Tecnimont ICB – Engineering Export Success

Header: Myth busters
Intro: Tecnimont is determined to prove that India has all that is needed to be a top-shot engineering giant in the world

Can India be the engineering superpower? Forget IT. We have already proved our mettle there. What about old economy technologies – refineries, caustic plants and so on. If one has doubts on that score, one just needs to look at Tecnimont ICB. An engineering services company that has phenomenally grown from around 150 engineers in 1996 to about 800 now, almost 75% of its revenues come from exporting engineering services.

An integral part of Tecnimont Group, the roots of TICB can be traced back to 1958 when it was first set up as ICB by the late Narendra Kapadia and family. ICB was a small company with just 150 employees till 1996. It was only after 1996 when Tecnimont ICB acquired 25% stake, upgrading it further to 50% within a year that the company started growing by leaps and bounds. What began as an engineering company with 20 engineers in 1950s is now a formidable force with a team of around 750 specialists in the engineering and construction industry.

TICB offers detailed engineering, construction and management support to Tecnimont for projects in various countries and has to its credit more than 300 successfully completed assignments which include detailed engineering services as well as plants on turnkey basis. TICB has an engineering centre in Mumbai with support offices in Delhi, Kolkata and Dubai. Apart from cooperating with TICB on various global assignments, TICB has worked with technology suppliers and other leading engineering and contracting companies such as Alstom, Acid Amines, Basell, Denora, Hyundai Heavy Industries, Linde, Mitsubishi Heavy Industries, Mitsui Engineering and Shipbuilding and Stamicarbon.

TICB activities include feasibility studies, process selection, project management, detailed engineering, procurement, construction management, commissioning and operations, supply of plants on a lump sum turnkey basis and electrical instrumentation and installation of control systems. TICB operates in various sectors such as petrochemicals, chemicals, oil and gas, refineries, power, fertilisers and material handling.

TICB maintains a highly trained and experienced staff of about 750. This includes 550 technical personnel in different disciplines. Total available man-hours for design and engineering are about 850,000 per year while that for
project management, project control and procurement and about 200,000 per year. The state-of-the-art computer facilities and communication network give the necessary fillip for efficient and quality support functioning. Pradeep Dhal, vice president – commercial, Tecnimont ICB says that they can boast of the best technology among all engineering companies operating out of India. TICB’s facilities include 30 file servers, 600 PCs, 60 high-speed printers, four laser plotters and four network scanners all interconnected by a LAN.

TICB uses the best software design packages such as Intergraph PDS 2D and 3D, Smart Plant P& ID, Isogen, Design Review, Intools, Frameworks, STAAD, Ansys – Structural, BJAC, Orthogen, Caesar II, HASS, Hysis, HTFS, HAZOP, PHA works and Process Hazard and Consequence Analysis. Primavera software is used for planning and project control. JD Edwards ERP system has been implemented in TICB’s Finance and Procurement departments. TICB uses FR, IPLC, ISDN, VSAT and other state of art technologies to interconnect home office with parent company Tecnimont Milan, branch offices, sites and clients. Major links include 256 kbps FR circuit and 64 kbps IPLC for voice between Mumbai and Milan.

The architecture of TICB’s CAD/CAE systems are built around the concept of Oracle database and of the 3D design tools PDS (Plant Design System) by Intergraph on a Windows NT platform. An integrated material work processes and system facilitates cost effective and timely identification, quantification, acquisition, delivery and installation of all materials and provides complete online information to downstream users and processes. A 3D virtual model is designed for every project involving all engineering disciplines. Projects are managed under a task force concept, coordinated and monitored through project engineering groups.

Pradeep Dhal, vice president (commercial) says that Tecnimont ICB has been an unqualified success. He dismisses the argument that engineering knowledge is a closely held secret, pointing out that most of the work is standard and there are no inventions that need to be done. Again engineering discipline is common and transcends the barrier of language so operating in Europe has never been a problem. Indeed the Tecnimont group sees the India operations as a major growth area compared to its operations in Milan or Paris.

Indian Engineering has it. If Indian software industry can do it, Indian engineering can very well do it. But the mindset of diffidence needs to be overcome.
Start-up Year: 1958
Area of Operations: Engineering design services
Location: Mumbai
CEO: Mr Premal Kapadia
Ownership: Tecnimont, Italy owns 50%, rest held by promoters and founders of ICB
Approximate Headcount: 800
Approximate Revenues: N.A