

15 June 2022

PEERLESS
BUFFALO

RE: STEAM TRAP SURVEY

SUMMARISED FINDINGS

On 26 May 2022, a steam trap survey was performed on 80 steam traps in your factory and on your main steam lines using software enabled ultrasonic steam trap testing and diagnostic equipment. The salient results are documented below:

Total number of traps surveyed	80
Total number of leaking traps found	18
Total steam loss from above [lb/year]	6,959,820
Total monetary loss [USD/year]	\$ 69,599

This is based on an operating time of 365 days per year and 24 hours per day, as well as a cost of steam of \$10/1000lb.

Steam trap failure results in:

- High steam loss equating to considerable financial losses
- Pressurisation of the condensate line putting back-pressure on the system, affecting all other working steam traps.
- Volume being occupied in condensate line by live steam, causing under sizing and “sluggish” performance
- Excessive CO₂ emissions due to extra boiler fuel being burnt to make up the wasted steam

PROPOSAL

A. REPLACE FAILED STEAM TRAPS ONLY

Size	QTY	DESCRIPTION	UNIT PRICE	TOTAL
½"	7	Delta DSV venturi steam traps screwed NPT	\$390	\$2,730
¾"	2	Delta DSV venturi steam traps screwed NPT	\$415	\$830
1"	7	Delta DSV venturi steam traps screwed NPT	\$570	\$3,990
1½"	1	Delta SCi venturi steam traps screwed NPT	\$1,250	\$1,250
2"	1	Delta SCi venturi steam traps screwed NPT	\$1,360	\$1,360
			TOTAL	\$10,160

PAYBACK = 1.75 months [$\$10,160$ (Cost of traps) \div $\$69,599$ (Steam wastage) \times 12 months]

This payback excludes any savings from water treatment, water savings, steam trap spares, maintenance, and improved efficiency of a working system, which will further add to the savings had.

B. REPLACE ALL STEAM TRAPS

Size	QTY	DESCRIPTION	UNIT PRICE	TOTAL
½"	31	Delta DSV venturi steam traps screwed NPT	\$390	\$12,090
¾"	10	Delta DSV venturi steam traps screwed NPT	\$415	\$4,150
1"	24	Delta DSV venturi steam traps screwed NPT	\$570	\$13,680
1½"	3	Delta SCi venturi steam traps screwed NPT	\$1,250	\$3,750
2"	12	Delta SCi venturi steam traps screwed NPT	\$1,360	\$16,320
			TOTAL	\$49,990

PAYBACK = 8.6 months [$\$49,990$ (Cost of traps) \div $\$69,599$ (Steam wastage) \times 12 months]

This payback excludes any savings from water treatment, water savings, steam trap spares, maintenance, and improved efficiency of a working system, which will further add to the savings had.

Exclusions: Any insulation, valves, installation of the steam traps, anything not specifically mentioned.

NOTE: These savings can be achieved by replacing the failed steam traps with any type of steam trap, but conventional steam traps like the type of steam traps that were tested that have moving parts will just fail again in a short period of time and are only guaranteed for 1 year. Delta venturi steam traps have no moving parts and are guaranteed for 20 years and will outlast any conventional steam trap that has moving parts.

Yours faithfully
For Delta Steam Systems

Bryan Anderson
Managing Director