7/20/2020



Boil-out Gages Practice and Policy











On new boiler installations it is common procedure initially to operate the boiler at a reduced pressure for a short time in order to cook out foreign materials (pipe joint compound, grease oil, flux, etc.) that remain in the drum or other pressurized parts of the system after the boiler has been constructed. During this boil-out period most of the suspended or dissolved debris is flushed out with blowdown discharges. However, a small amount of residue is unavoidably deposited as a film on all internal, wetted surfaces... including those of the water level gage. This type of scum layer is nearly impossible to remove by blowing down the gage, particularly if the gage glasses are protected by mica shields, as must be. in hiah pressure installations.

As a practical matter, it is more expedient to employ an inexpensive temporary level gage (which can be discarded or returned after the boil-out procedure), rather than to use and then rebuild the gage intended for regular service. For boil-out purposes on new water columns and direct-to-drum gage assemblies, Clark-Reliance provides temporary tubular glass gage at no charge under one of the following conditions:

1. When a Prismatic gage, Flat Glass gage or Simpliport gage, having 3/4" diameter end nipples, is supplied as part of a water column or direct-to-drum assembly, we will automatically furnish for temporary boil-out service the following parts at no charge:

1 pc. — ¾" OD tubular gage glass of proper length 2 pcs. — Rubber packing rings (*) 1 pc. — Low visibility tubular shield (so that low vision level in the tubular gage is same as in the gage that will be used for regular service).

At the conclusion of the boil-out procedure all the parts furnished for the Boil-out procedure should be discarded. When the gage having stainless steel nipples is then installed, it is essential that the appropriate (non-rubber) packing rings are used, to assure durable sealing of the stainless steel nipples.

2. When a gage having flanged connections is supplied as part of a water column or direct-to-drum assembly, and the boil-out pressure will not exceed 200 PSIG, we will furnish the following parts at no charge:

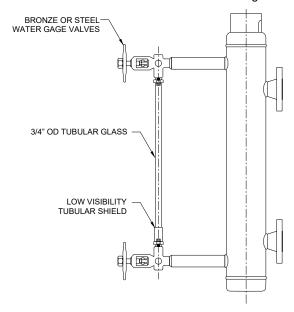
1 set — VB-991 gage valves with ½" NPT conn.
1 pc. — 5/8" OD tubular gage glass of proper length
1 pc. — Low visibility shield

The boil-out gage valves should be temporarily installed in the 1/2" NPT "Test" connections in the flanges of the regular water gage shut-off valves, which are on the water column or direct-to-drum assembly. This equipment may be discarded after the boil-out has been completed.

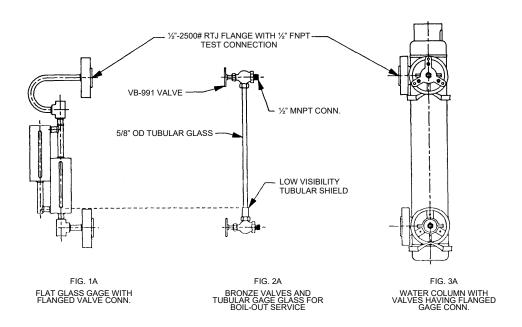
- 3. On installations where the boil-out pressures will exceed 200 PSIG, please consult Clark-Reliance for boil-out gage options.
- * Bronze valves are supplied with rubber packing rings. These are to be used for the boil-out procedure. Steel valves are supplied with packing cartridges and separate rubber packing rings (to be used for boil-out).



Illustrations that show how boil-out gage assemblies are to be used on Water Columns or Direct-to Drum Units having ¾" O.D. nipple connections



Illustrations that show how boil-out gage assemblies are to be used on Water Columns having flanged gage connections. The boil-out gage per Fig. 2A should be temporarily installed on the gage valves flanges per Fig. 3A, until the boil-out procedure is finished. Then the flanged gage per Fig. 1A should be installed for regular service.



REPLACEMENT PARTS WARNING

THE USE OF NON-ORIGINAL EQUIPMENT MANUFACTURER PARTS (SUCH AS GLASS, GASKETS, PROBES, MODULES, ETC.) WILL VOID THE AGENCY APPROVAL (FM, UL, CAS, CRN, ABS, ETC.) PRESSURE/TEMPERATURE RATING, AND WARRANTY OF THE EQUIPMENT. CLARK-RELIANCE REQUIRES THE USE OF OEM PARTS FOR ALL REPAIRS IN ON THIS PRODUCT IN ORDER TO MAINTAIN PLANT AND PERSONNEL SAFETY, AND RELIABLE OPERATION. VISIT WWW.PARTS.CLARK-RELIANCE.COM.





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