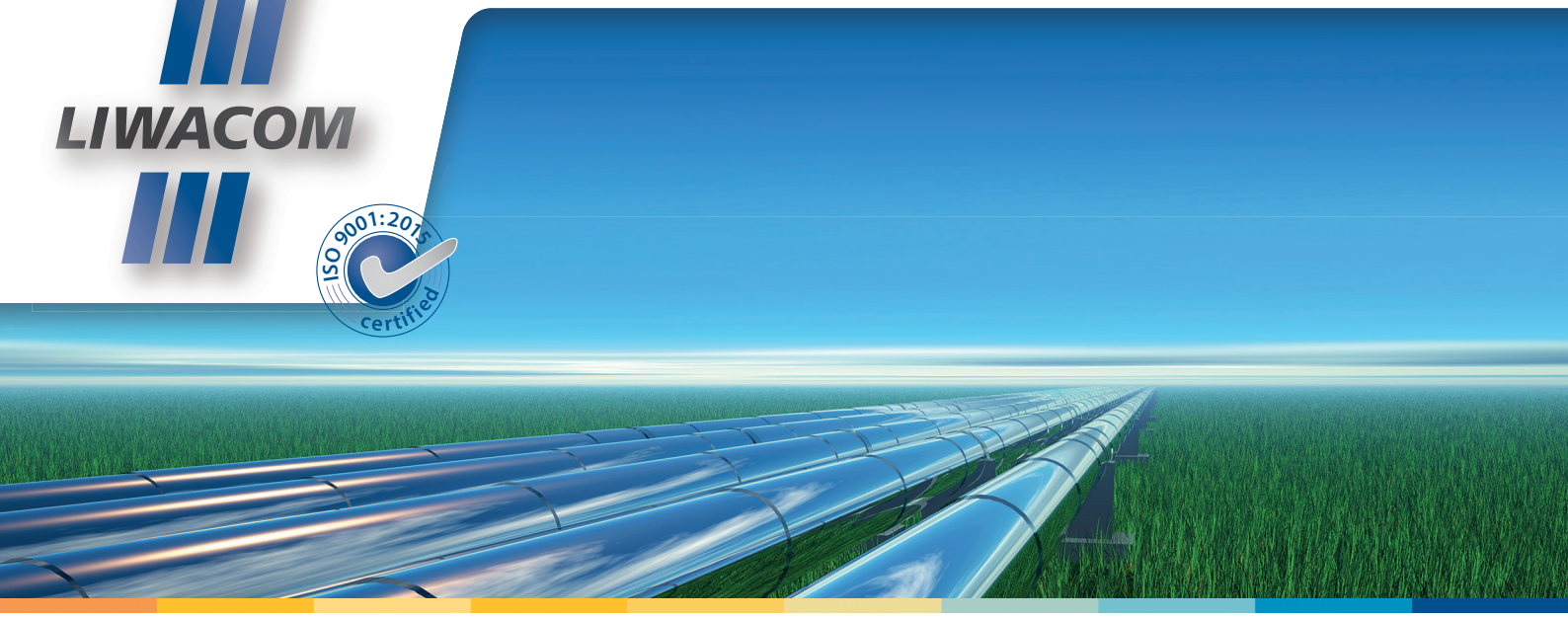
LIWACOM

ISO 9001:2015 certified



LIWACOM is major global supplier of pipeline simulation and optimization software. SIMONE is the industry-leading and most advanced standard software application for simulating and optimizing natural gas flows in pipeline transportation and distribution systems. It covers system design, real-time operation, leak detection, and energy billing.

Beside of Support / Maintenance / Training for the Software SIMONE, LIWACOM offers the following engineering, consulting and study services:

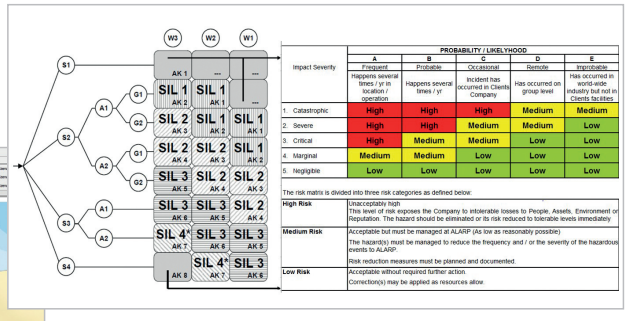
LIWACOM Engineering

FEED, Basic- and Detail Design in Process, E / MSR-Technics

General support for engineering services for gas projects.

Preparation, Moderation and Documentation of HAZOP / SIL Studies

Preparation, moderation and documentation of HAZID / HAZOP and SIL Studies.



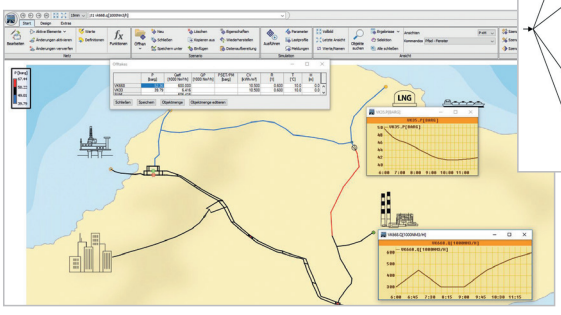
Impact Severity	PROBABILITY / LIKELYHOOD A Frequent	B Probable	C Occasional	D Remote	E Improbable
	Happens several times / yr in location / operation	Happens several times / yr	Incident has occurred in Clients Company	Has occurred on group level	Has occurred in world-wide industry but not in Clients facilities
1. Catastrophic	High	High	High	Medium	Medium
2. Severe	High	High	Medium	Medium	Low
3. Critical	High	Medium	Medium	Low	Low
4. Marginal	Medium	Medium	Low	Low	Low
5. Negligible	Low	Low	Low	Low	Low

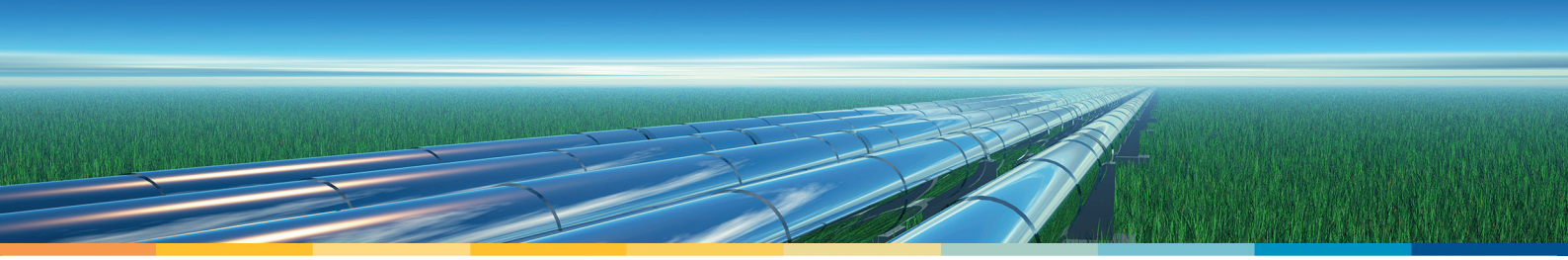
The risk matrix is divided into three risk categories as defined below:

High Risk	Unacceptably high This level of risk exposes the Company to intolerable losses to People, Assets, Environment or Reputation. The hazard should be eliminated or its risk reduced to tolerable levels immediately
Medium Risk	Acceptable but must be managed at ALARP (As low as reasonably possible) The hazard(s) must be managed to reduce the frequency and / or the severity of the hazardous events to ALARP. Risk reduction measures must be planned and documented.
Low Risk	Acceptable without required further action. Correction(s) may be applied as resources allow.

Hydraulic Studies for Gas Transport Systems

Preparation of hydraulic studies for the gas industry and creation of tailormade SIMONE models as support for SIMONE users.





Fact Sheet

FEED, Basic- and Detail Design in Process, E / MSR-Techniques

Support for preparation of technical enquiries and specifications for gas transport and storage systems, especially

- Pipeline systems,
- Metering stations,
- Compressor stations,
- SCADA systems.

Preparation and Examination of HAZOP / SIL Studies

- Preparation, examination, and documentation of HAZID / HAZOP and SIL studies for gas transport/ storage systems.
- Follow up of the created action points.
- Close out report.

Hydraulic Studies for Gas Trasport Systems

- Capacity investigations.
- Support for specification of technical enquiries for compressors (e.g. required power, head and volume flow for several operation points).
- Transient pressurization / depressurization for commissioning / decommissioning scenarios.
- Pre-design of depressurization systems.
- Simulation of modifications in existing systems (capacity calculation, e.g. transient behavior of the network for several load profiles).
- Calculation for scenarios with changes in gas quality / calorific values (e.g. new biogas or H_2 injection).
- Training for SIMONE users with individual tailor-made key aspects.

References

FLUXYS · REN · gasunie transport services · natran · أرامكو السعودية saudi aramco · nationalgrid · Open Grid Europe The Gas Wheel · SWISSGAS · GAZ system

Contact and Product Support

SIMONE SOFTWARE

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