERYWHERE.



FAT developed for LAB



First Interkama in India more than 150 exhibitors



The booth of Chino-Laxsons, Smar representative in India

Smar and Chino-Laxsons, the India sales representative, were present at the first Interkama Show in India. The event included over 150 exhibitors. Smar introduced Foundation Fieldbus technology with the SYSTEM302. The state of the art Foundation Fieldbus technology and SYSTEM302 drew considerable interest from attendees.

Simultaneously with Interkama, the ISA Show was open in Hyderabad, a town recognized for its high technology environment. Adriano Teixeira, Smar Applications Engineer, presented a seminar on "Boiler Control with a Foundation Fieldbus system."



2003 Mid-year International Sales Meeting

The 2003 Mid-year International Sales Meeting, held August 14-16, in Houston, Texas, gathered Subsidiary General Managers, Business Development Managers (BDM's), and the Smar USA Sales Team. The event was chaired by Carlos Liboni (International Division Director), and coordinated by Bob Lacerda (International Sales Manager) with a total of 25 individuals participating. The International Divisions mid-year performance was assessed, while case studies, new products, and company trends were outlined. The overall purpose of the meeting focused on establishing strategies to foster sales and raise overall customer satisfaction.

Part of the schedule also included a tour of Smar's Houston Facilities, giving visitors the opportunity to see an actual Factory Acceptance Test (FAT) currently underway for Duke Energy Company in the United States. Such opportunities are always useful providing managers first-hand knowledge of projects currently in progress. This of course can be shared with the subsidiary representative networks in the future. According to Bob Lacerda, "the results of this meeting were extremely positive, providing an excellent environment for personal relations to be strengthened,

which is a must when global operations progressively involve more and more units of our company, around the world".

A subsequent "brainstorming" session produced excellent synergy and many creative ideas within the group, which was enriched by the diversity and variety of cultures that were present. Such interactions are sure to improve our day-to-day business approach. The session resulted in several ideas that are now being reviewed for implementation.

Another meeting focal point involved a presentation by Marcelo Dultra (General Manager - Smar North America), regarding the theory and practice of "Strategic Selling". This approach has proven an efficient tool for increasing sales in the North American Market. Smar's next meeting is scheduled for early 2004 in Brazil.



The coordinator of the event Bob Lacerda (standing) addressing the group

Sugar plant expertise in Costa Rica

From September 3-5, Costa Rica hosted the "XV Congreso Nacional Azucarero", a national sugar congress promoted by ATACORI, the local association of sugar technicians. The event occurs every other year and had approximately 260 participants - mainly sugar mills from Costa Rica, El Salvador and Nicaragua.

Control y Automatización, Smar representative in Central America, led a technical conference on Foundation

Fieldbus technology applicable to the process automation industry. The conference included some 50 attendees, who showed significant interest and positive reactions to the technical information. Sugar mills Central Izalco from El Salvador and Ingenio Atirro from Costa Rica were particularly interested and chose Foundation Fieldbus as the automation system for projects associated with their next sugar harvest.

Smar promotes Foundation Fieldbus at PDVSA

Smar presented a Foundation Fieldbus course to the Venezuelan petroleum state company (PDVSA) in August, which will significantly strengthen their efforts in penetrating the Latin American petroleum market.

The course was presented at PDSVA Maturín to thirty engineers (primarily from the Engineering and Construction Departments), with the support of the Venezuelan representative Eleinca and Jorge Fandiño (Automation Supervisor of PDVSA). Adriano Teixeira, Applications Engineer from Smar International Division, provided the training in two separate courses to accommodate the large number of participants. Course topics included technology

basics, engineering aspects and installation of an automation project using Foundation Fieldbus.



Participants of the FF course at PDVSA-Maturín



Smar invests in technical seminars program for its engineers

Smar has launched a new technical improvement program to its employees. This new program is based on seminars given by the employees to their colleagues.

Once a week, a 2-hour presentation is given on various topics. Typically, presentations are related to technical subjects on various Smar products, as well as products from other manufacturers. Foundation Fieldbus, Intrinsic Safety, FF Macrocycle, Panel Design, Valves and Thermocouples are subjects that have already been covered on these seminars.

According to Claudio Fayad, Engineering Manager, the seminar program is an initiative to improve not only overall knowledge of the company, but also to create an informal environment for exchange of ideas among the engineers and technicians. The effort to advance communications and information distribution

is a constant goal of Smar Management.

The seminars have been very successful, with an average attendance of 25 people. The feedback from attendees is quite positive and shows a high satisfaction rating with the presentation program.

When questioned about his impression of the seminars, José Inácio, one of Smar's Project Managers, stated that: "...it is really a good tool to spread both technical and managerial experiences to all Smar peers. Personally, from the date the seminar program was launched, I have avoided missing the presentations since I felt it really enhances my background on several issues. The information that was previously restricted to the individual who undertakes a specific project can now be distributed, better preparing our professionals".

We wish continued success to all involved in this project.

According to Claudio Fayad, Engineering Manager, the seminar program is an initiative to improve not only overall knowledge of the company, but also to create an informal environment for exchange of ideas among the engineers and technicians.



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