

Site Inspections

Bennett Associates has been commissioned on several occasions to perform site inspections of support systems at Drax Power Station.

The objective of a Site Inspection is to establish that the existing support system is soundly engineered and fit for purpose.

The inspection is carried out on operational pipe supports and systems. Our engineer will establish the pipework geometry from existing drawings or by site observations and then investigate the security of each support. Such investigation includes loose bolts, standards of welding, loading of the supports, support alignment and conformity of the specified design.

A visual inspection of the plant is made to establish the condition of the supports, and a physical inspection to determine the details of the supports, their location, any restrictions to the pipework, and whether the correct load is being carried in hot and cold conditions.

During an inspection the engineer pays particular attention to structural steelwork, scantlings, condition of spring supports, sling rods, pipe clips or straps, shackle pins and any other attachments to load bearing components.

A performance survey comprises a cold and hot survey of the operational pipework to establish that the movement of the system is within the design parameters. Cold surveys are conducted during the course of the unit overhaul. Hot surveys are carried out when the unit is operating at full load and has been in operation through a minimum of two thermal cycles or eight weeks sustained operation.

The site inspection is completed by recording and reporting any observed defects that are present with recommendations to correct the defect. Minor faults can be repaired by a subcontractor under the supervision of our engineer. The engineer then records the final condition of all the systems, supports and steelwork and the conformity to design and standards. If supports do not fully comply with the standards, a 'fitness for purpose' assessment is made and recommendations for modification are submitted.

A data set for all the pipework systems is created or updated as required. This comprises all known data concerning the pipework systems and is amended as a consequence of the audits, inspections, surveys and design modifications performed.

Bennett Associates (originally founded in 1984) was acquired in 2008 by Atkins; bringing their proven technical expertise to the UK's leading engineering consultancy.

Atkins Ltd
Bennett House, Pleasley Road, Whiston, Rotherham, S60 4HQ, UK. Tel: +44 (0)1709 373782
www.bennettmg.co.uk

