Armstrong®

How Your Steam Trap Selection Affects Your Bottom Line Profits

Inverted Bucket
Trap Comparisons: vs Disc Traps
vs Bi-Metal Traps

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Example No. 1

5 YEAR TIME PERIOD

(Changing Disc Traps every 12 **MONTHS,** no change of I.B. traps)

INVERTED BUCKET TYPE		THERMODYNAMIC TYPE	
Enerav Costs			
.97#/Hr.	- ICI Steam Loss	2.4#/Hr.	
43,810#/5 years	- 5 Year Steam Loss (New Disc Trap every **12 months. No** change of I.B.)	105,120#/5 Years	
$175.20	- $ Steam Loss (Per $4.00 for 1000#)	$420.48	
$175.20		**$420.48**	
Maintenance Costs			
None	- Trap Cost (Disc Trap cost $55.00 ea. x 4 changes = $220.00)	$220.00	
None	- Labor of Trap Change Cost (1/2 Hour x 4 changes @ $20/hr. (Labor) = ($40.00)	$40.00	
$ 0		$260.00	
Installation Cost			
$149.10 (2011)	- New Trap Cost	**$55.00**	(Disc Trap No Strainer)
Same	- New Installation Labor & Fittings Cost	Same	
$149.10		$55.00	
$324.30	- TOTAL COST OF ONE TRAP (5 years)	$735.48	
	- Total $ Cost Difference (5 years)	+$411.18	
	- Total $ Cost Difference Per Month	+$ 6.85	

This example has the Maintenance Department changing disc traps once a year - **every** twelve months. The bottom line costs now come into play and the bucket trap saves the owner $6.65 per month for each trap.

Example No. 2

5 YEAR TIME PERIOD

(Changing Disc Traps every 2 **years,** no change of I.B. traps)
ICI Reports Disc Traps last 12 **months**

INVERTED BUCKET TYPE		THERMODYNAMIC TYPE
Enemy Costs		
.97#/Hr.	- ICI Steam Loss	2.4#/Hr. Yrs. 1,3,5
43,810#/5 years	- 5 Year Steam Loss (New Disc Traps every 2 **years. No** change of I.B.)	144#/Hr. Yrs. 2,4 (blow-thru)* 2,575,440#/5 Years
$175.20	- $ Steam Loss (Per $4.00 for 1000#)	$10,301.76
$175.20		$10,301.76
Maintenance Costs		
None	- Trap Cost (Disc Trap cost $55.00 ea. x 2 = $110.00)	$ 110.00
None	- Labor for Trap Change Cost (1/2 Hour x 2 changes @ $20/hr. (Labor) = ($20.00)	$ 20.00
$ 0		$ 130.00
I nstalhtiin Cost		
$149.10 (2011)	- New Trap Cost	$ 55.00 (Disc Trap No Strainer)
Same	- New Installation Labor & Fittings Cost	Same
$149.10		$ 55.00
$324.30	- TOTAL COST OF ONE TRAP (5 years)	$10,486.76
	- Total $ Cost Difference (5 years)	+$10,162.46
	- Total $ Cost Difference Per Month	+$ 169.37

This comparison considers the disc trap is replaced every two **years.** ICI reports that disc traps last one year. Therefore, the disc trap would be in a blow-thru mode years 2 and 4. Steam losses are estimated accordingly. The bottom line cost effect would be **$169.37** a month per trap when using disc traps.

*Armstrong estimate of 1/2" disc trap @ 200 psi and average tracer line load.

Example No. 3

5 YEAR TIME PERIOD

(Changing Bi-metal traps every 2 years, no change of I.B. traps)

INVERTED BUCKET TYPE		BI-METAL TYPE
Enemy Costs		
.97#/Hr.	ICI Steam Loss	0#/Hr.
43,810#/5 years	5 Year Steam Loss	0#
$175.20	$ Steam Loss (Per $4.00 for 1000#)	
$175.20		$ 0
Maintenance Costs		
None	Trap Cost (Bi-metal Trap cost $110.00 ea. x 2 changes= $220.00)	$220.00
None	Labor of Parts Change Cost (1/2 Hour x 2 changes @ $20/hr. (Labor) = $20.00)	$20.00
$ 0		$240.00
Installation Cost		
$149.10 (2011)	New Trap Cost	$110.00 (Bi-metal Trap)
Same	New Installation Labor & Fittings Cost	Same
$149.10		$110.00
$324.30	TOTAL COST OF ONE TRAP (5 years)	$350.00
	Total $ Cost Difference (5 years)	+$ 25.88
	Total $ Cost Difference Per Month	+$ 0.44

This example has the Maintenance Department changing Bi-metal Traps every 2 **years.** The costs do not differ much at all but other aspects of the Bi-metal must be considered.