

Leak Minimization Module



SynerGEE® Gas - Leakage Management Module

The SynerGEE Gas Leakage Management Module (LMM) allows you to minimize leakage in your gas distribution network while remaining within your model constraints.

SynerGEE Gas LMM enables the user to enter leakage factors, or coefficients, against the pipes within a model. This figure gives the expected rate of leakage from the pipes and is determined by the user. The module will then allow you to perform an analysis, for a single lower pressure tier, that will reduce the set pressures at supplies so that the pressure in the pipes with the highest leakage is preferentially reduced.

Minimum and maximum flow constraints can be applied at supplies, as well as the minimum and maximum pressure constraints varied throughout the single pressure tier model. Individual supplies may be included or excluded from the analysis as required.

LMM allows users to quickly and easily:

- Determine the set pressures required at supplies that maintain the model within the flow and pressure constraints specified and set a single or default global value for minimum or maximum pressures throughout the network model.
- Assess the resulting average pressure within the individual pipes and the system as a whole for the condition analyzed. Pressure can be minimized by not taking the leakage coefficient into account.
- Assess the level of leakage from the individual pipes and the system as a whole for the conditions analyzed. Leakage can be minimized by taking the leakage coefficient into account.

Leak Minimization Methodology

- Assumes the only known pressures in the model are at supplies.
- Does not optimize the settings of regulators and valves.
- Begins the process with the current network settings and then adjusts supply pressures to minimize leakage (or pressure if required).
- Supplies may be included or excluded from the minimization analysis.
- The maximum and minimum flow level from the supply may be set for inclusion in the analysis.

GL Industrial Services

Holywell Park, Ashby Road, Loughborough
Leicestershire LE11 3GR, UK

Phone: +44 (0)1509 282000

Fax: +44 (0)1509 282525

software@gl-group.com · www.gl-group.com/software