

Editorial

5th
Anniversary Special

We are glad to meet you through this 5th edition of Fleur - de - lis Times. For a growing company, every year is a mile stone. Every effort is an achievement.

We have come a long way..... and of course in a most focused way. Yes. Last five years of experience has taken us to greater heights in the field of on-site, in-situ machining.

After the passing over of the storm of recession, all the industries could feel the growth in their businesses and so with us too. Fleurdelis geared up to meet the International clients in the field of Power, Steel, Shipping and Mining sectors.

This year's major execution includes International clients such as M/s. Hitachi, Japan, Cairn Energy, FLSmidth, Elliot Ebara, Takraf Tenova etc.

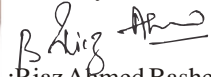
The successful execution of on-site machining of Hydro turbine components for Bhakranangal Hydro Project at Himachal for Hitachi Japan, have taken us to the International Competence in the field of on-site machining.

While our competency have left our followers far behind, we are sure our Mantra

“Perfection, Light and Life”

shall take us globally. I once again appreciate our Fleurdelites for their efforts and dedication to elevate Fleurdelis in global market.

Sincerely Yours,



:Riaz Ahmed Basheer

On the Land of Rising Sun

Fleurdelis' JV company SLMI signed an agreement with M/s. HITACHI LTD., on 3rd March 2011 at their HQ, Tokyo, Japan for On-site machining of 5 Nos. of Hydro Turbines at M/s. BBMP, Himachal.



Mr. Go ito our MD, Mr. Riaz, with Mr.Masatoshi Akaho Hitachi

Strengthening Relationship

Climax GmbH



Mr. Arjun, Mr. Willi Saric, Director, CLIMAX, GmbH, Our MD.

New Associations

Our MD, Mr. Eric Bensoussan, President & Mrs. Nadia Reicher, Executive Sales Manager, M/s. Protem - France, Mr. Arjun and Mr. Krishna Rao at



PROTEM, a leading manufacturers of Spl. Purpose Machines (SPM) and machining service providers for de-commissioning of Nuclear Reactors

Honour

His Excelency, Ex - President Dr. A.P.J Abdul Kalam, presenting momento to our MD during EMFT Seminar at Anna University, Chennai.

FTPL is a member of TIFAC (Technology Information, Forecasting



and Assessment Council) for the project CAR (Collaborative Automotive R&D) towards development of automobile components through Electro Magnetic Forming Technology (EMFT).

- Duraiswamy Natesan

worldwide, for representing them in India.



Mr. Eugenio Gonzalex, Mr. Muthaiah Mr. Krishna Rao, our MD, Mr. Arjun and Mr. Andimal of M/s. Correeanayak, Burgos, Spain.

Glance @ Northern Region

India produces electricity with a total installed capacity of 165000 MW. 70 % of the power plants are located in the



Northern India.

Power Industry may be classified in to three categories with the % of production as under:

- Thermal Power 70%
- Hydro Power 21%
- Nuclear Power 4%
- Wind energy & other sources 6%

FTPL focuses on power industry in northern India for on-site machining projects. The major potential is from Hydro power and second comes Thermal power and so on.

As most of the Hydro power projects are located in states like Himachal, Uttaranchal, Arunachal Pradesh and Sikkim, transportation of huge structures to project sites is a difficult task.

All the OEMs of hydro turbine & allied components experience the requirement of machining during the installation. Finding a machine shop for re-machining these large structures is seldom possible at these remote project sites.

This year, FTPL formed an exclusive team to develop the business in Northern India with Power as its Industry focus.

Northern region bagged the work order

Voice of Costumer

Mr. Deepak Arora, Project Manager, BBMP Site – Hitachi Limited.



Hitachi Ltd is in process of execution of a complete renovation and up-rating of 5 units of 108 MW to 126 MW at Bhakra Left bank Power House. The most essential part of up-

worth Rs.300 lacs for machining of 5 Nos. of hydro turbines at M/s. Bhakra Beas Management Board, Bhakranangal Hydro project from the OEM M/s. Hitachi, Japan.

While this was an opening of an account in North for FTPL, more work orders from M/s. Tata Chemicals Ltd., Babrala, UP., Cairn Energy, Rajasthan and Elliot Ebara for GAIL in UP were executed consecutively.



The successful & timely completion of all the above projects have increased our reputation in North and we look forward to



undertake most challenging projects in future.

I take this opportunity to thank my team, our technicians, management and our esteemed customers for the given opportunity.

- Riaz Ahmed Basheer

rating involved carrying out site machining on bottom and head cover to a very fine and close tolerance. This work was awarded to M/S SLM- India, (JV SLMA & Fleurdelis, Bangalore) after exhaustive discussions with our design and site engineers, the work has been completed on Unit 1 to our satisfaction and within the time frame that was

In Time All Time

Working for the shutdown jobs is a real challenge. Often the conditions are do or die. Lot of preparations should be made before going to the site. This reminds me of a saying “The more you sweat in the training.... The less you bleed in the battle.....”.

We have successfully completed work contract from M/s. Elliot Ebara Turbo Machinery India, for on-site machining of the valve seats for their turbine with in 5 days at M/s. GAIL, during their shutdown.

I appreciate our team who prepared themselves so well to face this battle which was very well appreciated by M/s. Elliot Ebara too.



Lens View @ North



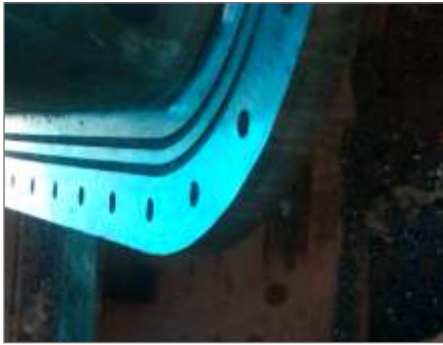
foreseen by us. The quality of work has been to our standards.

The work on subsequent units would be carried out from April 2011 onwards. We also look forward to working with them in similar works in future and wish them good success in coming times.

Glance @ Eastern Region

STEEL PLANT

FTPL has reclaimed & refurbished BULL GEAR SHAFT of Hot Strip Mill in Bokaro Steel Ltd. The dimensions of the shaft are Ø710mm & stroke 640mm. This was a very big challenge & opportunity in in-situ machining of shaft turning in the history of the plant. We were awarded the



job on technical grounds, as FTPL had previously done difficult jobs for the same client and has developed a level of confidence that is reassuring for the customer. Completing this job well above the client's expectations & maintaining the tolerance level has improved the confidence between us and the client. With this achievement they prefer to recommend our organization for refurbishment of another Bull Gear Shaft. The greatest challenge in this job was to develop rugged & portable equipment which would withstand the heated & dusty environmental conditions inside the hot strip mill.

FTPL also refurbished the Hatch Cover bottom flange in VIZAG STEEL PLANT for M/s. PAUL WURTH India Pvt Ltd. The biggest challenge for the job was to machine & obtain on the edge of the

HATCH COVER a radius of 440mm & 95mm respectively on opposite edges. The job was given to us on the basis of technical superiority against the competition. Completing this job well on time & achieving tolerances well beyond the expectations of client have strengthened our relationship & trust with the client. FTPL was also given an appreciation letter from the client for achieving such results in flatness & finish. After this achievement we are assured of further opportunities to work with this client.

SHIP BUILDING & ENGG.

FTPL carried out the machining of GRM seats on-board ship in construction for Garden Reach Shipbuilding &



Engineering. The ship in case was in construction & engine mounting pads are one of the most critical areas in it. The job was to mount an X/Y mill on the foundation of the turbine base and mill the plates with the accuracy of 0.1mm in all directions. The job was awarded to FTPL on the basis of technical superiority over the competition which included some of the biggest names in the industry. The biggest challenge for the job was to

maintain the plane of parallelism with the reference plane. After the machining results the client has recommended our

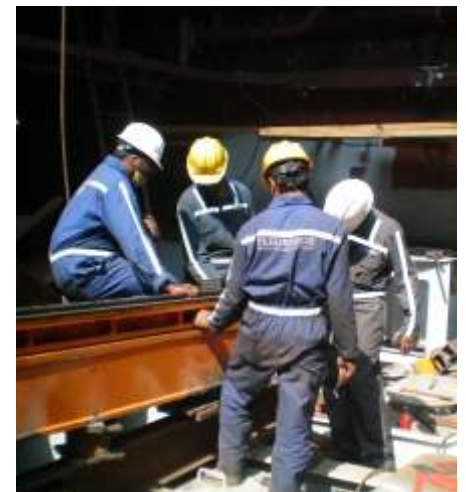


organization for further machining in the overhead crane leg which is present on the same site.

FTPL also carried out the machining of newly fabricated SRP flanges of a tug on board ship AW DELIMA. The flanges had to be machined overhead for the fixing of STANDARD RUDDER PRODUCTS otherwise known as SRP. This was a specialty job & was contracted to FTPL on the basis of previous performances & technical superiority with the client HINDUSTAN SHIPYARD LIMITED. We designed and developed a custom made flange facer for this job to achieve the desired results & tolerances within the given time. After the machining of the flanges the trust between FTPL & the client has further grown & client has recommended us for the machining of further 6 no flanges of similar type to be fixed in the upcoming months. FTPL has already started machining on the second batch of flanges with the same enthusiasm & capacity.

- Ravi Shanker V. Patnala

Lens View @ East



Glance @ Western Region

FTPL refurbished the Rudder stock bearing, Pintle bearing housing & Crane slew bearing machining at ABG Shipyard, Dahej, Gujarat. The Biggest Challenge of



the job was to machine at a height of 12 mtr & 20 mtr from the ground level. More over we had agreed to complete the job within 6 days and we had also successfully completed it within this schedule. Timely completion of this Job well within



the dimensions and tolerance has excited ABG to release a repeat order on us for similar job. FTPL Team was appreciated by ABG's Vice President-Planning for our professional approach to the job and the skill at work. We have also been assured

by ABG to get further opportunities in future.



Female Soft patch is an opening on a submarine shell, designed to take its components inside after the fabrication of its shell. There is another component called as male soft patch which seats inside the female soft patch.



Female Soft patch is hollow rectangular in shape with a radius in all 4 corners and the side walls are inclined at a degree of 10 & 20 along the length and the breadth of the opening.

Female Soft patch is fabricated and

welded on to the rectangular opening on the submarine. After completion of welding, all the side walls of the female



soft patch are machined to enable the male soft patch to fit in. FTPL is one of the short listed



organizations who can carry out this critical machining. FTPL have created the mock up for female soft patch (ratio 1:1) at shop floor to show the machining capability and all the dimensional controls.

- Anupoju Krishna Rao

Voice of Customer



Lens View @ West



Glance @ Southern Region

BHAVINI Project - Kalpakkam
Technical data of ROOF SLAB:
 Prototype Fast Breeder Reactor (PFBR), developed by IGCAR is a 500 MWe sodium cooled pool type reactor. The Reactor is having three main transport circuit namely primary sodium, secondary sodium and steam-water system. The heat



generated in the reactor core is removed by circulating primary sodium through the core. The primary sodium then transfers its heat to the secondary sodium in intermediate heat exchanger. The secondary sodium heats up water in the steam generators to raise steam for running steam turbine to produce electric power. All reactor internals including reactor core & primary sodium circuit is contained in a single vessel called Main Vessel (MV). The top shield forms the top cover for the MV and consists of ROOF SLAB (RS), Large Rotatable Plugs (LPR)

and the hot sodium pool to facilitate personnel access above it. Roof Slab forms part of Top Shield and supports various components such as MV, LPR, primary sodium pumps, intermediate heat exchangers, decay heat exchangers, delayed neutron detectors and level detectors. It is a box type structure made mostly from special carbon steel plates (A48 P2) and by special stainless steel



plates (AISI 316LN). It consists of top and bottom plates interconnected by inner and outer shells and radial stiffener plates. There are total 26 penetrations of which 14 penetrations belong to sector-1 and 10 penetrations belong to sector-2. In addition, each penetration opening has tolerances specified on the inner radius of the shells and on location of their center lines and these have to be maintained within the form / location tolerances

indicated in the drawings.
Specifications Achieved:
 Overall Flatness : 0.26 mm for 2250 mm dia Flanges. Surface Roughness: better than Ra1.6 (on all machined surfaces). The Roof Slab was fabricated in two parts (Sector-1 & Sector-2) at L&T, Hazira and was transported through axles in two



different consignments for further manufacturing process at L&T, BHAVINI, Kalpakkam. Our machining activity started after both the sectors were integrated into a single box structure. It is a prestigious project for FTPL and is sure to take us to international level executions...

Salient Features of ROOF SLAB :
 It is a global record for machining of 26 flanges of different dia from 300mm to 14 mtr, 28 Nos. of support structure pads, 1400 Nos. of drilling & tapping of holes, each inspected & accepted with go-no-go gauges.
 - Duraiswamy Natesan

Voice of Costumer


LARSEN & TOUBRO LIMITED
INDIAN ENGINEERING COMPANY

30th Oct 11

To Whom It May Concern

This letter is intended to express our appreciation for the dedicated efforts, the hard work and the outstanding quality of service provided by M/s. Fleurdelis Technologies Pvt Ltd, Bangalore for the in-situ machining of inner circum flanges of Roof Slab for Prototype Fast Breeder Reactor project being constructed by BHAVINI at Kalpakkam, first of its kind with a challenging specifications.

Even though there have been several problem during the course of action, they were able to maintain the efficiency of the developers. Their attention to the specifications of job, with a thorough analysis of the project and potential challenges as well as proper scheduling has been very remarkable, resulting to a job well done.

We would like to express our gratitude to M/s. Fleurdelis Technologies Pvt Ltd in providing 100% efforts in completing the job.

We hope that this would be the start of our continuous relationship for future success.

For Larsen & Toubro Limited

 D. Ganesan
 Site in charge
 BHAVINI, Kalpakkam

Lens View @ South



Team Work

Manufacturing & Maintenance

MANUFACTURING & MAINTANENCE (M&M)

Manufacturing & Maintenance (M&M) is the main hub in any organization. Manufacturing means production of product which the organization deals with. It also deals with the integration of



different facilities and systems involving all departments for producing quality products. M&M department also controls the maintenance of equipment and the factory premises.

Since inception of the FTPL, M&M department took the charge of building all the capital equipments, supported all the maintenance activities of the equipments.

MANUFACTURING

In FTPL we focus on On-Site machining equipments and the special fixtures requirement for mounting the equipments. We manufacture the equipments as per the drawing issued by design department. We are responsible for assembling, conducting trail and mock up of the manufactured equipment.

MAINTENANCE

The equipments manufactured by us operate under extreme conditions like Dust & Temp. Due to these conditions the wear & tear of the equipments are very high. Maintenance of these equipments time to time becomes a vital responsibility of manufacturing & maintenance Team. At FTPL we overhaul the equipment after every site and prepare it ready for the next mobilization.

- Francis Noronha

Safety

“Production is Must, but safety is First “

Safety can be defined as the control of recognized hazards to achieve an acceptable level of risk. This leads to protect the involved people from the event or from exposure to incidents that causes economical losses. This includes protection of people or their possessions “.

We have separate teams in FTPL for monitoring the safety & health of employees who work at factory & at site. All the members of the team participate



and share their experience & views during daily assembly to improve safety awareness among the employees. Safety & health on the job can only be achieved with the combined efforts of management and employees. FTPL believes that everyone benefits from a safe & healthy work environment.

- Ananda Kumar Jami

Planning

Planning in an organization is the organizational process of creating and maintaining the psychological process of thinking about the activities required to create a desired goal on some scale. Forecasting can be described as predicting what the future will look like, whereas planning predicts what the future should look like. Project planning is part of project management, which relates to the use of schedules such as Gantt charts to plan and subsequently report progress within the project environment. Initially, the project scope is defined and the appropriate methods for completing the project are determined. Next the durations for the various tasks necessary to complete the work are listed and grouped into a work breakdown structure. Then the

necessary resources can be estimated and costs for each activity can be allocated to each resource, giving the total project cost. Here the project plan may be optimized to achieve the appropriate balance between resource usage and project duration. Once established and agreed, the plan becomes what is known as the baseline. Progress will be measured against the baseline throughout the life of the project. Analyzing progress compared to the baseline is known as management. The inputs of the project planning phase include Project Charter and the Concept Proposal. The outputs of the Project Planning phase include the Project Requirements, the Project Schedule, and the Project Management Plan

Purpose of a plan

A plan is an important aspect of business. It serves the following three critical functions:

- Helps management to clarify, focus, and research their businesses or project's development
- Provides a considered and logical framework within which a business can develop and pursue business strategies over the next three to five years.
- Offers a benchmark against which actual performance can be measured and reviewed.

Importance of the planning process



A plan can play a vital role in helping to avoid mistakes or recognize hidden opportunities. The planning knows the business and those they have thought through its development in terms of products, management, finances, and most importantly, markets and competition. Planning helps in forecasting the future, makes the future visible to some extent. It bridges between where we are and where we want to go.

- Ramesh Ganapathy

Design

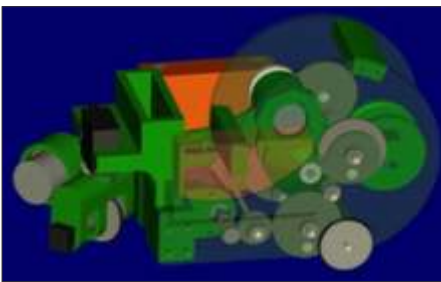
Fleurdelis is an onsite machining organization. Designing an onsite, in-situ machining equipment is core engineering. It needs imagination and creative mind.

FTPL's design department works on the



inputs from all the internal departments and engineering drawings from customers as well.

For most of the projects, we design equipments & fixture to suit the existing



set up. Thanks to state of art software "PRO E" which we use to create 3D models, Animations & Parametric which enable us to deliver faster.



Our Design team fulfills every department's need by preparing the drawings, interacting with other departments, sourcing sub contractors, costing, inspection, creating mock ups and up to product assistance at site.

I congratulate our Design Team for their dedication and efforts which drove us up to this mile stone of 5th year.

Good Luck.

- Arjun Cherukuri

Corporate Social Responsibility

Corporate Social Responsibility (CSR) can be defined as the active and voluntary contribution of companies to improve social, economic and environment so as to improve their competitive position and its added value.



Corporate Social Responsibility goes beyond compliance with laws and regulations, assuming their respect and strict compliance. In this sense, labor legislation and regulations related to the environment are the starting point.

Compliance with these basic policies does not correspond to social responsibility but the obligations that a company must meet simply because of its activities. It would be difficult to understand allegation by a company CSR activities if it has not or does not comply with the relevant legislation for their operations.

Under this concept of administration and management will encompass a set of practices, strategies and business management systems that seek a new balance between economic, social and environmental.

The history of CSR can be traced back to the 19th century under the Cooperatives & Associations who sought to reconcile business efficiency with social principles of democracy, self-help, community support and distributive justice. Its exponents today are social economy enterprises, by definition Socially Responsible Companies.

The CSR can be focused to improve: a) The quality of working life. b) The environment. c) The community where the company is installed. d) Marketing to develop responsible market. e) Business ethics.

- Bhavani Sankar Cherukuri

5 Year Mile Stones

Date	Event
28/02/2006	FTPL Opening
15/03/2006	SLMI Agreement
26/04/2006	Climax Agreement
31/05/2006	Peenya Works Pooja
28/08/2006	Soitaab Association
10/10/2006	First SLMI Equipment Built
13/11/2006	First major order from L& T
22/02/2007	First Large Climax Order from MDL
28/02/2007	First Fleurdelis Annivarsary at Atria Hotel
03/04/2007	Visit of Mr. Phil Bauder VP of International Sales Climax
20/08/2007	Colton Fleurdelis Agreement
06/09/2007	Chennai Office Open
10/09/2007	Climax Rental depot Agreement
18/10/2007	XPERT welding Alloys Introduction
29/10/2007	Purchase of land for FTPL
31/10/2007	FRS successfully built and proven to NTPC
01/11/2007	PULSAR VAR Agreement
13/11/2007	FTPL Bhoomi Phooja
27/11/2007	DWT Agreement
02/01/2008	FARO laser tracking system purchased
22/02/2008	10KJ Pulsar Equipment Purchased
28/02/2008	2nd Fleurdelis Anniversary in Jayamahal Palace
31/05/2008	Shifted to own premises
01/08/2008	Climax Rental Depot Launch in India
28/02/2009	3rd Fleurdelis Anniversary in ITC Fortune Hotel
30/06/2009	Major order from MDL
19/11/2009	Successful job in NDY
06/01/2010	Technology transfer from BARC
07/01/2010	Displayed pulsar job in Auto Expo, New Delhi.
28/02/2010	4th Anniversary
03/03/2010	First Overseas service job Order received for Rs.2.83 Crore from Hitachi
16/05/2010	Inauguration of New facility
28/02/2011	5th Anniversary



Achiever

Arun Kumar S/o Prema Prasad represented his college (MES College, Malleswaram) in INTER COLLEGE CULTURAL FESTIVAL (totally 16 colleges) and stood second in ESSAY WRITING COMPETITION. The topic was 'PATRIOTISM BEING SACRIFICED FOR MATERIAL WEALTH'.



Amulya D/o. T. Jayadev kumar receiving award from Mr.Chiranjeevi Singh-Brand Ambassador of UNESCO for having stood First in General Proficiency in Class VIII (2009-10), Sindhi High School, Kempapura-Hebbal on 23rd Dec'2010 the School Annual Day.



Anudeep S/o. Anupuju Krishna Rao 7th Standard S.G.International School took Part in Yaksha Gana.



Men at Work



Celebration

