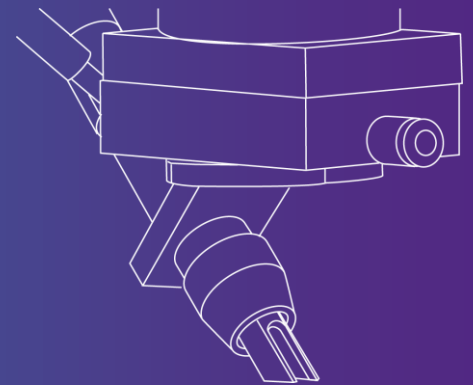


LASER NOZZLE-SHIELD

- IMPROVES SHIELDING GAS DISTRIBUTION
- STRONGLY LIMITS WELD POOL CONTAMINATION FROM AIR



The Concept

LASER NOZZLE-SHIELD is an easy-to-use gas nozzle designed by Air Liquide to optimize gas flow distribution. It results in a significant decrease of air contaminants such as O₂ and H₂O in the weld pool. It is compatible with all laser welding processes and gases, including argon, helium or mixtures.

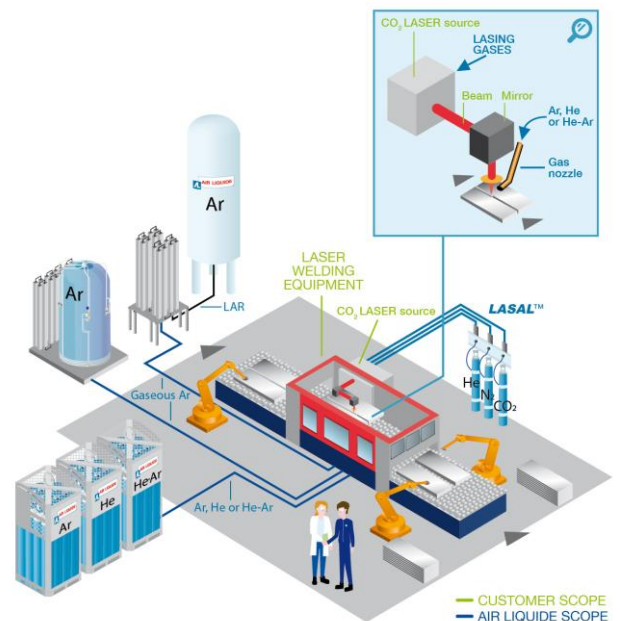
Applicable Industries

LASER NOZZLE-SHIELD is ideal for manufacturers that use laser welding:

- Automotive
- Mechanical parts
- Furniture
- Shipyards
- Pipes

Special Features

The shielding gas distribution nozzle is a key operational component, which has a direct effect on the efficiency of the CO₂ and solid-state laser welding process. Poor equipment design or adjustment can cause air inlets in and around the interaction zone, resulting in welding defects or weld bead oxidation.



Designed for laser welding with all types of sources, LASER NOZZLE-SHIELD improves shielding gas distribution in the interaction zone. This solution contains gas jet dispersion at the nozzle's end, achieving the highest possible laminar flow above the weld pool.

LASER NOZZLE-SHIELD is composed of a cooled brass body equipped with a slotted end whose size and angle are optimized for shielding efficiency. Spare parts for the slotted end are available.

In addition to LASER NOZZLE-SHIELD, a XYZ positioning device is proposed.

Model Ranges

THE LASER NOZZLE-SHIELD has only one version as it can be adapted to all laser configurations.

Technical Data

LASER NOZZLE-SHIELD	
Size – L x W x H (mm)	95 x 56 x 97
Nominal Ar flow rate (NI/min)	15 to 25
Weight (g)	472

Related Offer

LASER NOZZLE-SHIELD 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.

Contact Us

Air Liquide Standard Application Equipment
11, rue de la Croix Blanche
78354 Jouy-en-Josas
France

Phone: +33 (0)1 39 07 62 55
Fax: +33 (0)1 39 07 65 53
E-mail: application.equipment@airliquide.com

www.airliquide.com