



# in touch

the intops news letter

## Foreword...

- Sunil Badami ,HO India

We have ended the year with an overall growth in Intops of 6%.

Compared to the last 5 years where we have grown 25% plus every year, this year indeed a very average performance. But despite the effect of global economic slowdown there are many territories that have performed well with 30 and even 40% growth over the last year.

Branches that have done well overall are Iran, Egypt and Thailand. Congratulations to Rezaee, Milan and Valentine for performing really well through !

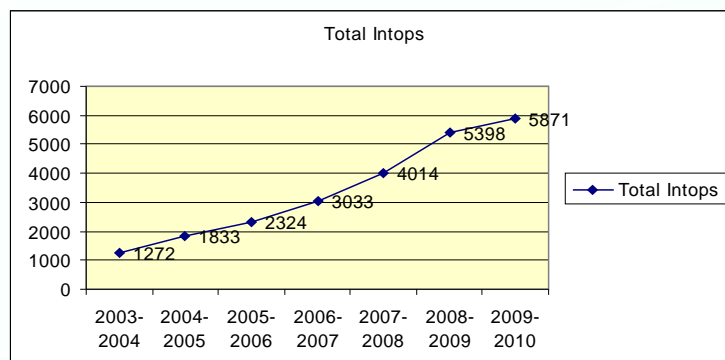
With the dark clouds of recession lifting in almost every country, we see an increase in project activity and also the end user day to day maintenance enquiries and business. We are sure that with encouraging signs in the market we will see a spurt in enquiries, quotes and orders.

We strongly believe that we must bring our customers to our factories and show them our facilities. In the past this has helped a lot and so we encourage all in the field to encourage your customers to visit us.

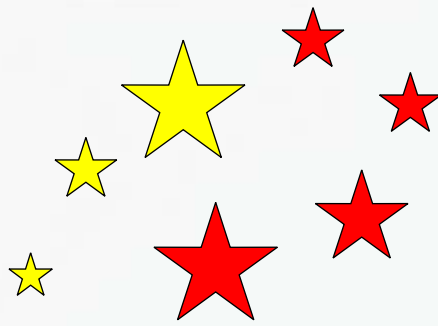
We have also initiated a number of medium term business initiatives that will soon result in good business in the year ahead! With 3 new FM Offices abroad, extended team in place, Intops is ready to roll!

So...Good luck for an exciting race ahead!

Ready...Get set...GO!!!



# Hyderabad 2010



Milan Chakraborty felicitated by Nenu for being one of the best achievers in 09-10 !



Rajesh Nair - Country Manager Bangladesh Operations flanked by Sunil and Sudhakar ; Appreciating good SEG sales



Titu Musa - Manager Bangladesh Operations appreciated for good SEG business



Deepak Sharma of Sri Lanka Branch with Sunil and Sudhakar. Nenu smiles on!

## Best Branch Office Award...

With Kwan's excellent Office Administration and Valentine's managerial skills , they have won Thailand the best branch office this year. Congratulations to the winning team !



Kwan stands proud and displays her administrative skills!



Phillips receives the Best Branch award for 2009-10



When the going gets tough...the tough get going!!! Motto believers Valentine, Kwan and Einstein

# Exhibitions

## SAOGE 1-3 November 2009 Damam, Saudi Arabia



Cedric and Nenu at our stall at the SAOGE show with Sanjai Joshi of Al Zamih Trading Comapny, Saudi Arabia.

## Palm Oil Expo 27-29 October 09 Medan, Indonesia



Harshad Bhat - Country Manager Indonesia and Nitin Kirloskar - Manager SWAS Division look exhausted, but happy with the customer response.

## Boiler and Pressure Vessel Exhibition , 24-27 February 2010 Bangkok , Thailand



The stall was one of the best in the Exhibition, and I was one of the few interviewed by the organizers!

Valentine Phillips ,Country Manager - Thailand Operations

## Around the world...

- Armaity Marzabani, HO India

### Amu's Day(s) Out!!!

`Amu, we have decided to send you across to Iran for the Iran Oil show in April this year! When Sunil mentioned this to me I really could not believe it. Firstly it was the joy of going to my land, my people for the first time in my life and equally was the pride of being able to represent Forbes Marshall at an international platform. I was really excited about this and just thanked god for giving me this opportunity!

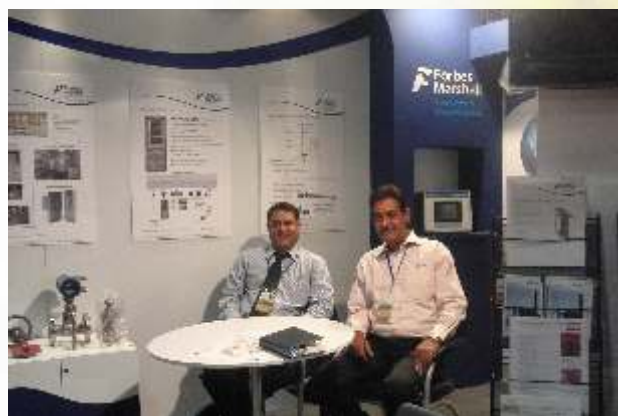
I had taken a personal leave before the exhibition started, so I could be with my people, visit our holy places and get a good amount of sightseeing as well. Iran's a beautiful country and leave taken ahead was worth it. We were



nomading from one place to another, one city to another seeing places, visiting people, praying when finally the day of the exhibition arrived. The Iran Oil Show is one of the most important and the biggest shows that welcomes thousands of specialist visitors from both Iran neighboring countries in the region. The venue was so huge that just from the exhibition entrance to our stall it used to take us an hour to reach. This exhibition gave me new learnings by exploring companies, their stalls their literatures, their giveaways and even their presentations.

Figures cannot tell it all but from the first day itself i.e 23rd April the attendance to our stall was amazing and it was a clear indication that customers knew us as FORBES MARSHALL.

On an average 100 customers per day would visit our stall which kept us busy throughout the days of exhibition. It was overwhelming to see that so many people knew Rezaee and Nenu and were asking for them. We had a huge workforce at the stall including Sunil, where



everyone was attending to customers and distributing our branded gifts to important ones. All of us were proud that we were representing our company. The great bonding and team spirit which the FM team showed during the



exhibition made this exhibition a grand success.

I thank Sunil and Nenu for giving me this wonderful opportunity and am grateful to Iran and its people for the warm hospitality extended. It was a trip whose memories I will cherish forever. It was a trip that filled me with content and happiness and peace within.

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*The most wasted day in life, the day in which, we have not laughed.* - Charlie Chaplin

## The Intops Booker



Recently a book written by our very own Fernando Silva, who is based in Colombia was released by Shashi Taroor at the Embassy of India in Columbia. Fernando is all praises for Sunil and Tamal for being so patient and supportive of his trips and research. He feels great to be a part of the FM family

In the book, *Columbia E India En Perspectiva*, he approaches democracy through Indian culture and argues that the diversity in India and the legacy of secularism from the times of Ashoka and Akbar, has helped to make participative democracy a viable system in India.

The hierarchical society that India has been throughout the years, has encouraged democracy as a system with the possibility of going up in the social scale and has also created an interesting political game, where parties claim religions, castes and jatis. The open conception of money in India, specially in Hinduism, has helped to encourage the acquisition of the same. The actual democracy in an excellent field that acts as an incentive for Indians to grow economically, as opposite to the socialist India, a few years ago.

The book is in Spanish and he has translated an excerpt from the book for us!

## Branch outing...

We all are so tied up with work that going out as a team just to have fun is really news!!! So heres a good branch ; FM Canada that went out to have fun ; though after visiting an industrial show and meeting up with lots of consultants and contractors. They visited the Royal Ontario Museum and saw dinosaurs!!! Way to go Canada!!!

L to R - Marcus Bellot , Sharam , Dilshaad and Farooq Pavri with the towering personality himself!

*"Is democracy a desirable system for Indians, do they prefer it?"*

*I used to ask this question to many colleagues and people I met on my trips and the answer was not surprising. India feels proud to be a democracy, it is liked by Indians and makes them feel one step ahead of their neighbours despite all the contradictions that democracy can have, for which they thank economic growth, future opportunities, and the proliferation of India as a power on the international scene. Highlighting these virtues in political discourses and even in Bollywood movies, has not only helped to increase the good perception that India has towards democracy, but also has helped to legitimize it, not only terms of elections and representation, but in it's appeal to the people, which is of great help in times of crisis. In fact, contemporary Indian cinema, highlights the virtues of India being a diverse and democratic State.*

*The most viewed and awarded movies of 2006, Rang de Basanti and Fanaa, actually developed all their intrigue within this context.*

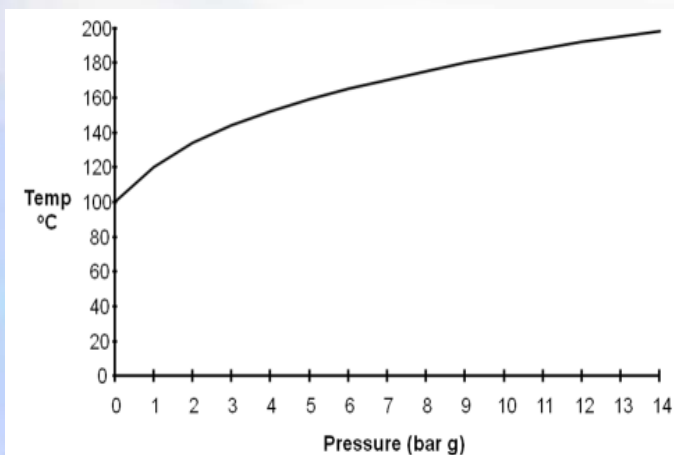
*Opposite to China where liberalization of the economy has not implied development or the strength of democracy, in India liberalization and the growing economy have implied a major faith in the democratic model, and has also increased trust in that form of political system"*



## Understanding Steam Flowmetering

Industrial facilities use steam for a variety of reasons. These may include process heating, space heating, as a product input (direct injection) or for power generation. Energy costs show an upward trend and have lately varied considerably depending on a number of factors. With energy costs becoming an increasingly large part of manufacturing costs and steam itself a large component of overall energy costs, the need to measure steam flow with greater accuracy is more important now than ever before. Before we look at how to measure steam, let's first look at what steam is.

Steam is vaporized water. It is invisible. If you see a cloud of steam coming out of your tea kettle, it is condensed water droplets, and no longer steam.



(Fig 1).

Two important terms to remember are saturated steam, and superheated steam. Saturated steam occurs just above the boiling point of water. The boiling point of water is dependent on pressure. (see fig 1).

At atmospheric pressure, water's boiling point is 100 deg C (212 deg F). At 7 bar\_g

(100 PSIG) water boils at 170.5 deg C (339 deg F).

If additional heat energy is added to saturated steam, it becomes superheated steam. There are several methods of superheating steam. In industrial boilers, Superheaters are heat transfer devices to heat steam beyond the saturation temperature of steam, without an increase in pressure. Steam may also become superheated by reducing the pressure of the saturated steam through a valve, orifice, or other 'throttling' device.

Saturated steam is preferred over superheated steam in heating applications. Saturated steam gives up a large amount of heat as it condenses. When steam condenses, it releases latent heat. This loss of heat from change of state is much greater than the heat transfer from the temperature differential between the steam and the product to be heated.

Superheated steam gives up relatively little heat until it is cooled to saturation temperature. The primary application for superheated steam is in power production. Saturated steam may have a small amount of condensate in it. These condensate droplets can be very damaging to turbine blades. By superheating the steam, any residual condensate will be converted to dry steam.

The throttling process is a constant enthalpy process. Enthalpy is a thermodynamic potential, which measures useful work, with units of KJ/kg (BTU/lb). It is common for distribution systems to carry steam at higher pressures of say 7 Barg (100 PSIG), which is reduced through the throttling action of a pressure reducing valve to say 3.5 Barg (50 PSIG) at the point of usage.

This is likely to introduce some degree of

superheat in the steam depending on the dryness fraction of the steam. The dryness fraction will itself vary with the ambient temperature and therefore the radiation losses. Thus, superheating is very likely to take place in such conditions.

Thus, even though the density of saturated steam may be measured using either only temperature or pressure, the possibility of the occurrence of superheat mandates the use of a meter which measures both temperature and pressure.

The cases below assume that we are measuring temperature only. As you can see, you will get significant errors if there is any amount of superheat in the steam. A meter using only temperature compensation is ignorant of whether the steam is saturated or superheated and will read this superheated temperature, assumes the pressure is higher than it actually is (see list of Cases below) and calculates an erroneous density value.

- Case I : Steam density at 3 Bar<sub>g</sub> (T.sat 143.7 deg C) is 2.17268 Kg/m<sup>3</sup>
- Case II: Steam density at 3 Bar<sub>g</sub> (T.sup 148 deg C) is 2.41027 Kg/m<sup>3</sup> (Error introduced : 10.9%)
- Case III: Steam density at 3 Bar<sub>g</sub> (T.sup 153 deg C) is 2.73399 Kg/m<sup>3</sup> (Error introduced : 25.8 %)
- Case IV: Steam density at 3 Bar<sub>g</sub> (T.sup 158 deg C) is 3.09164 Kg/m<sup>3</sup> (Error introduced : 42.3 %)
- Case V: Steam density at 3 Bar<sub>g</sub> (T.sup 163 deg C) is 3.48582 Kg/m<sup>3</sup> (Error introduced : 60.4 %)

This will lead to errors in calculation the mass flow rate and also the enthalphy. As the energy of superheated steam also increases with the amount of superheat, BTU calculation errors will be even more erroneous without pressure and temperature compensation. If you are paying for steam, the example above shows that with a superheat value of 5 deg C, you could be paying more than 11% too much.

The Forbes Marshall FLOWIRL 8700 is an application oriented instrument with a multivariable measurement option. A Vortex flow meter with an in-built temperature sensor and an optional pressure sensor, the FLOWIRL 8700 is capable of compensating for changes in process variables which have a direct bearing on the flow rate. Powerful diagnostic software makes the FLOWIRL 8700 'aware' of it's installation, a key factor to ensure accurate measurement. Application specific soft-ware, unique only to the FLOWIRL 8700, enables it to provide the following info:

The mass flow and totalized rate of steam and the operating temperature and pressure

Heat measurement, with flow displayed directly in BTU/hr etc. with a separate totalizer for heat flow totalization.



Drawn for BROOKCASTING by Jack Schmidt

"I hate it when engineers talk shop."

# Up, Close and Personal

- Sudakshina Banerjee, Spouse of Tamal Banerjee,  
HO India

## *Jab we met...*

Tamal's Uncle was my doctor. He was very keen that we meet. We met on Christmas day in 1992. He says he decided on the first day. Of course, I took some time to finalize !!

## *Education and his career:*

Tamal did his Mechanical Engineering in JU in Calcutta. Subsequently he did his MS on Thermofluids in North Eastern University in the US and then he worked in the US for a couple of years before returning to India. He joined Hein Lehman, and then Dewrance Macneill, in Calcutta before coming to Pune in 1998 to join Virgo Engineers. He is with Forbes Marshall from 2001.

## *Tamal and Forbes Marshall:*

Tamal's current tenure in Forbes Marshall has been the longest in any company. In one word he LOVES his job!!! He has found his roles and responsibilities immensely challenging and has always appreciated the freedom and implicit trust that he has received from the management.

## *Tamal as a husband:*

Gives a lot of freedom, very helpful in all housework, supports me in all my decisions (not all the time very pragmatic!) which I take regarding my career!

## *Tamal as a father:*

TERRIFIC! Spoils his daughter rotten of course, so it becomes that much more difficult for me to keep her grounded! Aashna and he share this very special relationship from

probably the day we came back from the hospital after her birth.

## *Tamal as a person:*

Generally very easy going, takes time to warm up to people, very focused and likes to see the fruits of his efforts.

## *One habit I want him to quit:*

Smoking and working on holidays (by holidays I don't mean Saturdays and Sundays...I mean when we go out on a planned family outing!!...check the picture)

## *Tamal and superstitions:*

Nothing that comes to my mind

## *Things which Tamal does not leave the house without:*

Car keys and mobile



# Take 5

Take 1

Favorite Holiday: Nepal

Take 2

Favorite Cuisine: Bengali home cooked food especially if cooked by mother

Take 3

Favorite Book: 'The Toyota Way'

Take 4

Favorite Movie: Sound of Music

Take 5

Favorite Pastime: Downloading and answering mails at anytime of the night and day!

## Intopper of the Issue

– Wiraj Fernando, Country Manager - Sri Lanka Operations

### How did we start the FM Sri Lanka Office?

Initially we started out by working in association with an agent. We did not have an FM office at that time but were working as a liaison office. But we realized the going was good and we were sure to pick up, so with Sunil and Nenu's support we were able to have an independent set up and start FM Lanka. Valentine Phillip who is now the country manager of Thailand, was also of part of this pioneering team.

### How has the branch grown over the years?

There was a time when there were only Valentine, Afana and myself at the Sri Lanka office. But then slowly and steadily we got a grip and with renewed confidence, enthusiasm and team spirit we refreshed the Lanka branch and added new recruits. There were frequent visits from Sunil, Nenu, and even Farad which helped build our foundation and base even stronger.

What started out as a single desk office is now a full fledged team of 2 SEG and 2 CIG engineers and one admin head. Business wise, also we have grown four fold.

### What were the kinds of issues that you faced?

The Sri Lanka branch was one of FM's first international branches. Hence everything was new to us the market, the operations, the procedures.... Our first challenge was to establish ourselves in the industry and prove ourselves.

Again whenever there were service problems, being a small force, we really had to struggle... I remember sometimes Farhad on his visits has also handled these service complaint calls!

But having overcome all this, today we stand tall as an MNC giving customers 360° solutions for their customized needs.

### Tell us more on this...what was your first achievement?

Our first boiler order was really interesting. Karthik visited the MD of a company. We were a bit late in the day. The MD was about to confirm a boiler order with one of our competitors. The deal was

almost near finalization. But our team used to go this MD's office everyday and try to convince him. This went on for 7 consecutive days. Finally he asked us to quote.

It turned out that our quote was much lower than competition. When the competitors came to know of this, they came down to a price lower than ours. But eventually we bagged the order... The MD felt we were more genuine... he trusted us. He was really happy with the product, the way it works and says that it helped him in his business and increased his plant's efficiency.

I guess that's one of the success stories of Trusted Partners providing Innovative solutions for the Sri Lanka Branch.

### Can you tell us something about our people in FM Sri Lanka Office?

FM Lanka is a gang of people who are very professional and always work towards building the FM brand.

### Can you tell us more about each of them...



all!

Ladies First... Lets start from Afana: She is very independent and is very good in processing and co-ordination. Her work is also very timely. She is one of our seniormost members. She is our guardian...and really takes care of everyone and so exercises her right over



new scratch on her car.

Rangini: She is the Official PR person of the branch... and so much so! She loves playing host and is very good at hospitality. She is very friendly and can make anyone feel at home. But my advice to her is to drive her car a bit more safely... Every morning she has a

Katheesh:

A good engineer and again is very good in



maintaining relations with his customers. An ex cricketer and cousin of Muthaya Muralidharan, he is great cricket enthusiast. But he is mischievous at times.



**Nalaka:**

Nalaka is famous in the whole of Intops for his witty comments which everyone looks forward to. Professionally he is good with his product knowledge. He is the livewire in the gang. He is very humorous and comes up with a joke a day that has all of us in splits.

**Deepak:**



A year old in the gang now! Professionally Deepak is an excellent addition to the team. He has got big orders from customers who had not given us orders for quite some time. He is learning Singhalese here and follows the political situations in Lanka, and also has discussions with customers at times on the subject. He is a smart guy and is doing very well for the company...but he has severe competition from his 4 yr old son!



**Chamunda:**

He is the assistant customer support, he has been with us only for a year but he has understood and grasped the work really well. He is quite shy and is the official student of the team. He is a sponge. He is

eager to learn and the others are eager to teach.

**That looks like a very nice and fun filled office...We'd like to know more about your family.**



I have a lovely and supporting wife, Dilani. We have 3 kids. Our elder son Dilana is in 3<sup>rd</sup> year engineering. He is qualified in accountancy. He plans to be an engineer...so we may have a second generation joining in! He is a very talented writer and had written his first book when

he was in the 6<sup>th</sup> std which sold more than 2000 copies.

My second son Isuru is very intelligent. He gets an award for excellence every year from our company. He hardly studies, but manages to come first every year.

My daughter Sarala is the youngest of all. She is very independent and has a mind of her own. We have a women rights organization in our home...thanks to her.

All of us are constantly having fun pulling each others' legs. We all are fond of food...so cooking is a family activity. Sometimes it so happens that all 5 of us are in the kitchen cooking.

But I must say...we have a family that prays together and eats together (and cooks too!). That's the foundation that has made me the person that I am.

**Any advice or parting note...?**

Just would like to tell everyone...look at the big picture...don't run behind short gains...professionally or personally!



Best Wished to Tony Chacko - just transferred to UAE for SEG operations , and his wife Anila. We wish the couple a very happy and blissful married

## Fun Trainings...

We recently had 8 engineers-3 ladies and 5 gentlemen from Azab industries, Iran join us for a training programme on 5-12th January. Azar Ab Industries has nominated 8 of their Project Engineers to attend this training program, as it was important for the engineers to be familiar with our product range for the products we have and in future would be supplying to Azab Industries Iran. All engineers deal in power boilers and Oil/Gas Refinery projects.

They went thru an extensive programme on Krohne , Valves , SWAS, Systems . Codel and the steam basics which gave them an entire spectrum of our company products , solutions and services.

In the evening the Iranis were taken to a number of place just to relive them from their

heavy training schedules. This photograph was clicked at Chowkhi Dani in Pune where the team had a rocking time.



Partners in Arms - Azar Ab team with our Iran Man Rezaee!

## Young Achievers

This time in young achievers we feature Ms Mumtahina Farzin, daughter of Titu Musa from the Bangladesh team. She received the FM appreciation award this year. She is currently in Standard I at Milestone School at Uttara, Dhaka, Bangladesh.

**She has scored 500 out of 500 marks!**

Ammu's (that's her nick name) favorite pass time includes drawing, reading historical story books, going out with parents and playing with her young brother. She was very excited to receive this award, and says that she would try to get the award next year too! She takes part in all the cultural activities in her school



which include recitation, dance, singing, story telling and has received many awards in the cultural competitions at school.

One unique talent she possesses is the recitation of the Q'uran ; at this young age she recites and has participated in Q'uran Recitation Competitions at school. She also won an Overall Performance Award when she was in the play group.

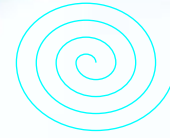
Mr & Mrs Musa are very proud of her and mention that she has a very strong grasping power. She takes interest in whatever she does, whether its making hand made cards or recitation of poems etc.

We wish her all the very best!

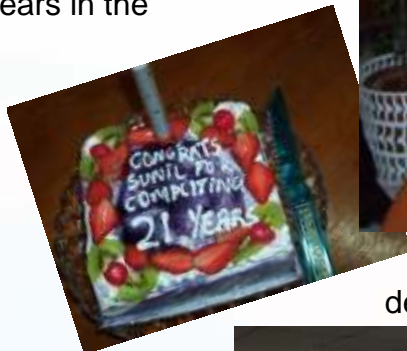
# Celebrations!



The captain of the ship...Sunil...completed 21 years in Forbes Marshall. Sunil joined FM in 1988 as a Sales Engineer and now heads the international Business.



Sunil and wife Sabina felicitated by Mr and Mrs Forbes for completing 21 years in the company!



Celebrations at the Intops department!



Our new addition to FM Canada, Marcus cuts his birthday cake, Farooq and Amu sing along! The entire department and BHD division joins us in the song!