

## Spill Controls In Lubricant Oil Blending Plant

### AUTOMATIC BATCH BLENDING (ABB)



Base Oil and additives are received in bulk to the production facility in trucks, IBCs, Drums, Barrels, and Containers for manufacturing. Most lubricant plants have issues with oil spillage, which causes at least a 10% revenue loss.

Our plant and machines are designed to protect from Spillage and help stock holders boost the plant's income. Given the elevated cost of quality lubricants and the heightened expectations for machines to perform at increased intensity and speed, a pressing need exists for high-performance Lubricants.

**Automatic Batch Blending (ABB)** represents a cutting-edge automation framework that incorporates Smart Blend Software, a Dilution Dispensing Unit (DDU), transfer pumps, a Thermic Fluid Heater (TFH), filtration units, a laboratory configuration, and professional installation services. The adoption of computerised technology has significantly enhanced lubricant batch blending processes, ensuring consistent product quality, lowering re-blending and laboratory costs, and maximising the efficiency of blend vessel usage.

The ABB automation ensures accurate blending of oil, and this brings an absolute leak-free plant and pipeline.

### Highlighted ABB Technology Equipment

**1. Spill-free blending with ABB technology:** Spill Prevention Control and countermeasures in Automated batch blending systems help reduce ingredient wastage, leading to cost-effectiveness and sustainable production practices. The automatic transfer of additives and base oils under computer control streamlines the blending process, and every drop of oil that companies collect makes its way safely into the supply chain.

**2. Spill-free filling and packaging line:** LINUS PROJECTS(INDIA) have developed all our filling machines with proper tray collection and drain points for efficient protection from oil spillage from the machine. Particular industrial lubricants can be associated with health hazards. If a spill occurs, leaving stains or puddles on the floor, cleaning up immediately and taking precautions to avoid further spilling is essential. We are a leading Indian manufacturer renowned for its advanced filling machines, specifically for the Lube Oil filling equipment designed for ease of use, exceptional versatility, accuracy, speed, and straightforward maintenance. It operates smoothly while being spill-proof, leak-proof, safe, and quiet. These packaging lines enhance productivity while safeguarding the integrity and quality of packaged products.

**3. Recovery management of spills:** Lubricant storage tanks can benefit from flexible berms that provide secondary containment, functioning as pools or basins positioned under tanks, containers or drums. In case of lubricant spills or leaks, these berms keep the oils contained for straightforward cleanup & recovery while meeting regulatory requirements.

**4. Reduction of slop by using spill-free plants:** The Lube Plant is designed to reduce spills on the floor and accurate batch blending by using ABB to ensure no batch failure. Hence, the chances of the slope are reduced by using accurate bleeding. Most of the slope is generated due to non-accurate bleeding and spillage on the slope floor. The excellent quality machine rarely has slop to process.

**5. Controls for spill management at the lubricant blending facility:** Automatic Batch Blending Technology reduces the risk of accidental spills in the event of a pipeline rupture. Leaks can be detected and avoided. Computerised and Robotic technology helps ensure consistency of product quality. Together with the economic advantages of tight control of additive usage and accurate blend control, this is of supreme importance. Leakage Sensors and the weight or litter of base oil and additives before and after production are checked. ABB helps minimise waste generation, reducing environmental impact. Performing a spill management risk assessment should be simple; however, the process must be comprehensive and precise.

**6. Best Practices for Lubricant Storage and Handling:** Spill Prevention, Control and Counter Measure. It is essential to safely manage oil storage tanks, drums, and other containers. Lubricants must be safeguarded against contamination and the deterioration that may arise from exposure to extreme temperature conditions, whether excessively cold or hot. Implementing all necessary fire safety measures when storing petroleum products is crucial. Flexible berms can offer an adequate secondary containment solution for lubricant storage tanks, functioning similarly to pools or basins strategically positioned beneath storage tanks or pallets stacked with drums.

### 7. Lube Oil Filling Machine:

#### A) Barrel / Drum / Pail Filling Machine



The Barrel / Pail Filling Machine is Engineered to safeguard against Spillage. It is a complex piece of machinery created to streamline and enhance the process of filling barrels with different liquids or semi-liquids. It is specifically designed with functionalities & characteristics that guarantee effective, precise, and dependable

barrel filling procedures within industrial environments. Advantages of Barrel / Pail Filling Machine are Improved Efficiency, Precision Filling, Savings on Costs, Minimized Environmental Footprint, Boosted Productivity.

#### B) IBC Decanting Machine



of use tailored to specific needs.

The IBC (Intermediate Bulk Container) Tank Decanting Machine is a highly specialized device designed to efficiently transfer liquids from IBC tanks. This decanting machine features pneumatic and hydraulic options, ensuring operational flexibility and reliability. Central to the system is a vertically positioned screw pump, which can transfer liquids at a remarkable rate of up to 2000 Liters per hour (LPH). Additionally, it can be modified with advanced Programmable Logic Controllers (PLC) and Human Machine Interface (HMI) options, providing enhanced control, automation, and ease

### C) Lube Oil Filling Machine



The Lube Oil Filling Machine plays a vital role in the production line, designed to enhance the filling process within the Lube Oil industry. With its advanced features and wide range of applications, it is an essential tool for businesses that prioritize accuracy and efficiency in their packaging operations.

#### **Key Attributes**

1. Automated Filling Solutions
2. Wide Range of Filling Capacities
3. Precision with Load Cell-Based Technology
4. Control System Powered by PLC
5. Various Types of Filling Machines.

### 8) **Storage Spill Control Regulations**

Proper storage is essential for an effective spill-prevention strategy. Ensure that chemicals are stored safely and carefully. Lubricants must be safeguarded against possible contamination and deterioration resulting from exposure to extreme temperatures, whether hot or cold. Drip trays are designed with a sturdy structure to hold a container containing spilt liquids. A spill pallet is an enlarged spill tray specifically constructed to accommodate oil and fuel drums as well as IBCs, allowing for the collection and storage of significant amounts of spilled fluids.



Drip trays, also known as spill trays, effectively prevent leaks and spills for the Storage of Oil Drums, Tanks, & Containers. The IBC Tank Decanting Machine is a specialised tool crafted to ensure the smooth and secure movement of Oil.



**LINUS PROJECTS (INDIA)** comprehensively understands the intricacies involved in operating a lube oil manufacturing facility. Through our Automatic Batch Blending System (ABB), we focus on achieving high production rates at minimal costs. Our specialised process engineering solutions for lube oil manufacturers encompass the design, construction, and commissioning of automated production plants, designed to enhance your Lube Oil Blending Plant (LOBP) efficiency and productivity.



## LINUS PROJECTS (INDIA)

Anand Nagar MIDC, Additional M.I.D.C, Ambernath, Maharashtra  
421506, Mumbai, India

Email: [ceo@linusprojects.com](mailto:ceo@linusprojects.com) / [sales@linusprojects.com](mailto:sales@linusprojects.com)

Mob: +91-9867080329 / +91-9867080330

Web: <https://www.linusprojects.com/>