

Immersive Training for a manufacturing unit

MR-based Maintenance, Repair, and
Overhauling Training for Maintenance staff

LEADING STEEL MANUFACTURER



BACKGROUND AND CHALLENGE

Working in a steel plant is hazard intensive. Employees work in a high temperature environment, handle heavy equipments and materials. Even a smallest of error can turn fatal for them.

Tata Elxsi teamed up with this global steel manufacturer to find a solution to help train their shop floor workers on how to handle critical and hazardous situations in a better way and avoid casualties.

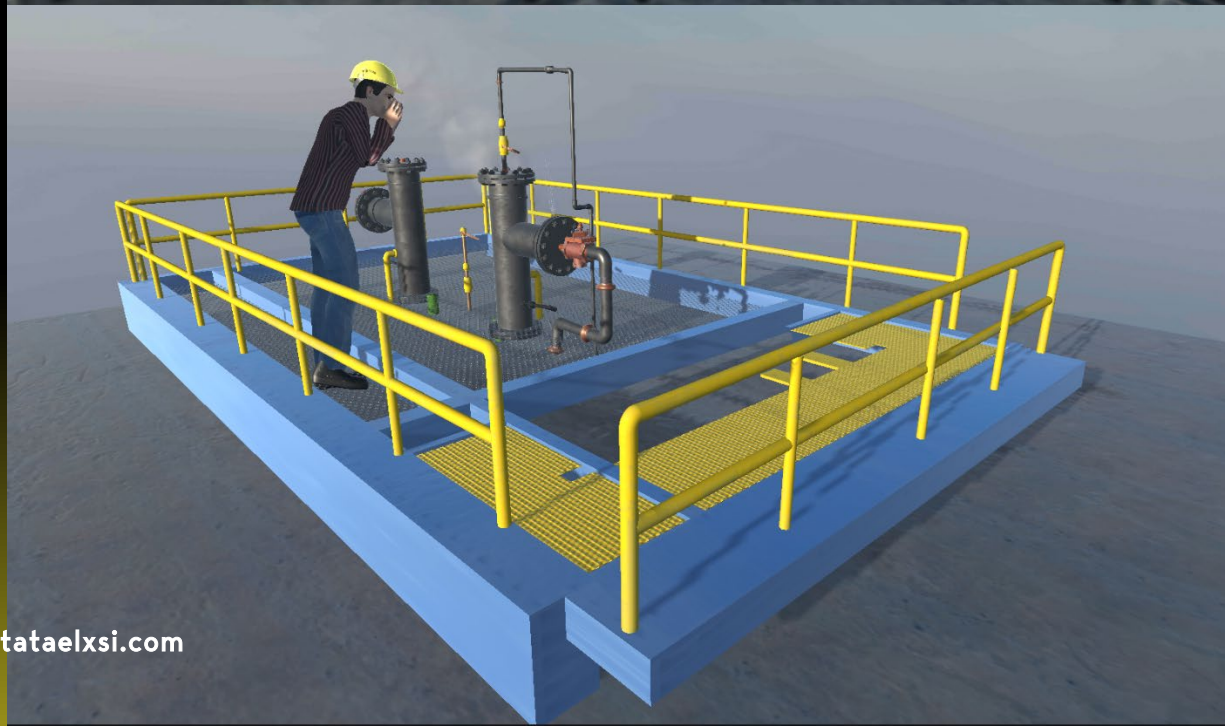
SCOPE OF WORK

- A scalable MR solution had to be developed to expedite Maintenance and Repair process and reduce worker stress.
- Develop an immersive Digital training solution to train the front-line staff who don't have technical background.
- Eliminate manual training and provide a more engaging training experience
- Develop a realistic immersive experience to allow workers practice real-time situations in a practical way.



SOLUTION

- Tata Elxsi team performed a detailed study of the hazardous situations, viz., Gas Leak, Electric shock, etc., faced by the workers on the shop floor.
- An MR application using EPSON MR glasses was developed by Tata Elxsi which allows to overlay Digital assets and effects on top of actual shop floor scenarios.
- A step-by-step instructions installation guide was provided, where content could be viewed in an immersive way. This provided a more engaging experience with the work instructions, safety guidelines, maintenance and repair.



IMPACT

The MR solution facilitates workers to learn how to handle hazardous situations successfully by trying out the scenarios multiple times till they become confident.

The immersive training solution was designed to help reduce fatalities on the shop floor. It also reduced stress in allowing technicians hands-free access to instructions which further increased overall employee comfort, safety and satisfaction.