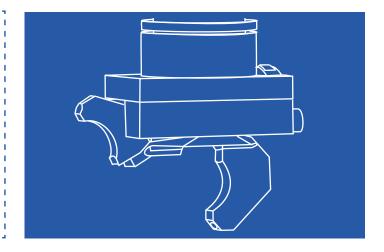


LASER NOZZLE-JET

- Improves and simplifies welding operations
- Optimizes welding costs
- Easy to install and low maintenance



The Concept

A robust and easy-to-use patented nozzle for linear welds, **LASER NOZZLE-JET** is specially designed to avoid gas plasma with CO₂ laser sources and to reduce metallic vapor plume extension above the weld pool with solid-state laser.

A dynamic gas jet makes it possible to use Argon in all welding configurations, even for the highest $\rm CO_2$ laser power (up to 12 kW). This results in an optimal laser-beam energy transfer and a high weld quality.

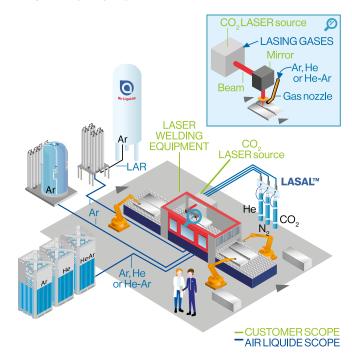
Applicable Industries

LASER NOZZLE-JET is ideal for manufacturers that extensively use laser for linear welds, such as automotive and tube manufacturers.

- Tailored blanks for Automotive industry.
- Tube and profile manufacturing.
- Short tube length (chimney, exhaust systems, etc).
- Continuous tube welding (heat exchanger, chemical and oil & gas piping, furniture).
- Structural pipes.

Special Features

The shielding gas distribution nozzle is a key operational component which has a direct effect on the efficiency of the laser welding process. A dynamic blowing of gas plasma allows the use of Argon in all welding configurations resulting in cost savings and quality improvement.



LASER NOZZLE-JET is designed with a massive brass block equipped with two gas outputs:

- The main gas output prevents gas plasma and plume formation while also reducing fumes and spatter emissions.
- The second gas output is shielding the weld bead from air contamination resulting in an improvement of the weld quality.

LASER NOZZLE-JET includes a setup finger device to easily position the nozzle in regards to the laser beam focus point. In addition to **LASER NOZZLE-JET**, a XYZ positioning device is proposed.

Model Range

LASER NOZZLE-JET has only one version as it can be adapted to all laser sources.

Technical Data

LASER NOZZLE-JET	
Size – L x W x H (mm)	64 x 157 x 137
Nominal Ar flow rate (Nl/min)	40
Weight (g)	970

Related Offer

LASER NOZZLE-JET is part of our **Nexelia for Laser Welding** solution, which is designed and tailored to meet your specific needs. This comprehensive offer combines the best of Air Liquide's gases, application technologies and expert support. As with all solutions under the **Nexelia** label, we work closely with you to pre-define a concrete set of results, and we commit to delivering them.

E-mail:application.equipment@airliquide.com

