

Our Combustion Equipment Sheets

Steel



ALJET LH

- High heat transfer rate
- Compliant with the safety standards
- No noise
- Low maintenance



The Concept

The **ALJET LH** burner is a patented oxy-fuel burner especially designed for heating of ladles used in metallurgy. It is adapted for operation under severe working conditions (confined or overheated enclosures).

The configuration of this burner is of pipe-in-pipe type delivering an cylindrical flame develops in the ladle. The implementation of **ALJET LH** burner accelerates the heating and also cleans the ladles from accumulated oxides and the refractory surface by improving heat transfer.

Applicable Industries

The **ALJET LH** burner is suitable for drying and heating of ladles used in metal industries such as ferrous, foundries and non ferrous industries.

Special Features

An ignition pilot burner and a flame supervision cell can be integrated into the burner body.

The configuration of **ALJET LH** burner is of pipe-in-pipe type: the fuel pipe is located inside the oxygen pipe. The fuel and oxygen mix at the burner outlet and the flame develops in the ladle.

The **ALJET LH** burner is composed of :

- A metallic burner body which ensures the oxygen distribution.
- A fuel injection system.

The metallic burner body is cooled by either the water flow or not, depending on the models.

Experimental and modeling studies have been carried out to design the shape of the burner body in order to ensure efficient cooling.

The alloy steels employed for the metallic parts offer good resistance to corrosion for the burner's "cold part" and good resistance to temperature and oxidation for the "hot part".

The **ALJET** burner produce a low momentum flame which minimizes dust emission and prevents any refractory wear.

The asymmetric luminous flame delivered by the **ALJET LH** burner enables the radiation to be adjusted. The flame shape is of cylindrical type.

The **ALJET LH** burner requires low oxygen and fuel inlet pressures.

The **ALJET LH** burner has been designed to minimize the frequency of maintenance and to make inspection easier (quick dismantling of the components of the burner). Thanks to a low pressure drop and low gas velocities, the operation of the **ALJET LH** burner is silent.

The mixture of the fuel and oxygen at the **ALJET LH** burner outlet prevents the premixing and risk of backfiring.

Model Range

ALJET LH is available in two standard models:

ALJET 1500* LH

ALJET 750* LH

Each model comes in one natural gas fuel version.

The **ALJET 1500 LH** burner is available in one standard natural gas version.

The natural gas version comprises :

- A metallic burner body which ensures the oxygen distribution.
- a Natural gas lance equipped with an inner oxygen tube and gas feeder

A gasket positioned between the gas feeder and the burner body.

The metallic burner body is cooled by the water flow. Experimental and modeling studies have been carried out to design the shape of the burner body in order to ensure efficient cooling.

The ignition pilot burner and flame supervision cell are not supplied with the burner. However, it is possible to order them. Due to the supervision of the flame through the main oxygen pipe for the **ALJET 1500 LH**, the flame detection is efficient even at low firing rate.

The **ALJET 750 LH** burner model is available in one standard natural gas version.

The natural gas version comprises:

- A burner body made of stainless steel equipped with a VITON gasket, the nozzle of the burner body is made of high temperature resistance stainless steel:
- A fuel lance made of stainless steel equipped with a VITON gasket, the injector of the fuel lance is made of high temperature resistance stainless steel.

The ignition pilot burner and flame supervision cell are supplied with the burner.

The ALJET 750 LH model is of non-water-cooled type.

(*) Numbers correspond to the nominal capacity (in kW)

Technical data**

Model	Power (in kW)		
	Maximum	Nominal	Minimum
ALJET 1500 LH	1800	1500	450
ALJET 750 LH	1000	750	400

** Description for information.

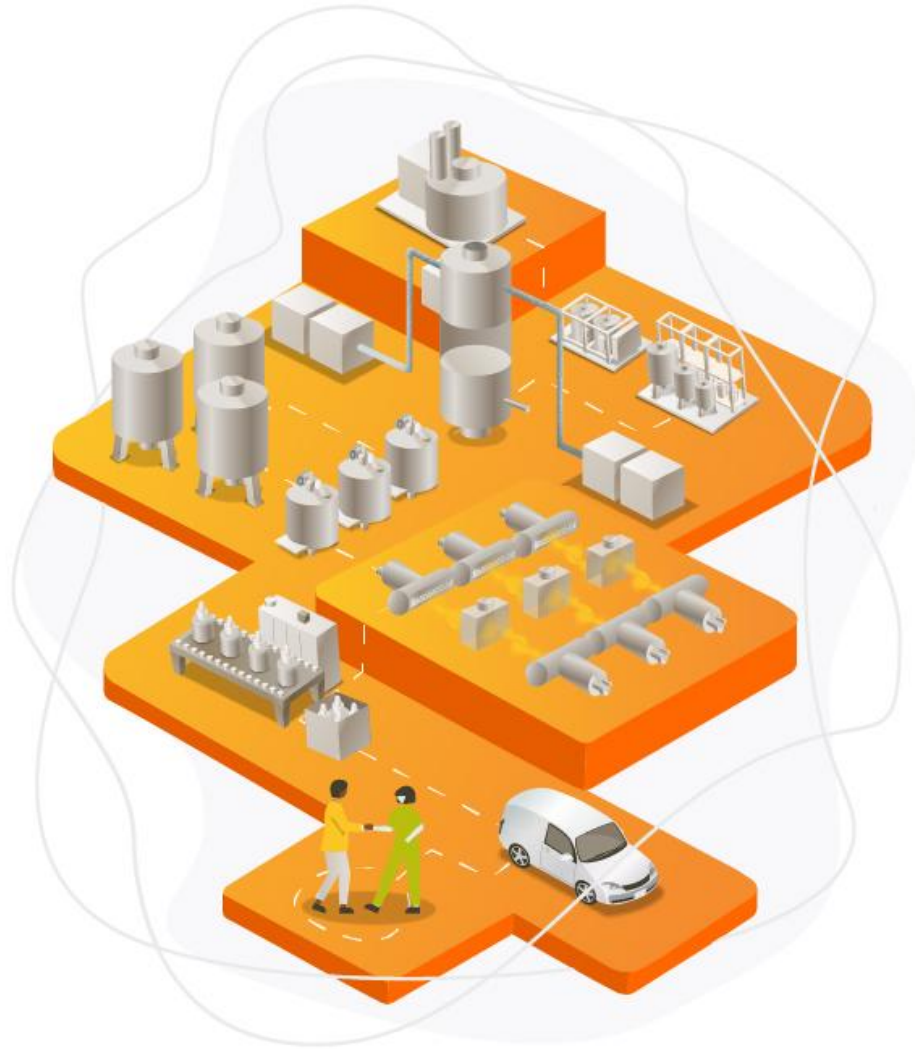
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The **ALJET LH** burner complies with the safety standards thanks to the incorporation of an ignition pilot burner and a flame supervision cell.

Related Offer

The **ALJET LH** is a part of the **BoostAL™ for Ladle Heating** offer.

These are comprehensive offers that combine the best of our gases, application technologies and expertise support from Air Liquide.

**Nous contacter :**

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L'activité Industriel Marchand d'Air Liquide propose à ses clients des gaz et des solutions innovantes, intégrant des technologies d'application, des équipements et des services. De l'artisan indépendant aux grandes sociétés industrielles, nos 35 000 collaborateurs accompagnent au quotidien plus de 2 millions de clients dans 75 pays. Ils utilisent leurs incomparables capacités commerciales et techniques pour développer des solutions de gaz qui stimulent la performance de nos clients industriels et les aident à améliorer la qualité de leurs produits, contribuant ainsi à une plus grande compétitivité tout en minimisant l'empreinte environnementale de leurs activités.

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