PMAI Newsletter

Every generation has some fool who will speak the truth as he sees it! Boris Pasternak

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MEET THE NEW PMAI BOARD MEMBERS

TIPS ON

THERMAL ENERGY

BOILERS-

- 5% reduction in excess air increases boiler efficiency by 1% (or 1% reduction of residual oxygen in stack gas increases boiler efficiency by 1%).
- 22°C reduction in flue gas temperature increases boiler efficiency by 1%.
- 6°C raise in feed-water temperature by economizer/condensate recovery corresponds to a 1% saving in fuel consumption in boiler.
- 20°C raise in preheated combustion air temperature by waste-heat recovery results in 1% fuel savings.
- a 3mm. diameter hole on a pipeline carrying 7kg/cm^2 steam would waste 32,650 liters of fuel oil per year.
- a 3mm thick soot deposit on the heat transfer surface cn cause an increase in fuel consumption to the tune of 2.5%.
- A 1mm thick scale (deposit) on the water side could increase fuel consumption by 5-8%.

STEAM PIPING -

- A 100mm well lagged pipe of 30m length carrying steam at 7kg/cm2 pressure can condense nearly 10kg of water in the pipe in one hour, unless it is removed from the pipe traps.
- The pipes should run with a fall (slope) of not less than 12.5mm in 3 meters in the direction of flow.
- Drain pockets should be provided at every 30-50m and at any low point in the pipe network.

On the first meeting for the SY 2008-2009, the new PMAI Board was convened and the various Standing Committee Chairmen were appointed. The new PMAI Officers and Committee Chairmen are as follows:

President	Tomas Merdegia, Jr.
Vice-President	Jerry Hui
Secretary	Eddie Go
Treasurer	Johnny Tan
Asst. Treasurer	Harvey Uy
Chair – Finance	Tomas Merdegia, Jr.
Membership	Jerry Hui
Trade	Joseph Navarro
Technical	Harvey Uy
Manpower	Nap Tanganco
Information	J. H. D. Bautista

The second meeting scheduled in August, this month, should see a resetting of policies and a redefinition of the programs that the PMAI intends to pursue this Society Year.

MEETING WITH SPRI

On July 30, 2008, we met with the Representative of the Basque Industrial Development Agency, Mr. David Fernandez Terreros, Internationalization Department, Asia Area Manager, through an arrangement made with the BOI. The group of Mr. Terreros is scouting in the Philippines for investment opportunities for their Spanish principals in Bilbao, Spain.

We took the opportunity to show the foundry situation in the Philippines and the opportunities that are open. When presented with the concept of industry clustering, he showed interest and commented that that is the correct way to go. In the midst of the global nature of business, this is the way some countries in the world have been doing it with some success. He mentioned South Korea and India. He also mentioned that help could be obtained from the foundry school that they have in Spain if this is needed in our plan to put up a Foundry Technology course at QCPU.

We would probably hear from him again in the very near future.

A SECOND LOOK AT CLUSTERING

We have prepared three pamphlets to better elucidate the concept of Industry Clustering. These are:

(a) A Concept Paper on A Metal Engineering Industry Park.

(b) All About Bohol (this is the province that was offering free land to groups that would set up industrial parks in Clarin, Bohol).

(c) A Five-Year Programme for the Metalcasting Industry (2005-2010) by the Philippine Metalcasting Association.

These are being submitted to the Board of the PMAI for whatever purpose they may achieve. It is some sort of "Last Hurrah" for "Yours Truly" who has seen better days in the Metalcasting Industry. His over 50 years of experience in the industry shows that this concept is the most plausible solution to our dealing with globalization. He also knows that our Filipino culture could be a stumbling block But he further knows that we are more sensible and flexible than most other people. He has experienced in the four plants that he has managed that the Filipino can be motivated to work harmoniously with his fellows. This has also been shown before by our "bayanihan" spirit of old and he knows that it is still there. And like the proverbial "walis ting-ting," he knows that we know that it is only by having a cluster of "ting-ting" that we can expect to "walis." There is no other way. In union there is strength.

So he humbly submits all the aforementioned pamphlets to the present PMAI Board for its serious consideration. The least that could be done, hopefully, is to investigate this whole thing further to really find out the merits of the project. The concept is there, it only needs to be investigated further for feasibility.

Take a lesson from the turtle: it will not move forward if it does not stick its neck out! Amen.

CULTURE AND THE FOUNDRY INDUSTRY – By J. H. D. Bautista

On the foundry floor would be found the main 4-M factors of production: men, machines, materials, and methods which are all interconnected together by the fifth-M, money. While all the others could be more or less standardized, the very first one, "men," defies standardization and is the single factor that could easily make the difference between foundries, especially those from different countries. This is because the culture between countries could make the immense difference in their production efficiency and productivity.

This is not a reckless statement as can be gleaned from the following anecdotes which the author personally experienced and gathered during his visits to various foundries in the West Coast and Midwest of the United States, Europe, Southwestern Asia, and Eastern Asia, including Oceania. While prudence dictates that the countries concerned be not mentioned anymore; it should be sufficient to describe the circumstances to illustrate the case in point.

Instant Millionaires. In one country, the practice was to pay the workers on a weekly basis. On the days immediately following pay-day, the workers went on a spending spree indulging themselves on their newly acquired liquidity and reporting for work two or three days later. During those days when they did report for work, they could not even afford to have breakfast before going to work which adversely affected their efficiency. Management was in a quandary — what could be done to minimize, if not eliminate, this problem.

Management shortened the payroll period to one-half and paid the workers twice a week, hoping at the time that the smaller take-home pay would prevent the splurging. Then, management also instituted a free breakfast on the immediate hour before time-in, but not afterwards. Efficiency improved and so did productivity. A perceptive management saved the day.

Unionization. In another country where the labor movement was well-supported by the government, unions were very popular in foundries. So popular, in fact, that there were at least four unions in some foundries: a melters' union, a molders' union, a core-makers' union, and a finishers' union. From a naïve point of view, there seemed to be nothing wrong with this, because each one was more or less homogeneous and so could better attend to its members' needs. However, whenever one union went on strike, the whole foundry lost production. The pathetic thing was that unions did not stage their strikes at the same time, so the foundry had to contend with so many strikes per year.

Management appealed to government to rule only one union per company. This was successfully achieved and both management and union came to a better relationship. Strikes became very much less frequent, in fact, they were sometimes averted. Productivity was improved. Again a discerning management saved the day.

In still another country, one foundry maintained a bar-club that operated only from 5-8 pm. after the regular work shift, conveniently located in the basement of the administration building (and calling it the "Snake Pit"), serving very low-priced drinks and snacks. The workers and other employees spent some time here, after their shift, socializing, or merely idling, relaxing and unwinding, thus promoting and nurturing good fellowship and rapport between the managers (including the company's president and officers), supervisors and the rank-and-file. As could be surmised, this foundry didn't have any workers' union for there was no need for it.

Quality Consciousness. There were foundries whose workers took product quality as a personal commitment. Workers meticulously, without supervision, observed work standards and metal specifications with silent pride. Rejection rates were below 2 percent after finishing. The whole foundry operated like a well-oiled machine, like a Swiss watch (so to speak) and probably because this was a Swiss foundry in Aarau, Switzerland where the author had the good fortune to undergo training.

Safety Consciousness. In some other foundries, workers were not so careful about safety procedures and requirements. Although management provided the necessary safety equipment like hard hats, gloves, leggings, and safety shoes, workers deliberately ignored, or even refused, to use these claiming inconvenience that hampered their movements and work. It was remarkable how the foremen allowed this on the pretext that the workers were skilled enough and experienced enough, and so were careful enough, in recognizing unsafe situations and thus avoiding accidents. However, when such workers did meet accidents, the company took care of them anyway because of the inherent culture of the people.

Floor Innovation. In some countries, workers were great innovators. Short-cuts to standardized methods were continually made — sometimes effectively and successfully, but most of the time unsatisfactorily and even disastrously. These could be remedied if the foreman knew or discovered such innovations on time, however most of the time the workers concealed the anomaly and tried remedies by themselves which resulted in lost time or defective castings. These could be avoided or minimized if there existed good rapport between the workers and the foreman. Such would produce good cooperation between them that would be conducive to better efficiency and higher productivity.

Needed: A Culture of Concerted Innovation. Innovation should be done by the foundry as a whole, as a concerted effort — like controlled innovation to improve on a product design or a production process. Basic research, or even applied research, is so expensive that most countries, especially the "third world" countries, could not afford it. This indicates that they should resort to innovation — not on short-cuts as mentioned above, but to improvements on products or processes. Manager, supervisors and workmen alike should be indoctrinated and trained in the process of conceiving, sharing and developing innovative ideas for the good of their companies. They don't have to invent anything; all they need to do is improve on what is already existing.

In today's fast-paced business environment, and *vis-à-vis* the globalization of business, innovation should find itself on top of the agenda of most foundries. It is today a prerequisite for success, if not for survival. However, innovation has its attendant risks and, although most managements do not like risks, the rewards could be awesome and tempting. It has been reported that today many companies in Europe and Asia have already set up formal structures to review and evaluate innovative ideas. Have you?

THE OLDEST PROFESSION

In a Professionals' Convention the MC asked the body, "What do you think is the oldest profession?"

Doctor: I think it is medicine, because when Eve gave birth to Cain that was medical practice.

Lawyer: I disagree. You see, when Adam and Eve got together as husband and wife, that was legal practice.

Engineer: You forget, out of the chaos, Lord God put order into it and built the whole universe; that was engineering.

Politician: Aha! And who do you think started and made the chaos? Huh?