

Culture Enables Successfully Sustained Improvement

By Ganesh Pai

During the Total Productive Maintenance (TPM) Step 1 initial cleaning event of a Fancu Milling Machine at the OpEx Solutions TPM training in September, the interest and zeal of the participants took me back in time. It reminded me of the enthusiasm of the shop-floor personnel who were sprucing up the machines in preparation for the Ayuda Pooja, several years ago, during my days as a shop-floor engineer. That is when I realized that TPM Step 1 is the same thing that has been practiced for generations well before TPM was conceptualized. Coincidentally, the Ayuda Pooja is also observed around September or October. TPM Step 1, initial cleaning & restoration of equipment, has been practiced for generations by the Hindu community in India in connection with Durga Festival. An integral part of this ten day festival is Ayuda Pooja which literally means “veneration of tools and weapons” – TPM Step 1.



Ayuda Pooja is not limited to just the shop-floor. Almost all of those who use any kind of tools for their trade and those who own/operate vehicles observe this festival. In preparation for the Ayuda Pooja, operation of equipment, stationary or mobile, in factories, workshops or offices, is shut down the previous day sometime early afternoon. The equipment is cleaned, small broken things are fixed, and some equipment may even be painted. In addition to the equipment, the surroundings are cleaned as well. While the operators typically clean their own machines, the owners and management are all involved and engaged in providing necessary help especially in cleaning the surroundings.



On the day of Durga festival, the Hindu Temple Priest is invited to bless the equipment for safe, efficient and productive operation. Many of the owners' and operators' families attend this celebration as well. The equipment is blessed by the Temple Priest with incense sticks. A lime and a chili (green pepper) are tied to the equipment to keep evil incidents away. After the auspicious blessing ceremony, sweets are distributed in recognition of all the people working on those machines.

I could not help noticing the strong correlation of Step 1 cleaning event of TPM to this Ayuda Pooja. Main similarity is the preparation of the equipment as the first step. People who work on the equipment get a sense of ownership and affinity. They also enjoy the attention and the importance they get from all the connected people. I also noticed some differences. The main difference is that, while Ayuda Pooja is an annual event, TPM is an improvement with seven steps—step 1 is just the embarking event.

Unfortunately the TPM program in most companies is limited to just the annual cleaning event similar to the Ayuda Pooja or a spring cleaning. TPM is at higher steps of the journey in India, Brazil and Japan than the rest of the world, per Martin Nazareth, the TPM training instructor. The progress in India can be attributed to the fact that a part of TPM is embedded in their culture.

When we introduce something new that is not within the culture, we have a lot of work to do to introduce the change. We have to train a lot of people, help them see the benefits and have faith in it, take them through a long learning curve and at the end of it all, if it has not yet latched on as a part of their culture, any change in leadership can cause the program to collapse. Changing culture is a gradual and long term commitment.

I am quite sure, this correlation of new practices to old traditional and cultural practices is not limited to TPM. The key is to continuously improve from our own traditional practices rather than to re-invent the wheel, and to copy and paste systems and tools. That way we can make greater progress, the program will cost less as well and will be more successful and sustainable.