AG MELCO
Elevator Manufacturing Industry

Need

AG MELCO was evaluating for digitized and centralized EHS management software that provides enhanced reporting capabilities through integrated approval workflows and gives comprehensive visibility to compliance metrics

Challenges

Onsite and corporate professionals found it difficult to standardize and maintain uniform reporting across their sites – they lacked on-demand visibility to safety metrics at corporate levels

Benefit

The critical environment overcame inconsistencies by establishing a digitized process, in the form of EHS management software to automate routine tasks and the reduced maintenance and support increased reliability

AG MELCO is a globally renowned name in the elevator manufacturing industry –with their continued association with Mitsubishi Electric Corporation, their high quality products and service standards guarantee a vertical transportation solution that lasts for a lifetime. With 20,000⁺ projects and more than 64,000 installed units, they offer design, sales, installation and modernization solutions for elevators, escalators, moving walks and dumbwaiters etc.

Over-the-time, as AG MELCO expanded, it was quick to build and realize their technological capabilities and opted for EHS management software which kept a track of potential issues and helped them achieve their desired outcomes.

Limits of traditional approaches

While constructing fall arrest systems, fall restricting systems, vertical lifelines or anchors, there are plans and procedures that help engineers proceed in a safe manner. AG MELCO is involved in all the critical operations such as lift design, installation, and maintenance solutions.

Each site of AG MELCO was prone to complexities and hazards. At such sites, safety rules are aimed at several types of possible accidents with lifts - shearing, crushing, falling, impact, trapping, fire, electric shock, damage to material, accidents due to wear, and accidents due to corrosion. Here, people to be safeguarded are the users, maintenance and inspection personnel and people outside the hoist way and the machine room as they are subject to unsafe conditions or incidents. Objects to be safeguarded are loads in the car, components of the lift installation and the building.

Before a lift is put into service, it is examined and tested to establish the lift's conformity and strength with the safety rules in the area where it has to be installed. Specific tests are required for locking devices, landing doors (possibly including fire tests), safety gear, over speed governors and oil buffers.

A lift and its components are inspected and maintained in good and safe working order at regular intervals by competent technicians who have obtained skill and a thorough knowledge of the mechanical and electrical details of the lift and the safety rules. The engineers and technicians are responsible for supervision and maintenance tasks that involve routine servicing such as adjustment and cleaning, lubrication of moving parts, preventive servicing to anticipate possible problems, emergency visits in the case of breakdowns and major repairs.

Solution

☞ Streamlined data collection

☞ Improved reporting efficiency

☞ Critical information tracking

☞ Employee-based approval workflow

☞ Real-time email notifications & escalation alerts

☞ Interactive dashboards and graphs

☞ Improved operational performance

While the above defines the working conditions of AG MELCO, one mustn't forget that risk is relative and depends on 'who' and 'what' is in the path of the hazards when they become active threats, the level of vulnerability of the system being impacted, and the degree of resilience that the system has. Though risk-based thinking was integral to their operations, AG MELCO relied on traditional tools such as excel-based approaches to record and manage their EHSQ risks. That often felt short in meeting today's challenges.

Increasing reliance on software tools

To create a positive dynamic that elicits a broader set of questions with in-depth information, reinforce safe work practices and address at-risk behaviours, safety patrols and observations were conducted onsite. Each site had assist and maintenance engineers, who then reported to branch and HSE managers. Though safety patrols were mandatory and scheduled in AG MELCO, their delays lacked accountability and transparency to the higher authorities as limited numbers of stakeholders were involved in the recordkeeping.

Similar was the case with incident reporting – in case of an incident, onsite professionals were given severity-based timelines to investigate an incident & take corrective actions. But, higher authorities lacked information about the incidents and their actions taken until they received a final report.

AG MELCO evaluated for solutions to streamline their reporting process and simplify their tracking process by eliminating the excel-based approaches. In March 2019, they got in touch with ASK-EHS professionals to integrate their approval workflow in a way that provides comprehensive visibility and transparency.

In an organization, a neat organizational chart can exist with clear lines for reporting and collaboration, but the actual worksite is more like a fragmented, impenetrable system full of barriers and disconnected parts. Distinct organizational subcultures emerge, each with its distinct priorities and routines. This kind of complexity makes it especially difficult to monitor and observe daily routine tasks, because they often require cross-functional knowledge, proper communication and monitoring.

Alerts and notifications, when missed, deprive companies of valuable information about what is effective on the ground and suppresses warning signs of potential system accidents. Previously, HSE managers coordinated with electrical and maintenance heads for CAPA and safety observations via e-mails – synchronization consumed a lot of time.

After understanding their requirements, ASK-EHS professionals proposed EHS software that encapsulated their end-to-end business essentials and processes that are designed to achieve continuous improvements in EHS performance. The project was initiated in July, and the essential capabilities that AG MELCO professionals looked into, were –

• Built-in stage-wise escalation matrix and employee-based approval workflow for CAPA, incident reporting and safety observations

• Safety patrol to set protocols and monitor site activities

"A native software has helped us build a proactive, forward-looking approach to manage our EHS risks. It aids us in harnessing valuable inputs from our employees and contractors about unsafe behaviours and incidents. That makes our employees the beneficiaries of just-in-time safety guidance in their workplace environments. With escalation matrix and enhanced reporting capabilities, our insights come not just from one siloed site but from benchmarks and data across the entire workplace."

Achieving a proactive, forward looking system-level approach

Comprehensive, integrated EHS management software that covers event logging, work instructions, inspection rounds and managing reporting helps transform unstructured information into a smart digital asset that ensures safe and efficient operations throughout the lifecycle.

AG MELCO was very specific in stage wise escalations of alerts and notifications – be it incident reporting, conducting safety observations or routine safety patrols. An automated solution that permits task execution and visibility over operations with different level of authorities was what they opted for. And, with EHS management software, the transition from excel was relatively painless – it allowed coordination of each step across different departments.

ASK-EHS tailored EHS management software to meet their unique requirements and led out extensive handholding and assistance in User Acceptance Testing (UAT). In the software, all their tasks were employee-based, not just role-based. AG MELCO had strict and defined working days for their employees – hence EHS software generated target dates in-line of their working days and hours. In case of events of absence, the software routes all the tasks to the next authority responsible for their execution.

After 7-8 meetings held online, the software is currently in the UAT phase and will be soon ready for implementation.

EHS management software was pivotal in fulfilling AG MELCOs workplace needs, and provided –

- **Actionable** metrics that have measurable steps
- **Meaningful**–obtaining information for continued tracking
- **Transparent** metrics that are clearly understandable
- **Timely** distributing information that is relevant to the organization