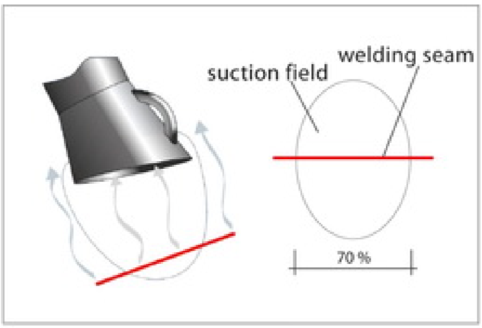
THE OPTIMUM EXHAUST HOOD FOR OPTIMUM COLLECTION

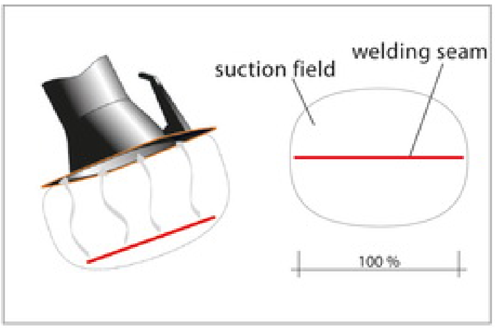
Posted on June 2, 2015 by Christian Wopen

Extraction systems should making working on pieces easier for welders. A correctly designed exhaust hood helps effectively secure occupational safety.

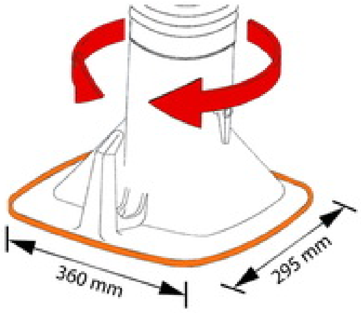
The best extraction performance and the best filter technology are useless if the welding fumes do not find their way to the filter. That’s not the only reason the exhaust hood plays a fundamental role in extraction and filter technology. A correctly designed exhaust hood also contributes to the tendency for welders to increasingly utilize extraction and filter technology correctly. Often these technologies end up interfering with the work welders are doing more than helping them.



conventional, oval exhaust hood



exhaust hood with flangeshaped overlep



In order to collect as much welding fumes as possible, exhaust hoods should meet the following criteria:

- Simple tracking ability increases the likelihood that the breathing zone never enters the fume funnel.
- For this purpose, it should be a one-handed, 360-degree swiveling exhaust hood with a throttle cover.
- The suction arms should be self-supporting in the position set by the welder so he can concentrate fully on the workpiece.
- A flange-shaped cover on the sides prevents suctioning air that does not belong in the funnel. In this way the hood achieves up to 40 percent higher collection range over a simple oval hood.
- The flange-shaped exhaust hood should be positioned 100 percent along the welding seam. This ensures a minimum amount of back-tracking of the suction arm.
- An integrated light lets the welder use the hood to go back and check his workpiece regularly.

Exhaust hoods are used for low-vacuum spot extractions. They are the most widely employed in practice, as opposed to burner integrated systems or funnel- or slit-shaped high-vacuum point extraction methods.