



Engineering safety into planning and operation

We identify safety risks and analyse them systematically at all stages of the plant lifecycle - from planning by our Engineering Division to operation by our Gases Division.

Operational safety

Risks that our plants might pose to employees and any neighbouring companies or people living in the vicinity must be systematically identified and evaluated. We are rolling out a management system, the Major Hazards Review Programme (MHRP), across the entire Group for this purpose.

Its objectives include identifying the maximum potential hazards and managing them effectively. It is also important to measure risks on a uniform basis for all locations and introduce controls that minimise these risks as far as possible. Monitoring the maximum potential hazards encompasses all key aspects of occupational health, safety and environmental protection.

As a minimum requirement under the MHRP, all locations operated by Linde that store or process hazardous substances (including pipeline transport) must possess a valid licence awarded following an internal audit.

We are currently working on the new Linde Group MHRP standard. In future it will divide all locations into three categories, with category 1 representing the greatest hazard potential. At a regional level, we pursue other risk prevention programmes as well as Major Accident Prevention Policies (MAPP) in line with our SHEQ policy, strengthening the aim of The Linde Group to avoid harming people or the environment and defining concrete areas of responsibility.

Engineering safety

Almost every plant we build is unique; tailored to individual process requirements, capacity demands and site conditions. To ensure effective project execution that complies with all QHSE (Quality, Health, Safety, Environment) specifications, our engineering process follows a clearly defined, step-by-step blueprint. Design reviews play an important role here, with interdisciplinary teams checking requirements are implemented in line with QHSE regulations. These mandatory reviews also include the hazard and operability study (HAZOP). Experts, usually led by an external supervisor, analyse in detail occupational safety for each individual part of the plant. This process – often requested by the customer – may take between one and two months, depending on the plant size and type. Although the customer is responsible for plant safety after handover, Linde Engineering builds up to this with in-depth advice and training, also supporting operations post-handover if required.

This stringent quality assurance process ensures that QHSE specifications are incorporated at all plant engineering steps.

See Corporate Responsibility at www.linde.com for more information about HSE management and HSE Essentials at our Engineering Division.

HOME

ABOUT THIS REPORT

FUNDAMENTALS

FIELDS OF ACTION

HSE management

Socially Responsible

Investments

Education, science and research

Community involvement of employees

Healthcare for our employees

Climate protection strategy

Work/life balance

Environmental management

Demographic trends

Customer satisfaction

Plant safety

[Our position](#)

Green innovations

Winning and developing talent

Safe handling of gases

Resource-efficient production

HSE management among contractors

Compliance programme

DIVISIONS

ROADMAP

GRI INDEX

ASSURANCE REPORT