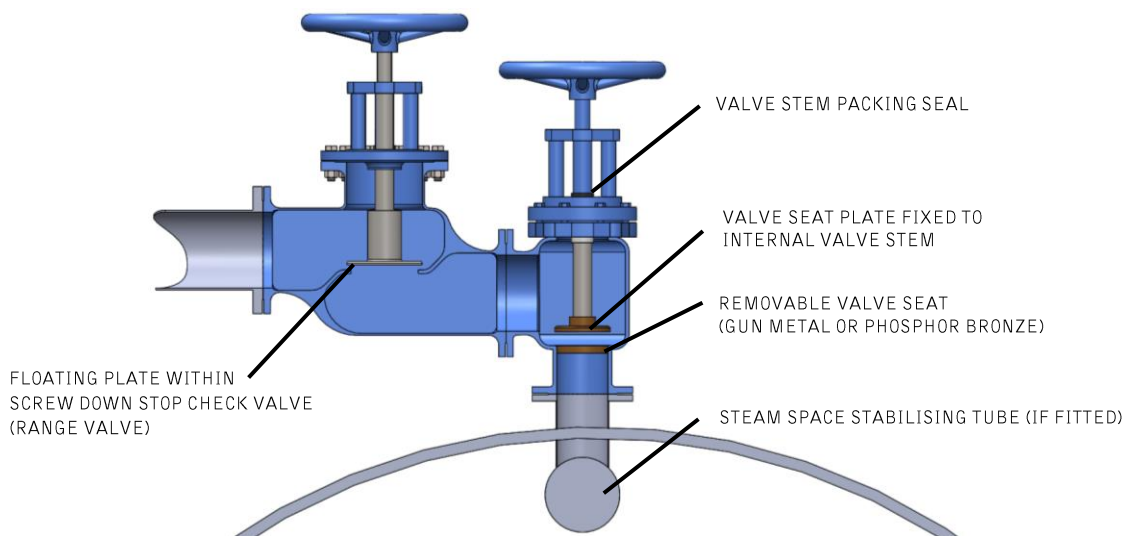


## BOILER VALVES AND EQUIPMENT

When operating the boiler crown valve to put the system into service, careful operation is essential to ensure that the minimum stresses and strains are placed on the valve and pipework. If the system downstream of the crown valve (header pipework) is cold, any introduction of steam into the system must be done sufficiently slowly so as to allow gradual expansion and heating and reduce the likelihood of thermal shock. It is therefore recommended that the following guidelines are followed:

- Following the completion of any works on the steam system downstream of the crown valve, and the closing off of any permits to work, the system components must be visually inspected prior to the introduction of any steam.
- Once satisfied that the system is safe to put into operation, all lock offs and signs should be removed and site procedures followed.
- **OPENING THE VALVE** should be done very slowly. **IMPORTANT NOTE:** The crown valve may be considered fully open or on line when only a ¼ open depending on the diameter of the supply pipe from the boiler. The phrase 'very slowly' should be considered to mean increments of half a turn with suitable periods in between (ideally 10 minutes between each increment). If the whole system is being brought up from cold, condensate drains must also be checked as the pipework begins to warm up. Gradual opening of the valve over a period of time will allow for gentle warming and show any system faults or leaks before the plant is subjected to full steam load and pressure.
- **CLOSING THE VALVE** should also be done slowly. It is possible that steam leaks from packing seals and valve stems may occur.
- It is **essential** that appropriate personal protective clothing is used when completing any operation on the boiler valves. Any additional valve lock offs should be applied in line with site procedures and every operation should be logged in the boiler-house log book.



### Notes:

These notes are intended for guidance only, and SAACKE Combustion Services Ltd exclude all liability for their accuracy or relevance to specific plant or sites who are responsible for carrying out regular risk assessments and introducing site specific procedures.

Contact SAACKE for upgrades, service, spare parts and training.

