Guidance on the periodic examination of coffee-machine boilers

This fact sheet is designed to help you mitigate the risks associated with steam boilers used in coffee-machines.

Statutory obligations

The risks associated with the day-to-day operation of coffee-machines can usually be mitigated by complying with: the manufacturer’s instructions; the Management of Health and Safety at Work Regulations 1999, and the Provision and Use of Work Equipment Regulations 1998; but incorporated into most machines there is a steam boiler and this presents other specific risks, demand the same level of diligence.

The Pressure Systems Safety Regulations 2000 (PSSR) are designed to prevent serious injury resulting from: ‘the unintentional release of stored energy’ and ‘the scalding effects of steam.’ In addition to the general requirements of the above, the owner/user of every steam boiler is specifically required (by PSSR) to ensure that the boiler, including certain associated fittings, is periodically examined by a ‘competent person,’ in accordance with a suitable Written Scheme of Examination (WSE).

Whether the boiler is new or old, it is illegal to use a steam boiler not covered by a WSE, or before any specified examinations and tests have been fully completed.

How PSSR applies to coffee-machines

PSSR apply to all steam boilers utilised in coffee-machines that are ‘used or intended to be used at work,’ irrespective of size and pressure. Identifying these boilers, in the case of most horizontal multi-head coffee machines and under-counter (stand-alone) boilers should be self evident. To ascertain whether some of the smaller self-contained coffee-machines have a steam boiler fitted may require further scrutiny of manufacturer’s documentation. Look for the pressure gauge, which suggests a steam boiler exists therein.

The following definition of a coffee-machine steam boiler – sometimes called a café boiler – should assist with identification: ‘Any closed vessel used during the production of hot beverages for the purpose of generating, storing and supplying steam and hot water.’
How to comply with PSSR

For each duty-holder to gain a comprehensive understanding of their obligations, PSSR should be consulted. The owner/user’s responsibilities for a coffee-machine steam boiler may be summarised as, but not necessarily limited to, ensuring that:

• The boiler is ‘suitable for its intended purpose so as to prevent danger’

• Adequate information relating to the boiler is ‘made available to the user’

• The boiler installation ‘does not give rise to danger’

• The safe operating limit (maximum pressure) has been established

• An appropriate WSE has been drawn up and certified by a competent person (as defined in PSSR)

• The boiler is periodically prepared, examined and tested in accordance with the WSE

• The boiler is not operated beyond the date specified in the competent person’s last report

• Any repairs specified in the competent person’s report are suitably addressed

• Users are supplied with suitable operating and emergency instructions

• The boiler is suitably maintained ‘so as to prevent danger’

• Relevant records and documentation are retained, including the competent person’s last report.

How Zurich Engineering can help

Zurich Engineering can help users/owners of coffee-machine steam boilers to comply with PSSR by providing and certifying a WSE, carrying out the examinations specified in the WSE and issuing the resultant statutory reports. Typically adopting a 14 month periodicity, the examination comprises two distinct parts: firstly, a cold out-of-service examination, usually consisting of an internal and external examination; secondly, a hot in-service examination to check for leakage and to test the safety valve and other protective devices.

Technical expertise and advice regarding regulatory compliance is all part of the service.

Essential reading

Guidelines for the Examination of Electrically Heated Café Boilers: SAFed Pressure Guidelines (PSGB). Available at: http://safed.co.uk


For more information

Should you require any further guidance, please contact: Steve Mulligan, Senior Engineer, Zurich Engineering, 126 Hagley Road, Edgbaston, Birmingham B16 9PF

Tel: 07764-149009
Email: steven.mulligan@uk.zurich.com

Zurich Management Services Ltd
Registered in England and Wales no. 2741053.
Registered Office: The Zurich Centre, 3000 Parkway, Whiteley, Fareham, Hampshire, PO15 7JZ.

Communications may be monitored or recorded to improve our service and for security and regulatory purposes.

© Copyright – Zurich Insurance plc 2011. All rights reserved. Reproduction, adaptation, or translation without prior written permission is prohibited except as allowed under copyright laws.