

# How to design a Best Practice Lube Room



Achieving world-class machine reliability starts long before a technician reaches for a wrench. It begins in the **lube room**. Lubrication Reliability (LR) is built on the "6 Rights": the right type, time, quantity, place, way, and condition. Without a dedicated, contaminant-free environment for your lubricants, your machinery is at constant risk of premature failure.

Our best practice design standards transform your storage area from a simple warehouse into a precision-controlled hub for **contamination control**.



## Steps to take before designing your lube room

Before breaking ground or purchasing equipment, it is vital to establish a foundation for Lubrication Reliability (LR).

- **Consolidate lubricants:** reduce the number of different brands, types, and packaging sizes to simplify your inventory.
- **Establish identification standards:** set up the Plant Lubrication Identification Standard (PLIS) using a consistent code for colour, symbol, type, and viscosity.
- **Audit new supplies:** check the ISO 4406 cleanliness code of incoming lubricants and apply PLIS identification immediately.
- **Review regulations:** ensure your plans comply with local health, safety, and environmental (HSE) and fire regulations.

## Selection criteria

When planning the layout and location, consider these three primary selectors:

- **Infrastructure:** decide if you will use an existing warehouse/store or build a completely new room.
- **Location:** determine if the room will be inside a building, a [standalone outdoor](#) transportable unit, or a decentralised storage area.
- **Storage type:** choose between using existing packaging, such as drums and IBCs, or installing new bulk storage tanks and reservoirs.

## Minimum recommendations

### New lubricant supply (spare lubricants)

- **Environment:** store in a dry, cool, and clean environment.
- **Separation:** keep spare supply separate from the active dispensing lube room.
- **Inventory management:** follow a First-In, First-Out ([FIFO](#)) strategy and record the date of reception on all units.
- **Shelf life:** remove any out-of-date lubricants, typically after 1 to 3 years depending on storage conditions.

### Lubricants in use: storage

- **Cleanliness:** filter new oils to reach the agreed ISO 4406 KPI cleanliness level before use.
- **Contamination control:** use a closed-circuit storage system to prevent any contact with the environment.
- **Dedicated equipment:** use individual pumps, filters, transfer hoses, and connectors for each lubricant type.
- **Air protection:** equip storage tanks with [desiccant breathers](#) to protect the oil from moisture and airborne particles.
- **Filtration capability:** storage systems should allow for circulation filtration and filtering during transfer from drums to reservoirs.

### Lubricants in use: dispensing

- **Tooling:** use professional, 100% sealable dispensing tools such as [OilSafe cans](#).
- **Visibility:** ensure dispensers are translucent so that lubricant levels and types are easily visible.
- **Cleanliness:** keep dispensers clean inside and out at all times, and ensure spouts are twisted closed when not in use.
- **Identification:** every dispensing tap and tool must be colour-coded and identified according to PLIS.
- **Measurement:** install digital consumption meters to track real lubricant usage against ordered quantities.

### Lube room minimum features

- **Lighting and walls:** select a room with light-coloured (white or grey) walls and sufficient LED tube lighting for high visibility.
- **Spill retention:** install all drums and tanks on retention equipment with a rule-of-thumb capacity of 110%.
- **Flooring:** use galvanized steel grid flooring for walking sections and steel checkered plates to support heavy tanks or drums.
- **Ventilation:** provide proper air flow, either through natural ventilation or powered electrical fans.
- **Grease handling:** store bulk grease in dedicated grease stations equipped with pneumatic pumps and follower plates to prevent air contact and contamination.
- **Safety and maintenance:** maintain a dedicated area for MSDS folders, spill absorbents, and closed cabinets for small equipment like grease guns and spare parts.

