

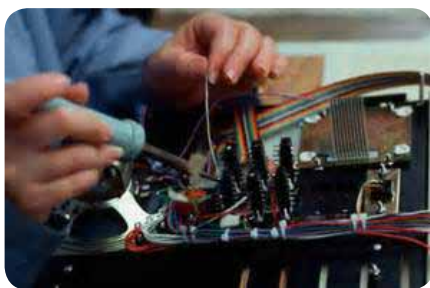
What is BOT in INDUSTRIAL AUTOMATION? ▶

BOT stands for “Build – Operate – Transfer” a terminology that is quite common in infrastructure projects, but in the field of Industrial Automation, it is quietly creating a new revolution.



ELECTRONICS ENGINEERS

Many decades ago, “Industrial Automation” meant the “electronics” used to control and automate the processes in a manufacturing plant / factory. From Microprocessor and PC based systems to PLC and SCADA based systems, electronics and software still play an important role in industrial automation.



But these electronics / software systems do not work in isolation. They are integrated with instruments, sensors, electrical, electro-mechanical and material handling systems to completely automate the various manufacturing processes.

AUTOMATION CONSULTANTS

Consultants took responsibility for the entire project, identified vendors for various sub-systems and equipment, framed specifications and RFPs, helped the customer evaluate and choose the right ones and coordinated between various vendors during the entire life cycle of the project. However the risk of cost escalation, time escalation, poor performance

etc still remained and this risk was borne by the customer – not the consultant.

TURNKEY CONTRACTORS

Then came turnkey EPC contractors, who took the complete responsibility – not only for design and engineering, but also for manufacturing, sourcing, integration, testing, erection and commissioning. They in turn sub contracted most of the work to specialist vendors in each discipline, and focused on integration and project execution.

FIXED PRICE CONTRACTS

Fixed price contracts completely shifted the risk from the customer to the vendor. All aspects of a plant's equipment, machinery, storage, drives, controls, panels, PLCs and software were delivered, installed and commissioned by a single vendor for a pre-agreed fixed price – within the pre-agreed time.

But as is often found, even if all the equipments and processes are set up as per pre-agreed specifications, there is still no guarantee for the Quality, Consistency and Production capacity of the plant. Irrespective of whether it is a green field project or refurbishing and modernizing an existing plant, very few vendors have the necessary domain expertise and process knowledge to offer **fixed price contracts with guaranteed performance , quality, throughput, change over time etc.** When they did, customer's simply invested the money and waited for the inauguration date,

because everything else is taken care of by the vendor.

BUILD-OPERATE-TRANSFER: THE LOGICAL NEXT STEP

When an automation company, is so sure about its depth of domain knowledge and process expertise, breadth and scope of its multi-disciplinary engineering skills and the length of experience in the field, it is but natural for the company to start offering a BOT model. They start with select verticals and expand their BOT offering to more and more verticals in multiple geographies.

Apart from engineering, technology and process experience, it is the passion and commitment of the team that finally make such projects successful. A culture of “Wowing” the customer and “empowerment” at all levels is absolutely essential.

So what exactly does BOT mean?

It means, the automation company will build / retrofit / modernize the entire plant, operate it for at-least 1 year and prove that it has indeed achieved the throughput performance, quality and environmental parameters. At the end of the BOT period, the management of the plant is transferred to the owners who originally invested on the project.

DISCLOSURE: Autosys undertakes complete end to end turnkey automation projects on fixed price contracts with guaranteed performance. They also offer BOT model for select verticals such as Refractories.

INDUSTRY NEWS

REFRACTORIES: Unitecr 2013, 13th Biennial World Congress on Refractories was held at Victoria BC Canada on Sep 10-13 2013. Remco De Jong, Refractory Minerals Division, Imerys; Tom Vert, Arcelor Mittal Dofasco and Charles Semler, Semler Materials Services, were some of the key speakers. Vert and Semler both lamented that technical data sheets from many refractory companies include very little useful data, and just about no data for properties at service temperatures. The 14th Unitecr, organized by the German Refractories Association, is scheduled for Sept. 15-18, 2015 in Vienna, Austria.

ANIMAL / POULTRY FEED: Avesthagen Limited, the Bangalore-based integrated systems biology platform company, has announced a licensing agreement with a global specialty chemicals company for its 100 per cent vegetarian AvestaDHA, for animal feed application. The company claims that AvestaDHA will serve as an acceptable and safe source of DHA for the much-neglected field of animal health and has expressed interest for global licensing,

manufacturing and marketing alliances.

FERRO ALLOYS: In an important development for the ferro alloy industry, a new, patented technology developed by Tenova Pyromet (part of Tenova Mining & Minerals) for the high temperature cleaning of furnace off gas generated in a closed ferro alloy smelting process, will enable smelter operators to use the cleaned gas more easily in a number of co-generation plant options. The new method and process to cool and clean the mainly carbon monoxide rich furnace off gas has been developed through a combination and modification of current technologies, successfully addressing the shortcomings of the traditional industry method of wet scrubbing systems.

FRICTION MATERIAL: Eaton India, is sponsoring the I2I (Ignited Innovators of India) program in partnership with BHAU Institute, College of Engineering Pune. I2I India Fellows will have the opportunity to network with successful social entrepreneurs, gain leadership and volunteer experiences and work intimately

with the local community.

POWER: Coal India has announced that it would place orders worth Rs 2,000 crore for at least seven coal washeries by the current fiscal 2013-2014. "The contract for seven coal washeries would be placed by this fiscal with washing capacity of 15-16 million tonnes (MT) of coal," CIL General Manager (project monitoring) T K Sinha said recently.

FOOD AND PHARMA: ISA Food and Pharmaceutical Industries Division (FPID) Symposium will be held on 5-7 March 2014 in Research Triangle Park, North Carolina, USA. The 2014 FPID symposium will bring together experts, vendors and end users in a two-day symposium to cover the critical challenges and issues in automation and serialization and how they are affecting food and pharmaceutical supply chains. Recent legislation and incidents of contamination and tampering have raised the importance of automation to reduce errors and implement enhanced serialization controls to improve tracking and tracing throughout distribution channels.



NEW PRODUCT LAUNCH FROM **Autosys**™

Xeleer

XELEER: Autosys has launched its new product division Xeleer (www.xeleer.com). Xeleer will focus on standardized products, such as Automatic Dosing systems. Decades of in-depth expertise in Industrial Automation have been distilled and condensed to create these standardized and proven products. So customers need not experiment with custom solutions.

Xeleer's dosing systems for fibers and fibrous composites has been hugely successful within a few months of its launch. Repeat and bulk orders from multiple customers prove that customers are very happy with the accuracy, cycle time and more importantly the ROI.

AUTOMATIC DOSING

Fibres @ 20 gram accuracy



Fibrous Composites @ 2 gram accuracy



Patent pending



Patent pending



AUTOSYS NEWS IN BRIEF

- CPRI Test certificate (as per IEC) received for MCC and Control Panels.
- ISO 9001:2008 certificate received from Tuv Nord
- Marketing & Support presence created in Nagpur, Delhi, Bangalore and Hyderabad. Coimbatore and Vizag to follow.
- Got projects in two new domains : Cement and Pharma.
- Got projects in two new geographies outside India : South East Asia and Middle East
- First of its kind Tap hole clay plant commissioned on EPC basis.
- Very large Electrical and Automation project commissioned for 5000+ IOs



CPRI
CERTIFIED



END TO END PLANT AUTOMATION

ABOUT US

Autosys provides end to end plant automation and turnkey project execution in a wide variety of industries and processes. Autosys combines its multi-disciplinary engineering expertise (mechanical, electrical, electronics, PLCs, SCADA, Computers and Software) with its deep domain knowledge to undertake fixed price contracts for projects costing Rs 100 lacs to Rs 100 Crores. Modernization of existing plants and Automation of specific processes are also undertaken. (Rs 10 lacs to Rs 100 Lacs). In essence you can depend on Autosys, for all your engineering, automation, process control and project management.

CAPABILITIES

- Complete plants on Build – Operate – Transfer basis for select industries such as Refractories.
- Automated Material handling (IN gate to OUT gate)
- Automatic Weighing and Batching (Grams to Tons, Solids & Liquids)
- Automatic Dosing Systems (up to 1 gram accuracy, BD upto 0.15)
- PLCs, SCADA, MES Software
- Instrumentation & Telemetry
- Project Management & Turnkey contracts

SAMPLE INDUSTRIES

- Ferro Alloys • Refractories
- Abrasives • Rubber
- Brake shoe
- Food • Pharma • Pesticides
- Ceramics & Insulators
- Animal / Poultry feed
- Power (Sub station)



WHY AUTOSYS ?

Multi-disciplinary engineering expertise

- Mechanical, Pneumatic, Hydraulic
- Electrical, Electronics, PLCs, Software

Deep domain and process knowledge

- Founding team has over 100 years of cumulative experience across various process industries.

Fixed price contracts

- Accurate estimation
- Execution within time and cost
- No escalation risk
- Guarantees for performance, quality and throughput
- BOT option for select industries such as refractories



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