LINESIG

CLEANER AIR
SAFER OPERATIONS
A SUSTAINABLE TOMORROW

WET-PACKED SCRUBBER
LNS-SC-WET

Introduction, Applications & Process Overview

Controlling Emissions Protecting Tomorrow

CLEAN PROCESS CLEANER AIR BRIGHTER TOMORROW



1 INTRODUCTION

The **LINESIG LNS-SC-WET** is a high-efficiency wet-packed scrubbing system designed for the removal of acidic, alkaline, odorous, corrosive and particulate-laden process gases using a packed column with circulating scrubbing liquid. It provides a reliable and cost-effective solution for industrial emission control with long-term operational performance.

Engineered for continuous operation in demanding environments, the LNS-SC-WET helps industries achieve cleaner air, safer operations and regulatory compliance.

2 INDUSTRIAL APPLICATIONS & USAGE

Widely used across a range of industries, including:

- Chemical Processing
- Fertilizer Plants
- Metal Treatment & Pickling
- Pharmaceuticals
- Wastewater Treatment
- Food Processing & Rendering
- Petrochemical Facilities
- Textile & Dyeing Industries
- General Odour & Fume Control

PROCESS FLOW OVERVIEW



3 TYPICAL CHEMICAL OPERATIONS

Effectively removes a wide range of airborne contaminants, including:

- **Acidic Gas Neutralization** — e.g. HCl, H_2S, SO_2, NO_x
- **Alkaline Fume Scrubbing** — e.g. NH_3, amines
- **Chlorine / Halogen Removal** — e.g. Cl_2, HBr, HF
- **Ammonia Absorption** — Control of ammonia and amine gases
- **Soluble VOC Control** — Removal of water-soluble volatile organic compounds
- **Particulate and Mist Knockdown** — Capture of fine particulates and aerosols
- **Odour Reduction** — Control of odorous compounds for improved air quality

4 PROCESS DESCRIPTION

Contaminated process gas is drawn by an induced draft blower and introduced into the base of the packed column. The gas flows upward through the packed media while a recirculating scrubbing liquid is distributed from the top via high-efficiency spray nozzles. Pollutants are absorbed and/or neutralized in the liquid phase, and clean gas exits through a mist eliminator to atmosphere. The scrubbing liquid collects in the sump and is recirculated by a corrosion-resistant pump, with provision for fresh water make-up, blowdown and pH control as required.

The LNS-SC-WET system is designed for reliable, continuous operation with minimal maintenance, delivering effective emission control and a cleaner, healthier environment.