## Problem solving: 'You can choose what your problem will do to you'



My career began in 1994 with Rohit Paper Mills, which used to make one of the finest Duplex Board at that time. I joined as a Shift In charge in Stock Preparation Section & had the exposure to State of the Art Lamort Secondary Fiber Treatment. Apart from very good work culture & products, we enjoyed the cultural programs in the colony like Garba, Dandia etc.

My stint with Rohit Papers was a short one as I moved to Dandeli to join 'The West Coast Paper Mills'. I worked in Stock Preparation & Paper Machines PM1, 2, 3 and in Projects for setting up PM5. I remember noting down all the shift parameters in pocket dairies & technical specifications in long registers & I still have all of them as my treasured possession. We had only one computer with WordStar in project department & I used to make reports with that computer with lot of pride.

When opportunity came from Sinar Mas India, I took no time to decide as working in a MNC with a 1000 mpm Paper Machine & 1300 mpm Off Machine Coater was a dream for young boys like us in way back 1997. I think Sinar Mas changed the whole game & set a new trend in Indian Paper Industry as every other organization started to think & invest in best technology & fast Paper Machines mostly after 2000. I had the exposure to interact with the finest technology suppliers & chemistry suppliers, participate in lot of inter-company competitions with the other mills of APP & learn process, project & product in detail.

When BILT took over Sinar Mas India in 2001 & all our expat bosses were gone, I had the opportunity to head various departments. I could learn a lot about leadership & cost structures during my tenure with BILT. With a new Paper Machine project in 2008, which was the first & fastest online Coated Paper Machine in India with latest features, I had to opportunity to conceptualize the technology for the Paper Machine & conduct lot of Pilot trials.

I had to move to Ballarshah Unit in 2013, where I was in charge of Production of all Paper Machines having Vintage as old as 1960's as well as Latest Technology as new as 2010. I was involved in lot of asset & efficiency improvement initiatives there. With multiple units of BILT in India & Malaysia, it was a great experience & exposure for people like me who wanted to learn new things.

Then I moved to J.K. Paper Ltd in 2016 with a responsibility to head 'Technology & Development' at Corporate Office. Though it was a challenge to move from Plant location to Head Office, it was a great opportunity to unlearn legacies & learn new skills. I had the

exposure to best technology in the mills & contribute to the performance of the group with lot of asset improvements, new projects, mergers & acquisitions. In my current job, I travel a lot, participate in technical conferences/seminars, conduct pilots & develop new things. With Covid-19 lockdown, I am trying to learn lot of new skills needed when you are working from home & whole business is undergoing a paradigm shift.

Even though I had the opportunity to participate in number of problem solving situations in last 25 years, I would pick few unique experiences as below:

- 1. Crushing in heavier basis weight uncoated paper: Normally the crushing in paper comes from various process/clothing related issues. We used to have this crushing in one of the mill whenever we switched to high GSM. After working day & night for almost a month & changing many forming fabrics & press felts, we could find that this problem is due to Cationic starch. Whenever a new batch of high D.S.Cationic starch was dumped & dilution ratio was less, paper was getting crushed as the sheet was getting immediately sealed after forming board & dewatering was very poor. We could fix the problem when the degree of substitution of starch was lowered for higher GSM & dilution ratio was increased.
- 2. Poor coverage & low surface strength in Coated paper: Normally the coverage & low IGT problem in a Coated Paper/Board if the binder level is low, metering blades are old or the coating color solids is low. Even after increasing binder level, increasing solids/viscosity & changing different types of blades, we couldn't solve this problem in a coated paper machine for months. Ultimately we found that coating color solids was going down in machine circulation, which prompted us to check coating color pan, service tank jackets, showers etc. But ultimately we found that the sealing water was leaking into the color through the gland of circulation pump. We had to change to completely waterless seals in all coating color pumps to solve this problem.
- 3. Steam & Condensate System Re-build: We carried out a complete steam & condensate rebuild with stationary siphons, thermo compressors etc. in one of the Paper Machines. When we started up the machine with a new system, we started losing all siphons one by one in a span of 10 days. This resulted in a heavy condensate build up & one of the dryer cylinders also fell down due to journal failure. We found that the design of new siphons was faulty as overhang was not properly calculated for the speed which resulted in breakage of all siphons. We were left in a situation to stop production for almost 20 days as almost 45 siphons were to be made again. But we used boiler tubes bent in workshop & modified as temporary siphons with which, we could run the machine at 70% of the rated speed till the new siphons were made.

With the above examples, it is clear that 'You can choose what your problem will do to you'. There as a positive & negative reaction to every problem & you need to stay positive always. Attention to details, empowering people & respecting the individuals are other important things in professional life as many of the solutions to the problems in my career have come from the least qualified workers just because of common sense & logical thinking approach.

Special thanks to all my Superiors & Colleagues for this wonderful journey till date. I intentionally left out names as it is a long list & I wouldn't be making justice if I only mention few names & miss many.

Thanks to IPPTA for this initiative.

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