

CE 5301 CONSTRUCTION PROCESS AND TECHNOLOGY

FIELD VISIT ON PVC PRODUCTION FACTORY OF S-LON
LANKA PVT LTD

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REG NO : EG/2021/4851

SEMESTER : 05

DATE : 15/01/2024

S-Lon Lanka Pvt Ltd Factory

S-Lon Lanka Pvt Ltd, located in Pannala, Kurunegala District, is a top maker of water management products in Sri Lanka. It was founded in 1957 and was the first to introduce Thermoplastic pipes to the country. Today, the factory makes a wide range of products, including pipes, fittings, sewage systems, water pumps, and other accessories.

It has a well-planned water supply and drainage system that is eco-friendly and follows all local rules and standards.

Water Supply System

The factory gets most of its water from a well because the water in the area is good. One well provides water for the entire factory, and purified water is available in the office areas. Although water is used for minor roles in manufacturing, it is mainly important for drinking, cleaning, and keeping everything sanitary. The water system is regularly checked to make sure it stays clean, and it is well-maintained to meet hygiene and quality standards, especially since the factory makes products related to drinking water. The factory uses water carefully to avoid waste and takes steps to ensure the well water lasts for the future. Water from the municipal supply is also used as a secondary and backup water source in case the well runs low. There are sufficient water storage tanks in place to make sure there is always enough water available. The factory follows environmental guidelines to protect the local area and regularly monitors water use to prevent shortages.

Drainage System

As a company involved in drainage and water supply, the factory knows how important it is to maintain a good drainage system. The factory ensures the system is in good shape by training staff to spot and fix problems before they cause blockages. They also use advanced filters to treat wastewater, making sure it is safe before being released. There are emergency plans in place to quickly fix any drainage issues, keeping the workplace clean and safe. The factory follows local environmental rules and looks for ways to recycle water to reduce waste. Regular inspections and maintenance are carried out to prevent problems and keep the system running smoothly. Workers are encouraged to report any issues, ensuring the system works properly.

QUALITY MANAGEMENT

S-Lon Lanka Pvt Ltd is a leading company that has been providing water management solutions to the nation for over 65 years. The company is committed to maintaining high standards of quality for its products, which include pipes, fittings, and other water-related items. S-Lon Lanka uses a Quality Assurance System to monitor every step of the production process, ensuring that each product meets the highest standards.

The company has a testing laboratory where all products are checked thoroughly before they are released. The laboratory is accredited to work as an independent third party, ensuring that the products are tested fairly and properly. Trained staff use special equipment to test samples from production to make sure they meet the required quality.

To make sure each product can be traced back to its production, S-Lon Lanka prints important information, like the manufacturing date, time, and worker details, on each product. This helps quickly identify who is responsible for any issues that might arise.

S-Lon Lanka's quality management is supported by certifications from trusted organizations like ISO 9001:2008, SGS, BVQI, WRAS, and SLS, proving the company follows international standards.

The company's mission is to provide clean, safe water to the nation and to preserve the environment. By using the latest technology, S-Lon Lanka makes sure its products are durable and long-lasting. S-Lon Lanka also values customer feedback and always ensures a quick response to any customer complaints. They take immediate action to resolve any issues, ensuring customer satisfaction.



Figure 1: Pipes, Fitting and Certifications of S-Lon

5S METHADODOLOGY

S-LON Lanka Pvt. Ltd. has effectively adopted the 5S methodology to improve efficiency, organization, and cleanliness in its production processes. This system, built on five key Japanese principles, helps create a well-organized and safe workplace. S-LON Lanka Pvt. Ltd. was awarded the Taiki Akimoto 5S Merit Award for 2015 at the 20th JASTECA Awards Ceremony, recognizing their successful implementation of the 5S methodology. Applications of 5S,

- **Seiri (Sort):** S-LON removes unnecessary tools and materials from the production floor, ensuring only essential items remain. Waste, including damaged pipes and fittings, is separated, pulverized, and reused as raw material in the production process. Top management conducts regular checks to ensure proper sorting.
- **Seiton (Set in Order):** The factory is organized with separate departments for different processes like Dry Blending, Fabrication, and Injection Molding. Tools, materials, and equipment are labeled and placed in designated areas. Signboards, floor markings, and shadow boards provide important information to workers, management, and visitors.
- **Seiso (Shine):** Regular cleaning routines are followed to maintain hygiene and prevent equipment malfunction. Workers are assigned cleaning tasks, and a dedicated cleaning staff manages sanitary areas. All employees are responsible for keeping their work areas clean and provided with necessary tools.
- **Seiketsu (Standardize):** Standard Operating Procedures (SOPs) help maintain organization in workstations. S-LON offers regular training for employees and university undergraduates. Permanent staff receives thorough training to ensure consistent adherence to procedures.
- **Shitsuke (Sustain):** S-LON focuses on continuous improvement through its Corporate Social Responsibility (CSR) philosophy, which emphasizes community and individual development. The company ensures the long-term sustainability of 5S practices by integrating them into daily operations.