

Extraction welding torch system for automated welding

## **Up to 95 percent less fumes due to direct extraction**

HAIGER, October 2022 – The requirements for occupational health and safety measures and safety technology are also continuously increasing in welding technology. The Technical Regulations for Hazardous Substances (TRGS) require welding fumes and harmful substances to be extracted at the point of origin in order to comply with the workplace limit values (AGW) for hazardous substances. Efficient solutions for welding fume extraction are necessary to protect employees from harmful welding fumes. The extraction welding torch system for automated welding offers a safe and effective extraction of welding fumes directly at the source. Up to 95 percent of the fume is eliminated directly during welding at the point of origin near the arc. The employees benefit from clean air and a better working environment.

### **Reduced investment volume with low operating costs**

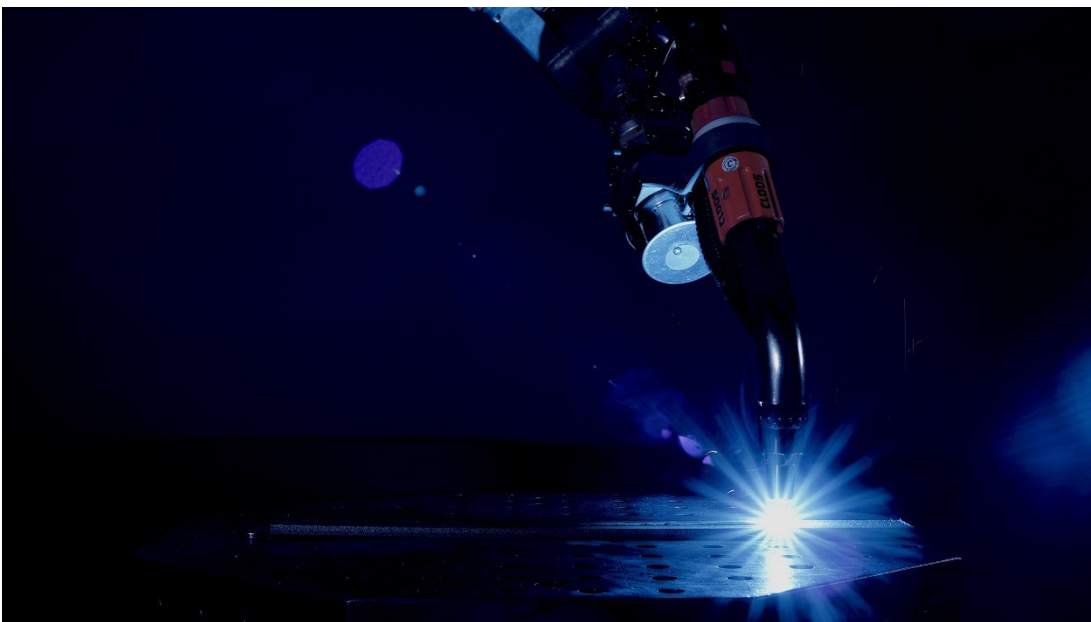
The measures required for collecting, extracting and filtering the flue gases in robotic systems are often associated with great effort. Large collection hoods with curtains, complex pipe systems and a large filter unit are necessary to extract and clean the polluted air. When extracting directly at the welding torch, the volume of polluted air is much smaller. By using the extraction welding torch system, users have to invest significantly less in extraction technology, air ducting system and filter device – with the same effect. A flexible hose with a small diameter replaces the complex pipe system for discharging the contaminated air to the filter unit. Due to the smaller volume of contaminated air, a smaller filter unit is necessary. Another advantage: Due to the optimised energy efficiency as well as the minimised effort for cleaning and replacement of the filter components, the operating costs are considerably reduced.

### **Easy retrofit**

The available geometries of the extraction welding torches correspond to the geometries of the standard welding torches in use. An extensive correction of the robot welding programs is not required. This means that existing robot systems can be retrofitted with the extraction welding torch system without great effort.



**Photo 1:** CLOOS now also offers an extraction welding torch system for automated welding.



**Photo 2:** The system extracts up to 95 percent of the welding fumes directly at the source.

**CLOOS Welding technology:  
Robot and welding technology from a single source**

Since 1919, Carl Cloos Schweisstechnik GmbH has been one of the leading companies in welding technology. More than 900 employees all over the world realise production solutions in welding and robot technology for industries such as construction machinery, railway vehicles, automotive and agricultural industry. The modern CLOOS welding power sources of the QINEO series are available for a multitude of welding processes. With the QIROX robots, positioners and special purpose machines CLOOS develops and manufactures automated welding systems meeting the specific requirements of the customers. The special strength of CLOOS is the widely spread competence. Because – from the welding technology, robot mechanics and controller to positioners, software and sensors – CLOOS supplies everything from a single source.

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