PEL helps ensure plant re-opens on time

Chemical Case Study – Syngenta, Goa, India



Process engineers use PEL to identify and test solutions to a venting problem which would have prevented the plant from reopening.



Syngenta India's site at Goa faced an issue with fumes after commissioning new venting equipment while the Active Ingredient (AI) manufacturing plant was closed for annual maintenance. Unless a quick solution to the health hazard could be found, the plant start-up would have been delayed with a potential loss of \$1 million. After attempting various fixes, the local team found itself contemplating an expensive and time consuming re-engineering solution suggested by the supplier of the equipment.

As a last resort the local engineering team posted an appeal for help on Syngenta's internal process technology discussion board.

»I know Flonet well and was confident the software, for which Syngenta already had a license, would provide the team in Goa with the information they needed to make a simple and speedy fix.«

David Sparkes, Contract Process Engineer, Syngenta – Grangemouth



SOLUTION

Within days of the appeal being posted, a process engineer in the UK, familiar with PEL Flonet having used it over a number of years on different projects, recommended using PEL software from TÜV Rheinland to model the venting systems to identify the source of the problem.

After gathering further details, he was able to guide the Goa team through the construction of a model of the venting system. PEL's network tokens and shallow learning curve allowed the Goa team to identify the cause of the venting problem quickly. Once identified, they were then able to simulate potential solutions, and rapidly identify a cost effective solution so that the plant could re-open on time.

BENEFITS

- Shallow learning curve allowed local engineering team to model the system quickly and accurately
- Quickly identified the dangerous reverse flow causing the fuming
- Assessed the effectiveness of multiple solutions by modelling the proposed changes
- Allowed plant modification to be carried out in time for scheduled re-start



Detail of PEL Flonet venting system model showing reverse flow.

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