



Product application checklist

Please complete in BLOCK CAPITALS

Steam Boilers

Manufacturer/supplier name:

ETL licence number (if applicable):

Applicant's name:

Telephone number:

Product information

Product name:

Model number:

Please complete each section of this form based on your product's characteristics. Incomplete or incorrect data could affect the processing of your product application.

Each product application should be made on a separate form unless a product's design characteristics are common to all the products. In this instance a single application can be made for multiple products.

1. Product testing and certification

No Yes

Where type testing has been applied to demonstrate product performance please ensure that the information supplied is sufficient to demonstrate the performance of all the products for which applications are being made.

- 1.1 Does the product conform to the requirements of the The Pressure Equipment (Safety) Regulation 2016 in respect of its design, manufacture and testing procedures?
- 1.2 Does the product have an appropriate Conformity Assessment mark?
- 1.3 For products with a thermal input greater than or equal to 1MW, and less than 50MW, does the product comply with the minimum requirements as stated in Annex II of the Medium Combustion Plant Directive (EU) 2015/2193?
- 1.4 How was the product(s) performance tested? *(Please select one)*
 - a) Tested in the manufacturer's in-house laboratory, in accordance with a registered Quality Management System (i.e. 'self-tested')
 - b) Tested in the manufacturer's in-house laboratory, in accordance with a registered Quality Management System and a representative sample of the test data has been cross-checked and verified by an independent body (i.e. 'self-tested and verified or cross-checked by an independent body')
 - c) Tested in a laboratory either in house or on-site, witnessed by an independent body (i.e. 'witnessed testing')
 - d) Tested by an independent laboratory (i.e. 'independent testing')
 - e) Tested as part of on-site acceptance tests or field trials, because laboratory testing was not practical due to product size, or lack of a suitable laboratory
 - f) Representative testing

Please refer to the [ETL Testing Framework](#) for details of the requirements that must be satisfied for each of these product testing options.

1. Product testing and certification (continued)		No	Yes
1.5	<p>Has the product's net thermal efficiency been tested in accordance with the procedures set out in one of the following standards?</p> <p>(a) BS 845: Part 1: 1987</p> <p>(b) BS EN12953-11: 2003</p> <p><i>The standard test conditions for performance testing BS 845: Part 1: 1987 are: a maximum ambient air temperature of 25 degrees Centigrade and an excess combustion air level of no less than 15%.</i></p>		
1.6	<p>Which method has been used to test product performance: (select one).</p> <p>a) Method A: Separate testing of boilers and burners</p> <p>b) Method B: Integrated testing at full and part load</p> <p>c) Method C: Validated design calculations</p>		
1.7	<p>Where product testing has been done in accordance with a registered Quality Management System, what is its registration number?</p> <p>_____</p>		
1.8	<p>Where product testing has been witnessed by an independent body, what was the name of the witness? <i>(Please include contact details).</i></p> <p>_____</p>		
1.9	<p>Where a representative sample of the test data has been cross-checked and verified by an independent body:</p> <p>a) What is the name of the independent laboratory?</p> <p>_____</p> <p>b) What is the laboratory's registration number (where accredited)?</p> <p>_____</p>		
1.10	<p>Where products have been tested by an independent laboratory:</p> <p>a) What is the name of the independent laboratory?</p> <p>_____</p> <p>b) What is the laboratory's registration number (where accredited)?</p> <p>_____</p>		
1.11	<p>Is the application for: (please select one).</p> <p>a) A product submitted with individual performance test data (<i>go to 2</i>)</p> <p>b) A product with the same constructional design as other products where 'representative models' have been tested and are listed on the ETPL</p> <p>c) A product with the same constructional design as other products that are not yet on the ETPL, and where performance test data is being submitted for 'representative models' with this application</p>		

1. Product testing and certification (continued)	No	Yes
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1.12 If representative testing has been used what are the 'representative models'?

ETL Product ID number	Product name and model number

Where applications are being made for products of the same constructional design to be included on the Energy Technology Product List (ETPL), test data may be submitted for a single representative model provided that the maximum rated output of the products being applied for is not more than three times, or less than one third, the maximum rated output of the product tested. Where the range of rated outputs exceeds these limits, products should be grouped into size ranges that comply with these rules, and test data submitted for one representative model for each group.

2. Product type	N/A	No	Yes
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2.1 What type of fuel does your product use (please tick one):

- a) Gas
- b) Oil
- c) Dual fuelled (i.e. gas & oil fired)

2.2 Is the product a modular boiler?

A modular boiler is defined as an assembly of two or more similar (but not necessarily identical) modules, each with their own heat exchanger, burner, and control and safety devices. The assembly has common water feed and steam output connections, but the water flow to, and steam flow from each module is independently controlled.

2.3 Does the product use a pre-mixed burner or a forced draught burner (or burners)?

2.4 Where forced draft burners are used are automatic (electronic or pneumatic) air fuel ratio controls fitted?

2.5 Does the product automatically respond to changes in steam demand by modulating its output in a continuous manner across a minimum turndown ratio specified below without initiating a purge cycle?

Fuel type	Turndown ratio
Gas fired or dual fuelled	4:1
Oil fired	2.25:1

2.6 Does the product use burners that are listed on the ETL List?

ETL Product ID number	Product name and model number

2.7 Does the product have a thermal rating in excess of 400kW?

If no, proceed to section 3.

2.8 Does the product use a microprocessor based burner control system that continuously modulates burner output in response to measured boiler temperature or pressure values?

2.9 Where the product is gas fired or dual fuelled, is each forced draught fan operated by a variable speed motor controller (or variable speed drive) to operate each fan incorporated into the product that controls air flow rate to the burner and, where relevant, the fuel-air pre-mixer ?

2.10 Does the product use mechanical dampers to modulate air flow?

If no, proceed to section 2.11.

2.11 Are all mechanical air dampers operated by a precision servomotor that is controlled by a positional or flow based feedback mechanism that automatically adjusts its operation to correct for mechanical wear, valve stiction and hysteresis?

2.12 Does the product use control valves to modulate fuel flow?

If no, proceed to section 3.

2.13 Are all fuel control valves operated by a precision servomotor that is controlled by a positional or flow-based feedback mechanism that automatically adjusts its operation to correct for mechanical wear, valve stiction and hysteresis?

This requirement is not applicable to pneumatically operated modulating gas valves.

3. Product Performance **No** **Yes**

3.1 Does the product have a net thermal efficiency of at least 92.0% at 100% of its Maximum Continuous Rating (MCR)?

If Method A is being used to demonstrate product performance proceed to 4.

3.2 If the product is oil-fired, does it have a net thermal efficiency of at least 92.0% at 50% of its Maximum Continuous Rating (MCR)?

3.3 If the product is gas-fired or dual fuelled, does it have a net thermal efficiency of at least 92.0% at 30% of its Maximum Continuous Rating (MCR)?

3.4 Did you record the product’s operating pressure (bar) when the measured net thermal efficiency was recorded?

3.5 Did the product achieve the net thermal efficiencies described in points 3.1, 3.2 or 3.3 have an economiser installed when testing took place?

4. Summary of documents to be included

No	Yes
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Please send ONE copy of each of the following documents:

If the relevant information in support of the questions above is contained within a larger document, please indicate the location of the relevant information. Note that all documentation submitted must directly refer to the model numbers for which you are making this application. Documentation should be added to your [online application](#).

- a) A technical sales brochure or leaflet for the product clearly summarising:
- i) The key features of the product (ideally including photographs of the product's exterior)
 - ii) The product's operation (i.e. in-built functionality) and intended applications (i.e. usage)
 - iii) Any product selection options (including optional extras, alternative configurations etc.)

This documentation should contain sufficient detail to enable the assessor to confirm that the proposed entry on the ETPL is correct, and uniquely represents a single product of fixed design (as defined by the rules of the ETL Scheme). If the model names contain any 'wildcards' in respect of cosmetic variations please check with ETL Questions that this is permitted before submitting your application.

- b) A technical specification for the product, including:
- i) Details of the model numbers covered (including individual features of each model)
 - ii) The product's design ratings (electrical, mechanical, thermal, flow rates, energy use etc.)
 - iii) A description of how to install the product including connection/wiring diagrams. Where the product must be assembled, configured and/or commissioned on site before use, please include instructions

This documentation should contain sufficient detail to enable the assessor to confirm that each product entry on the ETPL has the design features specified in the eligibility criteria for that category of product. Please indicate on the checklist where information on specific design features is located in the documentation.

- c) Evidence that the product meets the performance criteria, including:
- i) Test reports showing product performance at the standard rating/test conditions
 - ii) Details of the test procedures/standards used to determine product performance
 - iii) A declaration certifying the accuracy of the test reports and confirming that:
 - The test facilities complied with the minimum specifications outlined in the test standard, and the required test conditions where applied during testing
 - All measurement equipment used in testing was calibrated by an accredited laboratory, or its calibration is otherwise traceable back to national standards
 - Appropriate quality assurance procedures have been used to verify or cross-check the accuracy and repeatability of the test procedures and test results
 - iv) Where type testing procedures were used to select representative models for testing, please provide a written explanation of the reasons why these models were chosen, and evidence that the products covered by the representative model(s) are variants of the same constructional design

Please note that summary test reports will only be accepted, where the accuracy of the test reports has been certified by a recognised independent body, or where two detailed test reports have been submitted per product range and per laboratory used.

Detailed test reports must always be submitted for acceptance tests or field trials.

Please refer to the [ETL Testing Framework](#) for further guidance on the submission of test results, and minimum information requirements.

Product performance specification data should be in line with ETL guidance note 13.

- d) A Declaration of Conformity with UK/EU Directives on product safety, including one of the following:
- i) An appropriate Conformity Assessment mark
 - ii) The Pressure Equipment (Safety) Regulations 2016
- e) Evidence that a quality assurance system/procedures is/are in place to:
- i) Control the specification, design, manufacturing and testing of the products

f) Signed application checklist

Please note that all product documentation provided must be written in, or translated into, English.

5. Declaration

I confirm that the information given above is correct to the best of my knowledge and that I have read and agree to the terms and conditions governing the management of the Energy Technology List. A copy of the terms and conditions can be found [here](#).

Signature: Date:

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