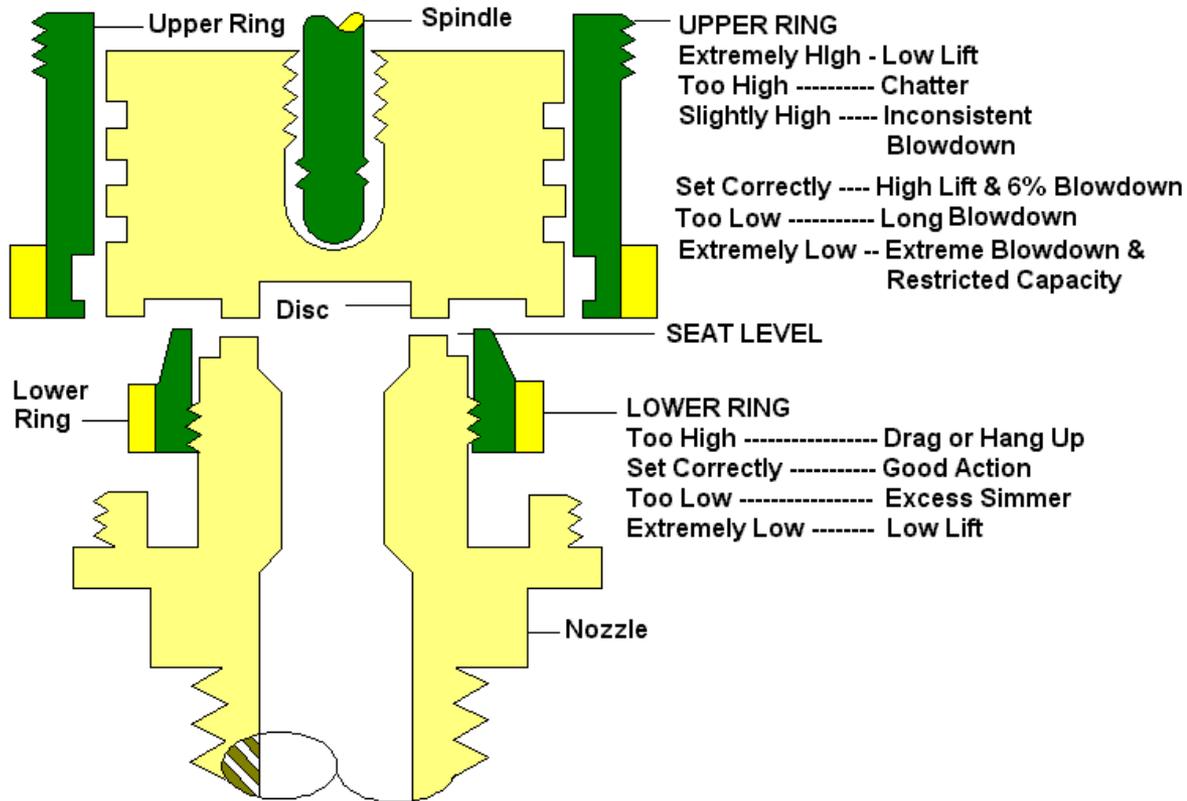


# Two Ring Design Ring Setting Chart



Raising the upper ring will decrease blowdown  
 Raising the lower ring will decrease simmer  
 Lowering the upper ring will increase blowdown  
 Lowering the lower ring will increase simmer



6.2.3 Blowdown Adjustment

Unless otherwise specified on the sales order, all valves shall be adjusted to the applicable blowdown indicated in Chart 3.

For adjustments of the guide ring and nozzle ring for proper valve performance, the following general rules can be followed as a guide:

- To increase Blowdown:                      Move guide ring to the left, lowering the ring.
- To decrease Blowdown:                      Move the guide ring to the right, raising the ring.
- To eliminate Simmer                              Move the nozzle ring to the right, raising the ring.
- To eliminate hang-Up on Close              Move the nozzle ring to the left, lowering the ring.
- To eliminate low lift;                              Move the guide ring to the left, lowering the ring.

For Style HL only, if ring adjustments fail to bring the blowdown to within acceptable limits, the blowdown adjusting screw can be tightened. The adjusting screw should be tightened no more than a quarter turn at a time until acceptable blowdown values are achieved or until the adjusting screw closes the cover vent completely.

6.2.4 Simmer (Warn)

Simmer is permitted within 1% of the established set pressure.

6.2.5 Final Test

After adjustments have been completed and the valve operation is satisfactory without flutter, chatter or other undesirable operational characteristics and the adjusting bolt and rings are locked in position, the valve shall be cycled a minimum of two (2) cycles to confirm that the valve operation is in conformance with the specified set pressure and blowdown.

Record actual settings on the Steam Valve Test Report.

6.3 Test Procedure B - Restricted Lift Test

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<b>SHEET NO. 9 OF 17</b>	



# ENGINEERING INSTRUCTIONS

TITLE: SETTING AND TESTING TYPES 1541 AND 1543  
METAL & TEFLON SEAT SAFETY VALVES

INST. NO. PT001

REV. : 15

DATE: 05/20/02

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3.3 RING ADJUSTMENTS - FOR PROPER OPERATION AND BLOWDOWN, THE FOLLOWING GENERAL RULES CAN BE FOLLOWED AS A GUIDE.

TO PREVENT CHOKING OF FLOW - THE UPPER RING SHOULD NOT BE ADJUSTED LOWER THAN INDICATED IN CHART 1. (READ \* NOTE AT BOTTOM OF CHART 1).

TO INCREASE BLOWDOWN - MOVE UPPER RING TO THE LEFT (THUS LOWERING RING).

TO DECREASE BLOWDOWN - MOVE UPPER RING TO THE RIGHT (THUS RAISING RING).

TO ELIMINATE SIMMER - MOVE LOWER RING TO THE RIGHT (THUS RAISING RING).

TO ELIMINATE HANG-UP - MOVE LOWER RING TO THE LEFT (THUS LOWERING RING).

3.4 BLOWDOWN ADJUSTMENT

SECTION I      STEAM                      CHART III (METAL SEAT VALVES ONLY)  
SECTION VIII   STEAM & AIR              CHART IV

AFTER ADJUSTMENT TIGHTEN ADJUSTING RING PIN SECURELY. MAKE SURE THE RING PIN DOES NOT BIND AGAINST THE RING. AFTER ADJUSTMENT OF THE COMPRESSION SCREW, THE LOCKNUT MUST BE TIGHTENED.

3.4.1 FOR ASME SECTION I VALVE WITHIN SET PRESSURE LIMITS OF THE TABLE BELOW MUST HAVE THE BLOWDOWN DEMONSTRATED AT THE MANUFACTURER'S TEST FACILITY.

VALVE TYPE & ORIFICE SIZE	MAXIMUM SET PRESSURE (PSIG)
1541/1543D, E, F & G	250
1541/1543 H	230
1541/1543 J	135
1541-3/1543-3 D, E, F & G	300
1541-3/1543-3 H	230
1541-3/1543 J	135