

TLV TMSSM

Trap Management System



- **Avoid Process Interruptions**
- **Reduce System Costs**
- **Lower CO₂ Emissions**
- **Mitigate Safety Risks**

TrapMan[®], the core technology behind TLV's Best Practice of Steam Trap Management, offers the latest Inspection, Reporting & Maintenance Support Program to eliminate Frequent Plant Problems.

- Heating bottlenecks
- Reduced product quality
- Unscheduled shutdowns
- Increased maintenance time
- Equipment trips or failures

- 686 t/y average failure steam loss for every 100 steam traps*¹
- 24% average failure (9% blocked, 15% leaking)*¹
- High Life Cycle Costs from frequently failing traps

Production Issues

Risings Costs

Frequent
Plant
Problems

CO₂ Emissions

Safety Risks

- 100 t/y CO₂ emissions for every 100 steam traps due to failure steam loss*²

- Water hammer
- External steam leaks
- Slippery work areas
- Hot, splashing condensate
- Open bypass valves

*1 Based on 350,000 surveyed steam traps benchmark data

*2 Based on CO₂ conversion factor of 0.146 t-CO₂/t-steam

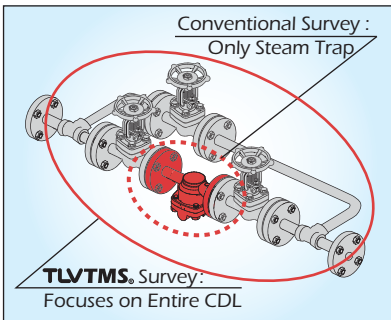
Production & Plant Operations are Affected by Steam & Condensate Problems

Eliminate these problems by optimizing Condensate Discharge Locations (CDLs), including steam traps.



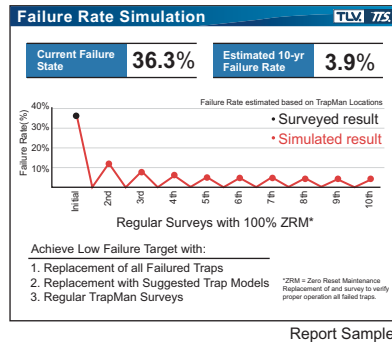
Eliminate Core Problems

Inspection of entire CDL, including steam traps, surrounding valves & piping



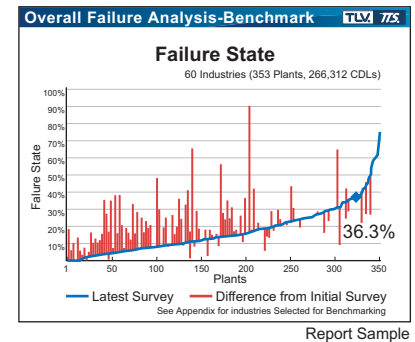
Prioritize Maintenance Response

Practical, Actionable Proposals



Set Realistic Targets

Benchmarking and Analysis based on Industry, Application, Historical Data etc.



Independently Validated Accuracy & Loss Quantification

Empirically derived data for over 4,200 trap models



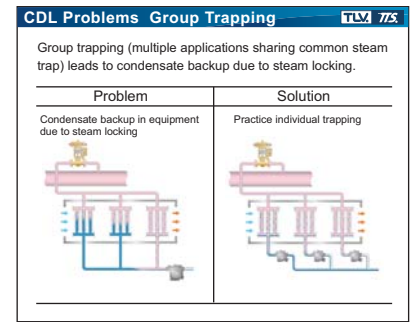
Consistent, Reliable Inspections

Professional, TTS*-certified Inspectors



Best Solutions Tailored for Each CDL

Countermeasures for each CDL's unique conditions



Program Timeline

Presented promptly after survey



TLV INTERNATIONAL, INC.

881 Nagasuna, Noguchi-Cho, Kakogawa Hyogo 675-8511, JAPAN
 Phone:0794-27-1818
 Fax:0794-25-1167
 E-mail:tlv-japan@tlv.co.jp

Inspection Services
Licensed by

