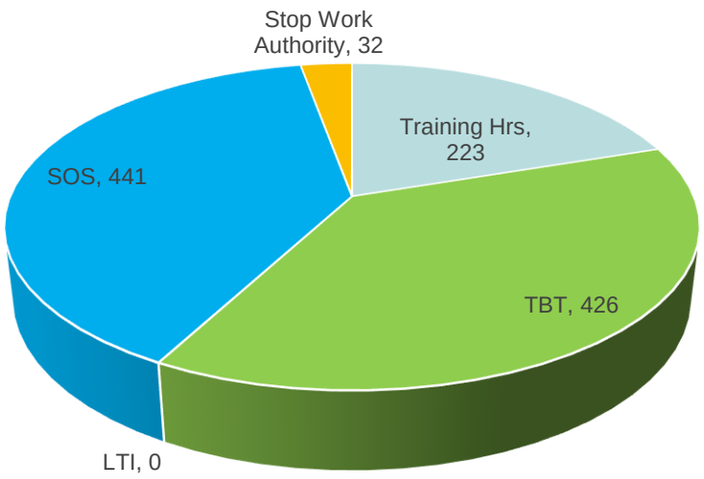
SPETCO

Feb HSE Bulletin 2020

HSE

HSE Statistics Report – Jan 20



Spetco Jan-20 Winners

Awards	Name	Remarks
Best Drivers of the Month	Barsoum Boulus 2196	WK
	Osama Selim 2409	WS
	Kamal Aabed 1794	NK
Best SOS	Moshlem Miah 2624	WK
	Joneben 2856	WS
	Anbu Manvial 2753	NK
	Saleh Aljaifs 2741	Logistics

Spetco HSE Motivational Program

*SOS- Safety Observation System

Steam Systems- Hazards & Prevention

1. Slips and falls

One of the biggest hazards of any steam system is the risk of injury to employees due to slip and fall hazards.

Prevention tips: Preventive maintenance of steam systems is one of the best ways to prevent slips and falls at a facility. When condensate is released into the atmosphere, it can quickly make the floor slick. Using ultrasound technology, inspectors can pinpoint small leaks before they would otherwise be visible to the naked eye for repairing aging assets.

Likewise, slip-resistant footwear can protect employees from hard-to-spot hazards in low-light environments.

Similarly, outlet valve connection shall be available at safe working platform instead of height / unsafe working platform.

2. Steam leaks

In addition to causing slipping hazards, steam leaks can lead to abnormally warm pipes and ambient temperatures, making the facility unsafe for workers. This problem is especially apparent in low-pressure steam systems where feedwater must be heated past the boiling point. Burns caused by steam can severely injure workers and reduce efficiency over the long term.

Prevention tips: Assuring steam traps are functional is one of the top ways to reduce the risk of dangerous leaks.

On top, suitable heat resistant PPEs shall be in use.

3. Ruptured pipes

A ruptured steam pipe is a serious problem with the potential to cause bodily harm and serious financial risk. When a steam trap fails in the closed position, it can cause condensate to back up, increasing pressure levels and causing water hammer. Poor maintenance of steam systems can also lead to pipe and valve corrosion, two more precursors to pipe rupture.

Prevention tips: Traps and valves should be monitored regularly for signs of anomalies. Ultrasonic technology spots leaks before they become a problem.

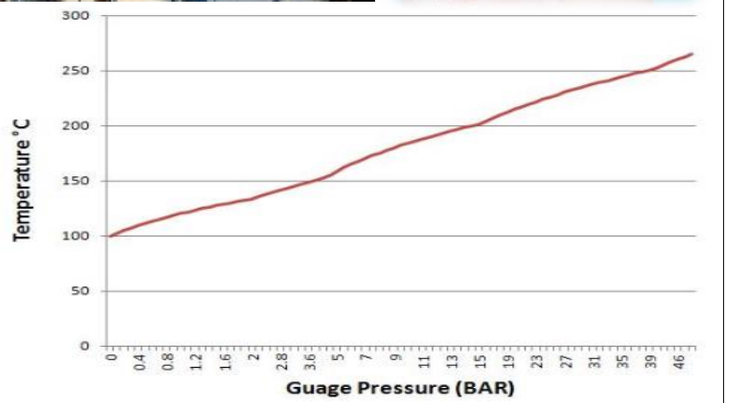
Fully open bleed valves, using reduced system pressure, to remove any remaining condensate. Do not "crack open" valves to avoid condensation-induced water hammer; the formation of a condensation-induced water slug can occur at very low condensate flow conditions.

4. Financial loss

If a steam system has never been inspected and isn't subject to a recurring maintenance program, upwards of 50 percent of the system's steam traps could be failed or blowing live steam. That unused energy can severely cut into a facility's operating costs.

Prevention tips: A annual inspection of a steam system can reduce trap and valve failures by half, and more frequent preventive maintenance will increase efficiency accordingly. Ultimately, the size of a facility and its access to resources will determine the optimal maintenance schedule.

Steam Pressure Vs Temperature



Gauge Pressure (Bar)	Temperature Degree Centigrade	Gauge Pressure (Bar)	Temperature Degree Centigrade
0	100	16	204.38
1	120.42	17	207.17
2	133.69	18	209.9
3	143.75	19	212.47
4	151.96	20	214.96
5	158.92	21	217.35
6	165.04	22	219.65
7	170.5	23	221.85
8	175.43	24	224.02
9	179.97	25	226.12
10	184.13	26	228.15
11	188.02	27	230.14
12	191.68	28	232.05
13	195.1	29	233.93
14	198.35	30	235.78
15	201.45	50	265.26