

SCHEDULES

SCHEDULE 1

Regulation 4

Ecodesign requirements for welding equipment

Interpretation

1. In this Schedule and Schedule 2—

“control panel” means an overall operating interface, containing controls and indicators, between the user and the welding equipment;

“electricity supply cable” means an electric energy supply cable meeting the performance and safety requirements of internationally recognised welding cable standards;

“equipment housing” means a casing intended to protect the product from the environment, including ambient humidity and possible shock impacts;

“equivalent model” means a model which has the same technical characteristics relevant for the technical information to be provided, but which is placed on the market or put into service by the same manufacturer or authorised representative or importer as another model with a different model identifier;

“fan” means a rotary bladed machine used to maintain a continuous flow of gas, typically air, passing through it and acts for instance as the internal cooling system for the power source;

“gas supply hose” means a supply hose specifically designed for supply of fuel gases (such as acetylene), compressed air and shielding gases used in welding, normally consisting of a tube and a protective cover, often specific to the gas type used, and sometimes to the operating conditions;

“gas supply regulator” means a device which reduces the higher pressure of the supplied compressed gases to the lower pressure that can be safely used in the welding equipment, often equipped with a metering valve or flowmeter to measure or control gas flow;

“idle state” means the operating state in which the power is switched on and the welding circuit is not energised;

“idle state power consumption” means the power demand, in watts, in idle state;

“model identifier” means the code, usually alphanumeric, which distinguishes a specific product model from other models with the same trade mark or the same manufacturer’s, authorised representative’s or importer’s name;

“power source” means a device that, for the purpose of powering welding equipment—

- (a) utilises alternating current (“AC”) to either power one or more AC power outputs, or
- (b) convert AC to one or more direct current (“DC”) power outputs;

“power source efficiency” means the ratio, expressed in a percentage, of the output power at standardised welding conditions and standardised welding load voltages, to the highest power consumption of the power source;

“professional repairer” means a person who provides services of repair and professional maintenance for welding equipment;

“spare part” means a separate part that can replace a part with the same or similar function in welding equipment;

“welding torch” means a device which delivers the welding current to the electrode, which may include transferring the current to a consumable electrode, where used, and which also delivers the shielding gas, where used, to the electric arc area;

“welding wire drive” means a device, used to feed welding wire or filler material, that may be of the type of push, pull or a push-pull combination.

Energy efficiency requirements

2. From 1 January 2023—

- (a) the power source efficiency of welding equipment must not be lower than the values set out in column 2 of Table 1; and
- (b) the idle state power consumption of welding equipment must not exceed the values set out in column 3 of Table 1.

Table 1

Power source efficiency and idle state power consumption

	<i>Minimum power source efficiency</i>	<i>Maximum idle state power consumption</i>
Welding equipment powered by three-phase power sources with DC output	85 per cent	50W
Welding equipment powered by single-phase power sources with DC output	80 per cent	50W
Welding equipment powered by single-phase and three phase power sources with AC output	80 per cent	50W

Resource efficiency requirements

3.—(1) Welding equipment must meet the following requirements.

Availability of spare parts

(2) Manufacturers, authorised representatives or importers of welding equipment must make available to professional repairers the following spare parts for a minimum period of 10 years after the production of the last unit of a welding equipment model—

- (a) batteries;
- (b) control panels;
- (c) electricity supply cables;
- (d) equipment housing;
- (e) fans;
- (f) gas supply hoses;
- (g) gas supply regulators;
- (h) power sources;
- (i) software and firmware including reset software.

- (j) welding torches;
 - (k) welding wire drives.
- (3) Manufacturers must ensure that spare parts can be replaced with the use of commonly available tools and without permanent damage to the equipment or the part.
- (4) The manufacturer, authorised representative or importer must—
- (a) no later than two years after the first unit of a model is placed on the market, publish the list of spare parts for that product and the procedure for ordering them on a website which is accessible to the public without charge; and
 - (b) ensure that the information referred to in paragraph (a) remains accessible throughout the period that the spare parts remain available.

Access to repair and maintenance information

(5) From no later than two years after the first unit of a model is placed on the market until the end of the period referred to in sub-paragraph (2), a manufacturer, authorised representative or importer of welding equipment must make repair and maintenance information available to professional repairers in accordance with paragraphs (6) to (10).

(6) The website of the manufacturer, authorised representative or importer must set out the process for professional repairers to register for access to repair and maintenance information.

(7) Before granting access to the information, manufacturers, authorised representatives or importers may require the professional repairer to demonstrate that—

- (a) the repairer has the technical expertise to repair and maintain welding equipment and complies with the Electricity at Work Regulations 1989⁽¹⁾;
- (b) the professional repairer is covered by insurance for liabilities resulting from its activities.

(8) The request for registration must be accepted or refused within 5 working days from the date of the request.

(9) Once registered, a professional repairer must be given access to requested repair and maintenance information within one working day of any request. The information may be provided for an equivalent model or model of the same family, if appropriate. The available repair and maintenance information must include—

- (a) component and diagnosis information (such as minimum and maximum theoretical values for measurement);
- (b) data records of reported failure incidents stored in the welding equipment (where applicable);
- (c) diagnostic fault and error codes (including manufacturer-specific codes where applicable);
- (d) a disassembly map or exploded view;
- (e) instructions for installation of relevant software and firmware including reset software;
- (f) a list of necessary repair and test equipment;
- (g) the unequivocal welding equipment identification information;
- (h) wiring and connection diagrams.

(10) Manufacturers, authorised representatives or importers may charge reasonable and proportionate fees for access to the repair and maintenance information or for receiving regular updates. A fee is reasonable if it does not discourage access by failing to take into account the extent to which the professional repairer uses the information.

(1) [S.I. 1989/635](#).

Maximum delivery time for spare parts

(11) Subject to sub-paragraph (12), during the period referred to in sub-paragraph (2), the manufacturer, importer or authorised representative must ensure delivery of spare parts for welding equipment to professional repairers within 15 working days of receiving an order.

(12) Sub-paragraph (11) does not apply to repairers who have not registered with the manufacturer, importer or authorised representative in accordance with sub-paragraph (6).

Information on the display of welding equipment

(13) Where a display is provided for a welding equipment, it must provide indication of the use of welding wire or filler material in grams per minute or equivalent standardised units of measurement.

Requirements for dismantling for material recovery and recycling

(14) Manufacturers must ensure that welding equipment is designed in such a way that the materials and components referred to in Annex 7 of the WEEE Directive can be removed with the use of commonly available tools.

Information requirements

4.—(1) Manufacturers, their authorised representatives or importers of welding equipment must provide the information specified in sub-paragraph (2) for each piece of equipment—

- (a) in instruction manuals for installers and end-users; and
- (b) for at least 10 years after the first unit of a model is placed on the market, on a website which is accessible to the public without charge.

(2) The information referred to in sub-paragraph (1) is—

- (a) idle state power consumption (in watts);
- (b) indicative shielding gas utilisation for representative welding schedules and programmes;
- (c) indicative welding wire or filler material utilisation for representative welding schedules and programmes,
- (d) information relevant to recycling and disposal at end-of-life;
- (e) a list of critical raw materials present in indicative amounts higher than 1 gram at component level, if any, and an indication of the component(s) in which these critical raw materials are present;
- (f) a list of equivalent models;
- (g) manufacturer's name, registered trade name and registered address at which they can be contacted;
- (h) power source efficiency (in per cent);
- (i) product model identifier;
- (j) product type.

(3) The year of manufacture must be provided on the rating plate of welding equipment.

(4) The instruction manuals referred to in sub-paragraph (1)(a) must be provided with the product when it is placed on the market.

Technical documentation requirements

5.—(1) The technical documentation file required for the conformity assessment of the product must comply with the following.

(2) Where the information in the technical documentation for a particular model has been obtained—

- (a) from a model that has the same technical characteristics relevant for the technical information to be provided but is produced by a different manufacturer;
- (b) by calculation on the basis of design or extrapolation from another model of the same or a different manufacturer; or
- (c) by both paragraphs (a) and (b);

the technical documentation must include the details of any such calculation and the assessment undertaken by the manufacturer to verify the accuracy of the calculation, and, where appropriate, the declaration of identity between the models of different manufacturers.

(3) The technical documentation must include a list of all equivalent models, including the model identifiers.