

CENELEC/TC or SC TC 26	Secretariat Austria	Date 2019-02-10
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*Please ensure this form is annexed to the TC Report to the CENELEC Technical Board if it has been prepared during a meeting, or sent to CCMC promptly after its contents have been agreed by the Committee by correspondence.*

**TC or SC title:** Electric welding

## **A Background**

To prepare standards for electrical safety, EMC and EMF matters related to the construction, installation and use of equipment for electric welding and allied processes in both normal and adverse welding environments, taking into account all safety aspects for protection against electrical and mechanical hazards for professional and non professional use and all aspects to protect the environment. All electric welding processes are covered except electromagnetic processing

## **B Business Environment**

### **B.1 General**

- a) Strong competition between the manufacturers worldwide.
- b) The input of the experts from CEN and CLC will result in standards that will be accepted by both organisations and will normally become harmonised European Standards as basis for CE-marking.
- c) Cooperation between CISPR/B and experts from CENELEC TC26 and TC 210, lead to consideration of existing problems and results in 60974-10 Edition 2 and Edition 5 of CISPR 11.

### **B.2 Market demand**

- Members: manufacturers of equipment, users and authorities, e.g. shipyards, nuclear plants, car and other industries, they are represented on national basis through national delegates.
- Wide use increasing; competing standards decreasing.
- Need for development, see projects.
- Because of the principle of arc and resistance welding, there is a need for specific requirements, e.g. EMC and EMF standards.
- Based of the requirements of the Energy Efficiency Directive there will be a need to adopt standards for arc welding equipment.

### **B.3 Trends in technology**

Process controlled equipment to optimize the weld quality and energy efficiency. Less costly but reliable equipment. Preprogrammed or program-selection desired. More automation applied.

### **B.4 Market trends**

Less expensive but safe equipment. Preprogrammed or programm-selection desired. More automation applied.

### **B.5 Ecological environment**

- Increasing use of computer controlled equipment will improve the welding process and result in high quality and less waste output.
- Fumes and spatter will be reduced to a minimum.
- Energy consumption will decrease by a rise of work efficiency.
- In addition work safety and health conditions will be highly improved.

## B.6 Involvement of societal stakeholders

Societal stakeholders (e.g. health and safety organisation, certification bodies, scientific organisation) are represented by members of the TC.

## B.7 Involvement of SMEs

SME's are involved via NC's.

## C System approach aspects

TC26 is to seek cooperation and contact with other TC for better alignment of products and standards.

System committees	CEN/TC121 SC9	Health and safety to welding and allied processes
Other committees	CISPR B	Interference relating to industrial, scientific and medical radio-frequency apparatus, to other (heavy) industrial equipment, to overhead power lines, to high voltage equipment and to electric traction
	IEC/TC 77A	EMC - Low frequency phenomena
	IEC/TC 26	Electric welding
	ISO/TC44 SC6	Resistance welding and allied mechanical joining
	ISO/TC44 SC9	Health and safety to welding and allied processes
	ISO/TC44 SC10	Quality management in the field of welding
	IIW	International Institute of welding
	ETSI	European Telecommunications Standards Institute

## D Objectives and strategies (3 to 5 years)

TC26 is to improve those sections of its standards, which deal with

- safety of laymen
- energy efficiency
- standardized interfaces
- EMC matters
- EMF matters

This can be done by forming WGs and delegate the task to them.

## E Action plan

To group new teams to fulfil action as listed under D.

To agree on a time schedule and to check it at official meetings.

## F Useful links to CENELEC web site

TC home page giving access to Membership, TC/SC Officers, Scope, Publications, Work programme [password-protected area].

[https://www.cenelec.eu/dyn/www/f?p=104:7:253413957454801:::FSP\\_ORG\\_ID,FSP\\_LANG\\_ID:2558800,25](https://www.cenelec.eu/dyn/www/f?p=104:7:253413957454801:::FSP_ORG_ID,FSP_LANG_ID:2558800,25)

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