

LINDOFLAMM® flame safe. The ultimate safety solution for automated heating with acetylene.



Challenge Pre-heating before welding may be required to achieve high-quality seams in thick steel sections and special grade steels. This is achieved with pre-heating burner systems. The key to optimum outcomes lies in stable, predictable burner settings. This calls for the correct ignition of the burners and a constant, correct flame temperature throughout the pre-heating procedure. However, burners can get clogged or may be accidentally moved out of place. This means that – unknown to the operator – they may not be working properly. Other challenges in steel fabrication include a strong need for process safety and traceability – fabricators need a way to monitor process data for verification, approval and certification purposes.

Solution With LINDOFLAMM®, Linde offers an extensive portfolio of acetylene burners, supply concepts and complementary services, including customised and automated pre-heating burner systems ideally suited to larger jobs. Designed to optimise the efficiency and safety of automated heating processes in particular, these innovative LINDOFLAMM systems use acetylene and compressed air for maximum heating performance. Customers benefit from increased flexibility, productivity, quality and cost efficiency.

Innovation While LINDOFLAMM flow stop protects manual burner applications, LINDOFLAMM flame safe takes Linde's safety policy to the next level by protecting automated standard burner solutions.

The solution safely ignites all burners and automatically cuts off the acetylene supply if flames extinguish. As an optional extra, functional integrity and temperature profiles can be controlled and monitored. The operator can fully concentrate on the task at hand without having to worry about the pre-heating process and operational safety.

Components

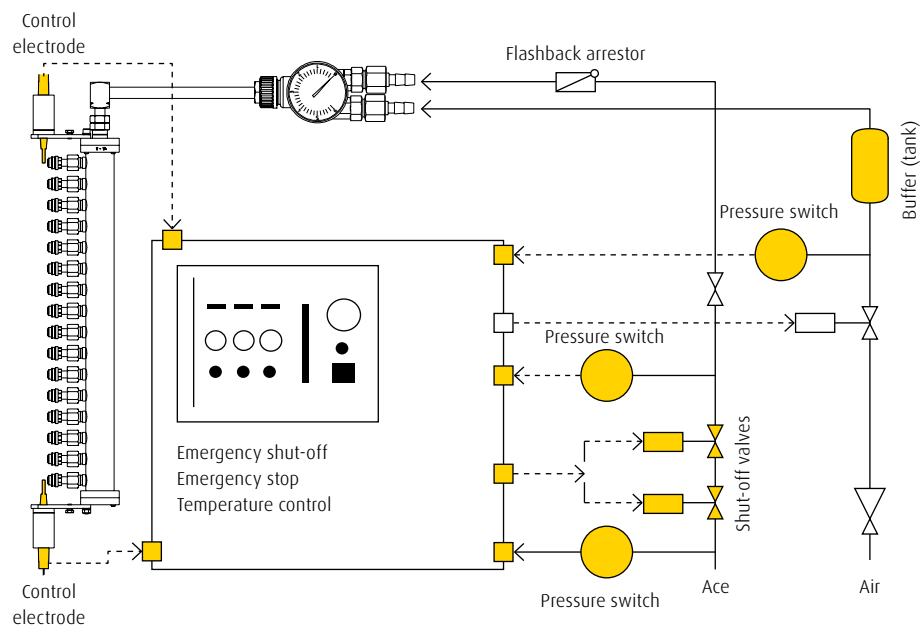
Like all LINDOFLAMM solutions, LINDOFLAMM flame safe is customised for a specific application, in this case automated LINDOFLAMM burner units. The system was designed according to the requirements of EN 746-2 for maximum safety. Safety inspectorate TÜV Süd supported the design process for the flow control unit.

The basic unit comprises the following components:

- Flow control unit for acetylene and air to monitor gas flow and pressure limits in accordance with EN 1854
- Flame detection with two ionisation electrodes for maximum safety
- Electrical control cabinet including type-approved burner management system for start and stop procedures in accordance with EN 298
- Product temperature control and monitoring
- Double safety shut-off valves meeting fundamental requirements of EN 161 and 16678, TÜV approved

Benefits at a glance

- More convenient, efficient and reliable acetylene flame control for welders and operators
- Safe and consistent automated burner ignition
- Automatic and fast acetylene flow shut-off
- Ease of operation and straightforward commissioning
- Customised to individual application needs
- Smart extension of Linde's vast LINDOFLAMM flame pre-heating programme



Questions?

For more information, go to: www.linde-gas.com/lindoflamm or contact the LINDOFLAMM team at lindoflamm@linde.com.

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