



Bajaj Auto galvanizes permit to work environment

Need

Bajaj auto were evaluating a range of EHS related software for their mega manufacturing facility at Waluj, Aurangabad.

Challenges

Software demonstration and discussions, polarized their interest in ePTW. Complete automation solution for the permit to work environment.

Benefit

Automotive manufacturing with its ancillary intensive shop floors, benefitted from the faster approval time ePTW generated. Replacing a redundant, inefficient paper based method with trackable, ubiquitous software based approach.

Software based approach increases efficiency and ensures proactive tracking

Bajaj Auto Ltd. (Bajaj Auto) was India's very first two-wheeler manufacturer founded in 1945 under the vision of Jamnalal Bajaj in Rajasthan. It currently manufactures automotive vehicles in three categories: two-wheeler, three-wheeler and four-wheeler.

Pursuit to make assembly lines safer

Automotive manufacturing is a resource intensive job with multiple threads of workshops, shop-floors and departments coming together to assemble a finished product.

These multiple threads are driven by a mechanized but hazards laden processes that require significantly safer work practices. Due to the nature of its collaborative work, hazards and heavy engineering based manufacturing practices – automotive manufacturing plants become a hotbed for maintenance jobs.

Bajaj Auto is spread over a 700 acre campus at Waluj, Aurangabad. This mammoth facility is categorized into 3 separate divisions based on the nature of vehicles produced within these divisions. The company officials were undertaking an exercise in evaluating the need for environment health and safety (EHS) software. As it is understandable, when a large automotive manufacturing facility, such as Bajaj Auto, would enter into a round of evaluation; they would wish to understand and address – functionality, cost-benefit ratio, implementation scenarios, support and feasibility.

In this pursuit, during ASK-EHS software demonstration, one of the participants raised a simple question “..do you also do, permit to work software”?

This query was met by a yes, and both Bajaj Auto and ASK-EHS set forth to making permit to work as the focus of their pursuits.

Reinvigorating permit to work system

As one can understand that the very nature of automotive manufacturing revolves around hazards. Metal and alloy works for engines and components. High temperature ovens that ensure the gloss and colour use gas based fuel. The other known hazards of a manufacturing based environment such as electrical hazards, chemical hazards, working near moving parts, etc.

This clearly suggests that the nature of 'permit to work' environment becomes crucial to delivering services, unhindered by maintenance and repair activities. It is further



Solution

ePTW SOFTWARE

- Area map
- Job hazard analysis
- Isolation management
- Permit tracker
- Information management



“Apt permit to work environment features matched with superior expertise in EHS domain made Bajaj Auto choose ePTW for their permit to work environment”

magnified by the collaborative manufacturing and assembly process which is at the heart of a modern day automotive manufacturing plant.

Based on ASK-EHS ePTW software demonstration and discussions that followed, Bajaj Auto was able to realize the potential, ePTW could bring to the table in making their permit to work environment – simpler, trackable with a faster response time.

A traditional hardcopy approach to deal with the PTW environment is not only cumbersome for the EHS teams to track but it lends little credibility to the sophisticated automation based manufacturing facilities. It is a definitive case of mismatch and come to closely examine the issue, a safer and trackable PTW environment would mean better productivity, overall.

When Bajaj Auto were made aware of the fact that a subscription based model for the ePTW software is in the offering, they were able to recognize two things:

- The feasibility ratio becomes significantly higher than internal development and deployment, increasing cost-effectiveness.
- EHS domain expertise of ASK-EHS endorses its credibility with dedicated support and training, lowering risk.

This outlook shaped their next step, where they wished to rollout the software and implement it, within a shop-floor, at one of the three divisions. A super-scale and complex works' facility as a 700 acre plant, demanded a controlled rollout.

It only took 10 days and 2 site visits to implement the ePTW software with initial training provided to 6 individuals to ensure the controlled rollout. 3 week period allowed this control group to focus upon the usage and initial feedback, which helped ASK-EHS, in adapting the ePTW system, more intimately to their needs.

There was minimum hand-holding required when it came to rollout the ePTW software at other shops and finally division-wide. The control group trained the next set, who trained the next set, so on and so forth.

One of the ePTW features which became sought after within Bajaj Auto was the SMS based approval mechanism. It ensured a faster approval process, even in-absentia of their Director, who could approve the permits via SMS instead of traditional pen and paper chain of approving a permit.

With 200 users and about 50-60 permit requests raised each month, Bajaj Auto has supported its ancillary-intensive permit to work environment – moving from complicated hardcopy checklists to a visual web-based feature rich dashboard.

Priority transformation and culture of safety

When several different works' domain in a complex manufacturing environment, collaborate to produce products, smooth and uninterrupted operations become an inevitable need.

ePTW software facilitates in supporting these operations by fast tracking the maintenance aspect of your day to day plant activities. Automotive sector as mentioned earlier can have exhaustive paper based checklists cited by worker while undertaking each permit to work request.



ePTW replaces the cumbersome paper or excel based permit to work systems to deliver a seamless permit to work environment that supports all the features within a single window, on your PC or phone.

The benefits are transitive in nature; as the permit raising worker can find the simpler workflow less laborious with a faster approval process, aiding him in focusing on the “job” rather than running pillar to post in ensuring approval or losing sleep over attaching the correct form.

Automation as shown by the ePTW software, provides the scope to mitigate human error, increase efficiency and deliver insights which are difficult to generate from the traditional systems.

Traditional systems can become 'data jails' where the information is siloed, standalone without delivering any insights to its user. ePTW system, not only enables information collation and analyses of several factor but helps in generating key performance indicators. Thus, making the data work for you and for making the system more and more robust, over the course of time.

This finally amounts to reinforcing a culture of safety within permit to work environment, where the worker is self-initiated – as he recognises that the system is easier to work with and offers a faster approval time. A win-win for both the worker and organisation.

With the successful deployment of ePTW at Waluj, Aurangabad. ASK-EHS were able to do the same for Bajaj Auto plant in Pantnagar with implementation at other facilities also on the cards.