

Case Study

Critical Equipment Inspection Animations



Client Background

Shell is well known as one of the five major national suppliers of petroleum products. Shell supplies their fuel and convenience products through a vast network of retail and commercial sites across South Africa, with many assets in constant daily operation. Shell has more than 400 retail sites nationally that are maintained by Pragma through the Facilities Management Centre (FMC).

Critical equipment inspections (CEI) are performed on the critical equipment at Shell retail sites. The inspections are control barriers for the mitigation of safety and environmental release incidents. Some inspections are statutory requirements and each inspection is scheduled according to specified intervals, as outlined in the Shell Global Innovation and Design Standard (GIDS).

Key Challenges

A need was identified to clarify the Shell GIDS CEIs for the following reasons:

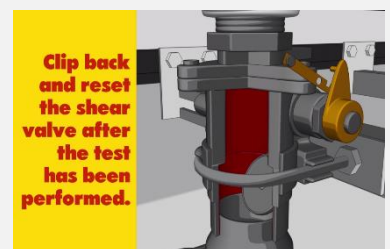
- L3 partners misunderstood many inspection points.
- Target audience and inspectors were not always sure why inspections were important.
- Inspection personnel were not always aware of the potential consequences of poor inspections.
- Varying local naming conventions and terminologies meant that L3 partners were often unsure which specific equipment the inspections referred to.
- There were varying types of equipment and site layouts across the network.
- Poor quality inspections supplied to the FMC led to insufficient repair actions.

Value Add

- These animations were discussed and released to the L3 partners and their frontline staff in a roadshow across South Africa. They are also freely available to them for reference and training purposes.
- As a result, L3 partners and frontline staff have already demonstrated an improved understanding of the equipment and inspections.
- The CEI is being overhauled and improved to go hand in hand with the upskilling of the L3 partners and frontline staff.
- The animation includes core HSSE messages such as 3 Golden Rules, 12 LSR and Fire Triangle.
- Although this has been created in South Africa, it can be used in other Shell markets globally to support the understanding of the standards.

“Helpful to bring across the Shell Standard requirements in a visual way for learning.” L3 Contractor

“The CEI clarification animations have become a Practice Worth Replicating in other markets and were shared at the global monthly Maintenance Excellence Forum.” Shell Global



Pragma Intervention

- CEIs are performed on assets such as the dispenser, tank, fuel delivery area, interceptor, compressor, automatic tank gauging and groundwater monitoring.
- A root cause analysis for 'Poor inspections and feedback received' was compiled, following multiple onsite and virtual sessions with the L3 contractors. Through this process, a need was identified to clarify the CEI standard.
- Pragma sourced a media consultant for the project.
- A Shell service station was rendered into 2D and 3D animation, and a technical video created depicting local equipment types and describing the equipment as well as the inspection requirements and why these are important.
- The video shows how tests must be performed and clarifies the expected results of the inspection.
- References are made to GIDS specifications and checklist items are included for easy cross-referencing.
- A local voiceover was used so that the target audience can easily identify with the subject matter.

Tools and Technology

- Shell Global Innovation Design Standard
- Asset Care Plan Development
- Asset Register Administration
- Work Planning and Control
- Focused Improvement.