

- Commissioning management
- Commissioning feasibility studies
- Commissioning test packs
- Commissioning test and balance (TAB)
- Ultrasonic flow readings
- System energy optimisation
- Fault finding & trouble shooting

KES TAB Commissioning is the core of our business activities and involves the provision of commissioning management, digital commissioning test-packs and TAB commissioning services for HVAC systems. All works carried out in line with latest revision of BSRIA, CIBSE and ASHRAE Guidelines and codes of practice.



King Environmental Services Limited

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TAB Commissioning

Ultrasonic flow readings

KES have the latest up to date panametrics equipment to verify flow volume in pipework where no flow measuring device is fitted. The ultrasonic flowmeter can also be used to log flow where peaks and troughs may appear in a system.

- Read and record flow on a range of pipework systems
- Eliminates costs for the installation of flow measuring devices and drain downs
- Facilitates accurate recording of flowrates prior to system up-grades
- Meter can be used on a range of pipe sizes starting from 15mm

System energy optimisation

KES have worked with a number of clients to improve energy consumption and operational efficiency of motors and heating and cooling loads by detailed effective commissioning. This is achieved by the effective operation of variable speed / volume control systems and the reduction of sectional or total room air change rates.

- Enables the client to review present operation of system
- Enables the client to add additional load onto system
- Reduces wear of equipment and filter change periods
- Reduces energy consumption and loading of primary and secondary equipment
- Enables system equipment and user points to operate more efficiently

Fault finding & trouble shooting

KES have particular effectiveness in this area due to our understanding of systems operations. In most instances the fault is identified quickly. In instances where a complex issue has been highlighted, KES will work with the project team ensuring tests are performed achieving effective conclusion.

- Enables specific system problems to be identified and addressed in isolation
- Improves operation of system as a whole
- Can improve production cycle times
- Eliminates specific system alarms

Commissioning management

The appointment of a KES commissioning management team early in the project has distinct advantages, achieving suitably commissioned systems in line with project completion dates.

- KES become the focal point for any commissioning related issues
- Frees up site construction teams to focus on the installation process
- Allows commissioning related problems to be identified early and dealt with without delay
- Communicate process and system requirements to the commissioning team

Commissioning feasibility studies

The commissioning feasibility studies would normally be carried out by the KES commissioning manager by reviewing specification documents and construction / design drawings. This can identify areas of difficulties with the present installation at commissioning stage.

- A review of the system control parameters
- A review of air & water balancing / automatic devices
- A review of the basis of design (BOD) and user requirement specifications(URS)
- Determines the accuracy and effectiveness of final commissioning.

Commissioning test packs

The generation of a commissioning test pack (CTP) ensures that the correct commissioning procedures are adhered to and the project team sign-off each system for both pre and post commissioning stages. The CTP's are generated digitally and a printed working copy is placed in main contractor's office for on-going inspection.

- Generated digitally in house by our technical authors
- Easily modified to suit specific client / project requirements
- Generated in line with IQ/OQ, CIBSE, ASHRAE and any on-site tagging system as required
- Allows for commissioning procedures to be signed off at pre-approval and final handover

Commissioning test and balance (TAB)

The hands-on commissioning procedure is the key to ensuring systems operate correctly throughout their use. KES ensure that this section of the work is carried out by suitably trained engineers.

- Ensures correct final operation of system
- Improves system energy efficiency and operational life
- Improves room comfort levels
- Works carried out in line with CIBSE, BSRIA & ASHRAE as required

