

**PURE  
STREAM**



**PURE STREAM**  
SOLUTIONS FOR REDUCING FUME EMISSION

[www.lincolnelectriceurope.com](http://www.lincolnelectriceurope.com)

**LINCOLN<sup>®</sup>**  
**ELECTRIC**  
THE WELDING EXPERTS<sup>®</sup>

# SOLUTIONS FOR REDUCING FUME EMISSION

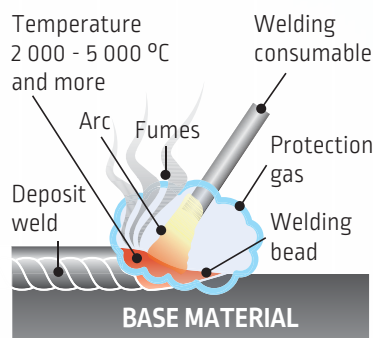


**PURE STREAM** is not only a customized offer but also an initiative to reduce the exposure of welding fumes to the welders.



## WHERE ARE THE FUMES COMING FROM?

Welding fumes are essentially coming from the consumables as well as the type of mode transfer and the welding process.



Welding consumables  
Welding process  
Arc transfer



Welding arc temperature  
between 2 500 - 5 000 °C  
and more

Metallic vapors

Decreasing temperature

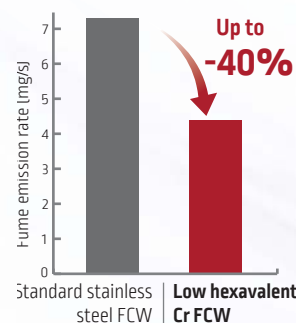
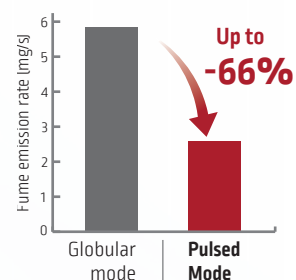
Condensation + Oxidation

Creation of particles

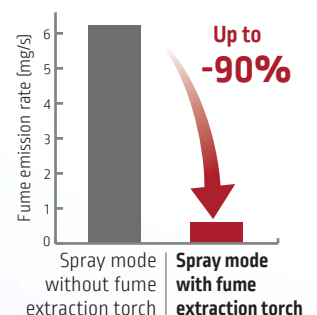
## WHY ARE WELDING FUMES BECOMING A MAJOR ISSUE AT WELDING WORKSHOPS?

National regulations for each country **require Permissible Exposure Limits (PEL)** for fume emission and also for some elements considered as dangerous for welders' health.

For example: in France, PEL for fume emission is fixed at **5 mg/m<sup>3</sup>**.



## FUME EMISSION LEVELS (MG/S)







## IN WHICH WAY IS PURE STREAM THE BEST SOLUTION FOR ME?

When a manufacturing company is looking for solutions to limit the exposure of welding fumes to its welders, it might be necessary to reconsider some elements in the production process.

### Which questions need to be answered?

- Am I ready to change welding parameters?
- Am I ready to change welding process?
- Am I ready to change welding consumables?
- Am I ready to implement a fume extraction solution?

**PURE STREAM** is the solution that corresponds to the answers above, and is therefore by definition the most adequate solution adapted to your specific situation.

## WHO CAN HELP ME TO FIND A SOLUTION FOR REDUCING THE EXPOSURE OF WELDING FUMES TO MY WELDERS?

Lincoln Electric, a **leader in developing and producing welding equipment and consumables**, has the right expertise to help you to choose **the most effective solutions for reducing the potential exposure of welders to welding fumes in your workshops.**

Lincoln Electric is **YOUR** partner in weld fume control with the **PURE STREAM** solution.



*The operation of welding fume control equipment is affected by various factors including proper use and positioning of the equipment, maintenance of the equipment and the specific welding procedure and application involved. Worker exposure level should be checked upon installation and periodically thereafter to be certain it is within applicable PEL and ACGIH TLV limits.*

## BEING PRESENT LOCALLY MAKES US MORE AWARE GLOBALLY



**2.6**  
BILLION USD REVENUE

**160**  
ACTIVE IN 160  
COUNTRIES  
WORLDWIDE

**11 000**  
EMPLOYEES WORLDWIDE

**120**  
YEARS OF EXPERIENCE

### CUSTOMER ASSISTANCE POLICY

The business of The Lincoln Electric Company® is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

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Subject to Change – This information is accurate to the best of our knowledge at the time of printing. Please refer to [www.lincolnelectric.com](http://www.lincolnelectric.com) for any updated information.



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