

CE-marking of Arc Welding Equipment in Europe

Since 01.01.1996 the European directives, legislation and harmonized standards have obliged all manufacturers and distributors/importers of arc welding equipment to make sure that the equipment that they manufacture and/or sell comply with at least the following:

- 1973/23/EEC (LVD)
- 1989/336/EEC (EMC)

The Low Voltage Directive (LVD) defines the compliance with several health, safety and technical requirements, such as:

- isolation of transformers (risk of electric shock)
- accessibility of live parts (risk of electric shock)
- thermal protection and duty cycles (10 minutes in 40 degrees C)
- safety in case of a malfunction in the equipment
- mechanical safety and durability

Information related to these issues has to be clearly available on **the rating plate** of the equipment and in the relevant documentation (manuals etc.).

The Electromagnetic Compatibility Directive (EMC) defines the effects of electromagnetic emissions and immunity. This means in practise that:

- arc welding equipment shall not emit electromagnetic disturbances, potentially causing malfunctions in other types of equipment (e.g. elevators, cranes, power tools, information and telecommunication equipment) that could lead to serious consequences
- arc welding equipment shall be resistant to electromagnetic disturbances emitted by other types of equipment or coming from the mains.

The fulfilment of the above mentioned criteria is indicated with a CE-marking that is attached to the equipment. However, **the CE-marking does not guarantee that the equipment has been tested by any neutral third party laboratory or even the manufacturer**. This, unlike many consumers and industrial buyers may assume, is the current situation in Europe. **The CE-marking is only a statement made by the manufacturer or the distributor/importer.**

When purchasing arc welding equipment, it is indispensable to seriously consider these issues and to evaluate the trustworthiness of the manufacturer and distributor/importer of the equipment. In addition to the above mentioned health, safety and technical issues also the reliability in use and the true welding performance can vary a lot.

Abusive use of the CE-marking is subject to prosecution.

For more information: <http://www.european-welding.org/>
<http://www.iec.ch/>
<http://www.cenelec.org/>