CASE STUDY

WELDING FUME EXTRACTION OPERATOR PROTECTION

BOILERMAKING WORKSHOP



ISSUE :

In a shipbuilding company, and especially in the boiler workshop, operators can be exposed to welding fumes released at their workstation.

NEU

As part of the redevelopment of its boiler making area, this company wanted to install welding fume extraction systems with source capture on its 2 workstations.

The objective of this installation was to protect the operators who work in these areas, by limiting their exposure to welding fumes.

Generated by welding operations, these fumes can be very dangerous for the health of the operators. They are classified as possible carcinogenic by the International Agency for Research on Cancer and can cause neurological and pulmonary damage.

Specialist in air treatment in the industrial environment, NEU-JKF has been able to meet this demand and propose an offer well suited to this activity, in accordance with the CARSAT (French organisation) regulations in force and following the INRS (French organisation) recommendations in this field.

SOLUTION :

2 fume collection points with adjustable suction arms, have been installed in boiler workshop, as close as possible to the release zones to capture the fumes from the steel and stainless steel welding.

As welding operations take place on large parts, it was necessary to provide a solution that could easily be adjustable to the emission source. The swivel suction arm can then be rotated through 360°.

In order to increase the area of use of the equipment and not clutter up the immediate area all around, the arms have been equipped with a 3m extension and a pivot point.

Each arm has its own fan. The air sucked in on each arm is directed to a main collector made of galvanised spiral duct and connected to a NYLAIR® helicoidal fan. This fan exhausts the fumes outside the premises.

This installation complies with the ventilation principles recommended by the INRS and implements eco-friendly technical solutions. Particularly adapted to the layout of the work area, it also offers better ergonomics for workstation and more comfort for the operators.

