

## Venturi Orifice Steam Trap DSV Insert Replacement Instructions

1. Ensure that the necessary PPE is worn at all times.
2. Ensure steam isolation valve upstream and condensate isolating valve downstream of the DSV steam trap are isolated and that all residual pressure in the line has been released.
3. Once the line is depressurised, remove the trap cap of the DSV steam trap. (see Table 6.3 for spanner sizing).
4. Remove the secondary / top strainer and ensure that it is clear of any debris. If necessary rinse with water to clean strainer mesh.
5. Remove the insert from the trap body using a socket wrench (See Table 6.3 for spanner sizing).
6. Clean out any remaining gasket material or line scale from inside the trap body.
7. Apply a very small amount of anti-seize compound to the thread of the insert thread of the insert and fit new insert gasket. Ensure that orifice is not obstructed by anti-seize or other debris.
8. Screw in new insert and tighten to a maximum torque as shown in Table 6.4.
9. Refit secondary strainer/top strainer.
10. Apply a small amount of anti-seize compound to the thread of the top cap and refit cap tightening to the required torque stipulated in Table 6.4.
11. Inspect the steam line and, when safe to do so, proceed with commissioning of steam and condensate lines.

Table 6.3 Socket wrench / Spanner sizing

Model	Size	Insert	Top Cap	Bottom Cap
DSV	DN15	7mm	38mm	21mm
	DN20	7mm	38mm	21mm
	DN25	14mm	62mm	32mm
nHRi and SCi	DN40	24mm		
	DN50	27mm		

## Insert Unblocking Instructions for Venturi Orifice Steam Traps

If sludge has managed to get through the DSV dual strainers and blocked the orifice, the following instructions will help to clear this blockage and have the trap back to as good as new.

1. Ensure that the necessary PPE is worn at all times.
2. Ensure steam isolating valve upstream and condensate isolating valve downstream of the steam trap are isolated and that all residual pressure in the line has been released.
3. Once the line is depressurized, remove the top cap of the steam trap (see Table 6.3 for spanner sizing). If nHRi- or SCi model, remove the entire trap from the steam line.
4. In the case of the DSV steam trap, remove the secondary strainer and ensure that it is clear of any debris. If necessary rinse with water to clean strainer mesh.
5. Remove the insert from the trap body using a socket wrench (See Table 6.3 for spanner sizing).
6. Clean out any remaining gasket material or line scale from inside the trap body.
7. Using a welder nozzle cleaner unblock the orifice completely.
8. Apply a very small amount of anti-seize compound to the thread of the insert thread of the insert and fit new insert gasket. Ensure that orifice is not obstructed by anti-seize or other debris.
9. Screw in insert and tighten to a maximum torque (see Table 6.4 for maximum torque settings).
10. Refit secondary strainer/top strainer if removed previously.
11. Apply a small amount of anti-seize compound to the thread of the top cap and refit cap tightening to the required torque stipulated in Table 6.4.
12. Inspect the steam line and, when safe to do so, proceed with commissioning of steam and condensate lines.

Table 6.4 Recommended Tightening Torques

Model	Size	Insert	Top & Bottom Cap
DSV	DN15	10Nm	80Nm
	DN20	10Nm	80Nm
	DN25	20Nm	80Nm
NHRi	DN25	20Nm	
	DN40	35Nm	
	DN50	40Nm	
	DN80	40Nm	
SCi	DN40	35Nm	
	DN50	40Nm	