

YOUR WINTER STEAM SYSTEM CHECKLIST

ENSURING OPTIMAL PERFORMANCE OF YOUR STEAM SYSTEM

AS WINTER SETS IN, KEEPING YOUR STEAM SYSTEM EFFICIENT BECOMES PARAMOUNT

As the winter chill sets in, it's crucial for industries relying on steam systems to prepare for the challenges that colder temperatures bring. At Spirax Sarco we understand the importance of a well-maintained steam system to ensure efficiency, reliability, sustainability and safety during the winter months. We've therefore put together a comprehensive winter steam system checklist tailored for our users.

1

CONDENSATE MANAGEMENT

- ✓ Start by inspecting condensate return lines for any signs of leaks or blockages.
- ✓ Ensure that condensate pumps are operating smoothly and efficiently.
- ✓ Check pump receiver vents and overflows; when were the level controls and pumps last calibrated or serviced?
- ✓ Check the insulation on condensate return lines to prevent heat loss.
- ✓ Check for signs of excessive flash/plant steam emissions (sign of failed traps).

2

STEAM TRAPS INSPECTION

- ✓ Conduct a steam trap survey before winter.
- ✓ Repair failed-open traps causing steam loss.
- ✓ Repair blocked traps causing condensate backup to avoid freezing risk.
- ✓ Prioritise traps on outdoor distribution and steam applications.

3

PRESSURE AND TEMPERATURE CONTROLS

- ✓ Calibrate and test pressure and temperature controls to ensure they respond accurately.
- ✓ Check safety valves for proper operation, ensuring they're set to the correct pressure.
- ✓ Do the safety valves have the recommended drain points?
- ✓ Inspect pressure and temperature gauges for accuracy.

4

INSULATION AND HEAT TRACING

- ✓ Examine the insulation on pipes, valves and fittings to minimise heat loss and reduce the risk of any trapped condensate freezing.
- ✓ Ensure that heat tracing systems are operational and set to appropriate temperatures.
- ✓ Repair or replace any damaged insulation promptly.

5

WATER TREATMENT

- ✓ Check the effectiveness of water treatment chemicals and adjust dosage if necessary.
- ✓ Conduct a water analysis to ensure that the water quality meets the specified standards.
- ✓ Inspect and clean water strainers and filters.
- ✓ Service and calibrate dosing pumps.

6

INSTRUMENTATION AND CONTROLS

- ✓ Check the calibration of pressure, temperature and level instrumentation.
- ✓ Test the functionality of control valves and actuators.
- ✓ Check the performance of any advanced control systems in place.

7

PIPE AND VALVE INSPECTION

- ✓ Inspect pipes and valves for leaks, corrosion, erosion or damage.
- ✓ Lubricate valve stems and ensure that they open and close smoothly.
- ✓ Check for proper alignment and support of pipes to prevent stress on the system and prevent condensate from sitting inside any sagging pipework.

8

TRAINING AND EDUCATION

- ✓ Train steam system operators on best practices for winter optimisation.
- ✓ Stay informed about the latest advancements in steam system technology through Spirax Sarco's training programs.

BY IMPLEMENTING THESE MEASURES, OPERATORS CAN NOT ONLY MITIGATE ENERGY WASTAGE BUT ALSO CONTRIBUTE TO A MORE SUSTAINABLE AND COST-EFFECTIVE OPERATION OF THEIR STEAM SYSTEMS.

STAY WARM, STAY EFFICIENT. ARE YOU WINTER READY?



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