



YARWAY HARDSEAT-HARDSEAT UNIT-TANDEM™ BLOW-OFF VALVE SERVICE AND OPERATION MANUAL

How to operate and service hardseat-hardseat UNIT-TANDEM blow-off valves



INSTALLATION AND OPERATION

The Yarway hardseat-hardseat UNIT-TANDEM blow-off valve is designed so that the blowing valve, nearest to boiler, will have flow entering below seat. The blowing valve, installed next to boiler, should be opened last and closed first; the sealing valve, farthest from boiler, should be opened first, closed last. Both valves should be opened rapidly and fully to increase life of working parts; never blow down with valves partly open.

CONSTRUCTION DETAILS

One piece body

Hardseat inlet valve and hardseat discharge valve are mounted in one-piece forged steel block body.

Hardseat valves

Seat and disc design, with stellite sealing surfaces. Beveled end of steel disc has welded-in stellite facing and inlet and outlet nozzles have integral welded-in stellite seats. This stellite provides smooth hard-wearing surfaces at these important points. Lip on end of disc checks wire drawing and protects bearing faces against cutting action of blow-down.

All working parts of the unit tandem valve are readily removed through the tops of the Hardseat yokes, permitting easy maintenance and providing convenient access to the integral stellite seats in the body. After loosening gland and removing its split bushing, packing may be raised by jack action of stem. After breaking tack weld of yoke bushing, this piece is backed out and stem, packing, and disc can be removed through top of yoke.

CARE OF VALVES

Since these valves are typically used in severe service applications (e.g.-Boiler Blow-Down service, Boiler Drain service) they should be included in a regular preventive maintenance program. It is recommended that valves operated on a daily basis (blow-down) be serviced at least every six (6) months. Infrequently operated valves should be serviced every twelve (12) to eighteen (18) months.

Lubrication

Keep both valves well lubricated. Lubrication is important and stem threads should be oiled frequently; Yarway SV-650 (or equivalent) super-heat mineral oil is recommended.

Addition of packing

If it is necessary to add packing with boiler under pressure, it is recommended that the blowing valve (nearest to boiler) be tightly closed and the sealing (outside) valve be fully open.

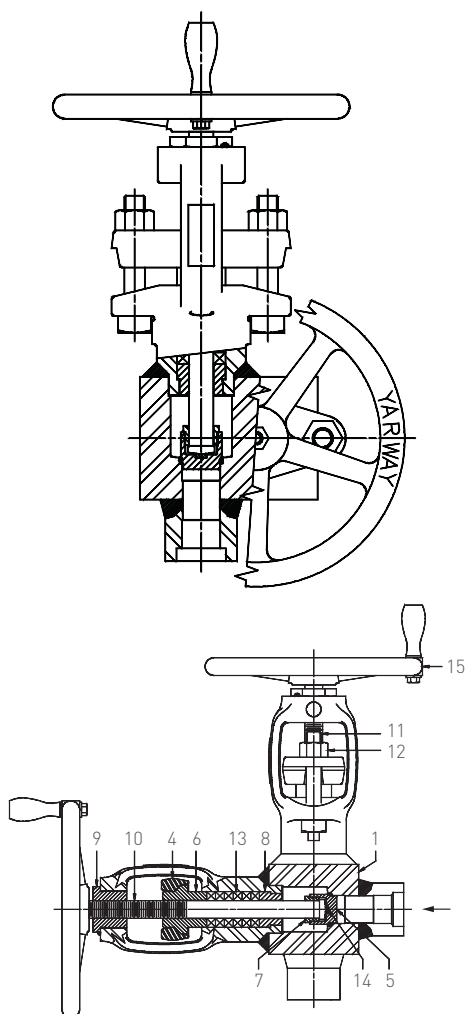
Inspection

Valves should be examined externally and internally. External examination involves opening the valve closest to the boiler while keeping the sealing valve closed. The complete external pressure boundary should be examined thoroughly for leaks. Subsequently, after the boiler is shut down, the inner valve (i.e. body and trim) should be examined for any deterioration. Chapter 11 of the second edition of the Instrument Society of America's Control Valve Handbook is recommended as a good source for information on valve maintenance and reconditioning practices.

WARNING

Hot discharge from this product may cause severe burns. Discharge must be piped away or directed so that persons in the vicinity are not endangered. This product must be isolated, vented and cool to the touch before repairing or inspecting.

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When ordering replacement parts, please use parts numbers and names shown in table, specify size and type of valve, figure number and operating pressure (see nameplate on valve body).

NOTE:

Any malfunction of this product must be reported to the service department. Repair made to the product by unauthorized personnel will void the warranty.

RIGHT TO KNOW LAWS AND OSHA STANDARD 29CFR (1910.1200)

Material safety data sheets on the following Yarway products: Valves, Steam Traps and Strainers.

The OSHA Hazard Communication Standard 29CFR 1910. 1200, states that the standard does not apply to "articles". The standard defines an article as:

"A manufactured item formed to a specific shape or design for a particular use which does not release or otherwise expose an employee to a hazardous chemical under normal conditions of use."

The above named products fall within this definition of an "article", no material safety data sheets are available or are required. Our product is manufactured as an "end product." If the product is a weld end the following applies.

WARNING

Materials used in manufacture of Yarway products are considered in a stable condition when shipped. However, under certain conditions purchasers could create potential hazardous conditions by their future operations.

CAUTION

Welding, cutting, burning, machining or grinding of this product can generate toxic dust and fumes of potentially hazardous ingredients. The dust or fumes can cause irritation of the respiratory tract, nose, throat, skin and eyes. It may cause temporary or permanent respiratory disease in a small percentage of exposed individuals. Use moderate ventilation when grinding or welding. Avoid breathing dust fumes or mist. Avoid prolonged skin contact with dust or mist. Maintain dust levels below OSHA and ACGIH levels. Use protective devices. Wash hands thoroughly after contact with dust before eating or smoking.

PARTS LIST

Item	Description
1	Body
4	Gland
5	Disc
6	Split gland bushing
7	Disc nut
8	Stuffing box bushing
9	Yoke bushing
10	Stem
11	Bolt
12	Hex nut
13	Packing
14	Disc insert
15	Handwheel

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