

Condensate Removal Device



In manufacturing and business today, having a good and efficient steam system is no longer a luxury, but is a necessity. Many organizations are interested in investing millions in their large scale steam operations. However, little consideration is given to attend to the health of the system that could sometimes be considered as 'fatal'. SteamPro provides a compelling engineered technology solution that could overcome and stop steam losses on a permanent basis.

A very special device made entirely of stainless steel. The critical internal components are wholly manufactured in U.S.A. Machined by CNC shop to the best possible quality and undergoes stringent quality control. All units are 100% hydrostatic pressure tested with plain tap water of 5-times its full-rated steam pressure for a minimum of 1-minute.

The CRD has been specifically and uniquely designed to achieve the following:

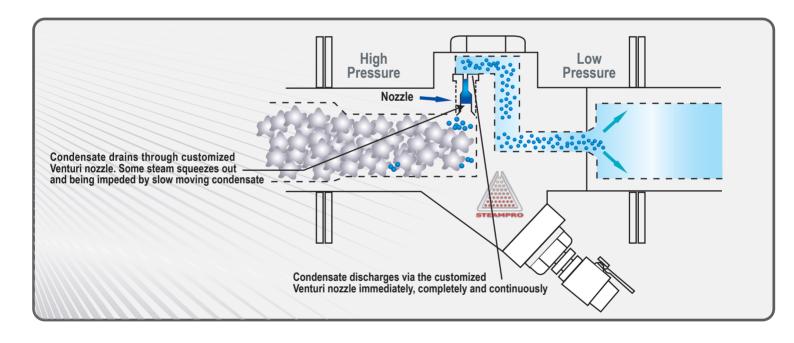
- Tuned to system load characteristics
- Ensure optimum and consistent process temperature
- To stabilize inconsistent steam temperatures
- Reduce and recover steam losses

- Never fails to open & close
- Works non-stop
- High durability
- World's only on-pipe-line real time inspection, repair and installation without having to shutdown

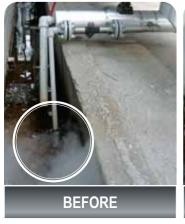
The End Results

- Efficient energy utilization reduce fuel costs
- Higher productivity improve profits
- Higher quality manufactured products
- Reduction in maintenance cost

- Elimination of conventional Steam Traps and parts replacement
- Reduce production reject rates
- Safer work environment
- Reduce global warming effect A responsible Corporate Citizen



Before And After Installation of SteamPro Device



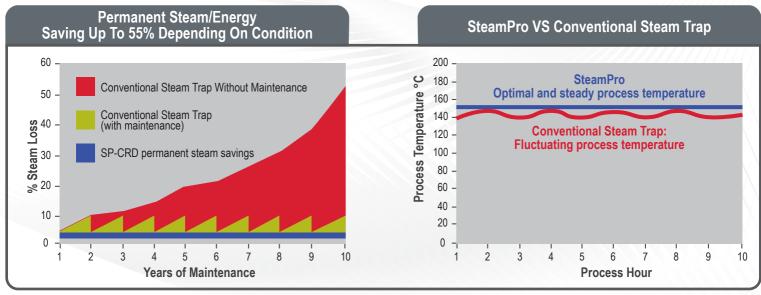




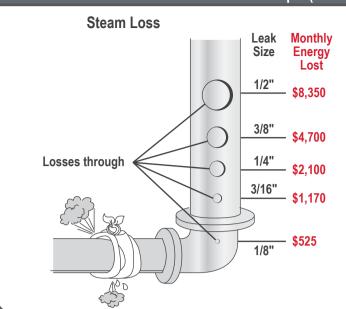


| Why SteamPro Condensate Re | emoval C | Device (SP-CRD) Works Better |
|----------------------------------|-----------|---------------------------------|
| Than Conventional Steam Traps | s, Any Ot | her Orifice And Its Competitors |
| eamPro Condensate Removal Device | Others | Benefits of SP-CRD |

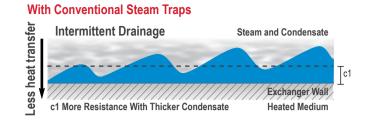
| Than Conventional Steam Traps, Any Other Office And its Competitors | | | | | | | | | | | |
|---|--|--|---|--|--|--|--|--|--|--|--|
| No | SteamPro Condensate Removal Device | Others | Benefits of SP-CRD | | | | | | | | |
| 1 | World's only on-pipe-line real time inspection for ease of diagnosis and any of its parts is replaceable (if necessary) within just 5 minutes. | None | No need to shut down production line to enable diagnosis or replacement of parts. Hence, saves time & costs and will not affect current production. | | | | | | | | |
| 2 | Total professional service. | Rarely | We have a team of trained and experienced local engineers ready to attend to all enquiries or demand from design stage to implementation. | | | | | | | | |
| 3 | 100% stainless steel construction including all internal components. | Few | 100% stainless steel to withstand higher pressure and does not rust i.e. less prone to corrosion. This minimizes containment of particles in the pipelines and longer life span. | | | | | | | | |
| 4 | Custom-fitted to the precise needs of customers' system. | Rarely | Custom-fitted to ensure condensate are drained immediately, completely and continuously. It also prevents loss of steam due to oversized nozzle or water hammering due to undersized nozzle. | | | | | | | | |
| 5 | Optimal process temperatures for production efficiency. Consistent process temperatures for improved product quality and reduce rejects. | Few | SP-CRD enables optimal process temperatures as condensate is drained immediately, completely and continuously hence improves in productivity and product quality. | | | | | | | | |
| 6 | Permanent steam energy saving up to 55% depending on condition. | Few | The correct sizing of orifice that never fails and working continuously. In return, these reduce fuel usage and steam loss due to steam trap failures. | | | | | | | | |
| 7 | Expected useful life of exceeding 20 years. | Range from few months to 4-5 years | SP-CRD customized Venturi nozzle is designed to lasts, plus it is made of 100% stainless steel hence it will not corrode as compared to conventional steam traps which are made of cast iron. | | | | | | | | |
| 8 | No moving parts hence nothing to service! Nothing to wear out! No breakdown! | Few | SP-CRD has no moving parts, hence no failure which cuts steam losses and improves process temperature thus increases productivity. | | | | | | | | |
| 9 | Simple maintenance of one annual strainer blowdown. No need to keep spares. No kits to fit. | Few | No requirement for steam traps stocks. No need for endless steam traps surveys and replacements permanently. | | | | | | | | |
| 10 | SP-CRD comes with built-in 40x40, 316 stainless steel wire meshes filter. | Few | Cleaner steam system after a few months of installation hence longer parts, coils and equipment life spend. | | | | | | | | |
| 11 | Removes condensate immediately, completely and continuously. No back up condensate in the system or pipeline. | Rarely | Prevents acid formation in the pipelines, hence no rusts/ corrosions and maintain high quality dry steam. | | | | | | | | |
| 12 | 5-years product warranty | Rarely | Peace of mind. | | | | | | | | |
| 13 | Guaranteed Payback Period within 2 years | Rarely | Due to SP-CRD's reliability, consistent and effective performance, Steampro guarantees a Payback Period within 2 years (some of our customers experienced Payback Period of as fast as 3 months!) on any investment on SP-CRDs. | | | | | | | | |
| 14 | Money Back Guarantee within 3 months with no hidden clauses | Rarely | SteamPro is confident of its product quality and performance. Customers are assured of 3 months Money Back Guarantee from the delivery date of our products based on its quality and performances. This is our way to ensure total customer satisfaction, and that we truly add value to our clients. | | | | | | | | |



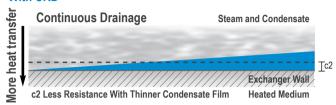
Cost of Various Sized Steam Leaks at 100 psi (Assuming steam cost USD \$10.00 per 1000 lbs)



Cross-Section Of Heat Exchange Surface



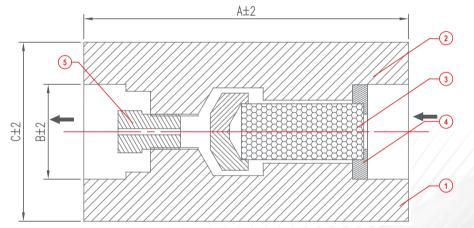
With CRD



SP High Pressure Unit Product Specifications



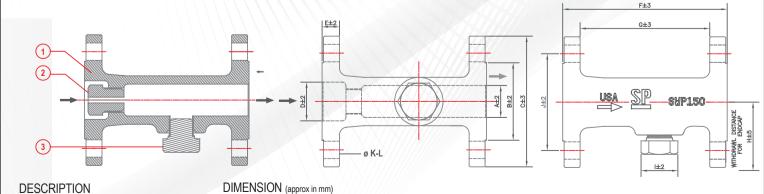
| NO. | PART NAME | MATERIAL(ASTM) | QTY |
|-----|-----------------------------------|----------------|-----|
| 1 | BODY | SS TYPE 316 | 01 |
| 2 | STRAINER ASSEMBLY | SS TYPE 316 | 01 |
| 3 | STRAINER SCREEN (40 x 40 MESH) | SS TYPE 316 | 01 |
| 4 | STRAINER HOLDER | SS TYPE 316 | 01 |
| 5 | NOZZLE | SS TYPE 304 | 01 |



DIMENSION (approx in mm)

| MODEL | SIZE | | Α | В | С | WEIGHT | PRESSURE RATING / STANDARD |
|-----------|------|------|----|----|------|--------|----------------------------|
| SP 15S-HP | 15 | 1/2" | 92 | 22 | 38 | 0.9 kg | 160 BAR/600°c, API 598 |
| SP 20S-HP | 20 | 3/4" | 92 | 27 | 51 | 1.2 kg | 160 BAR/600°c, API 598 |
| SP 25S-HP | 25 | 1" | 92 | 34 | 63.5 | 1.5 kg | 160 BAR/600°c, API 598 |

SP- CRD Flange Type Specification (DIN PN16)

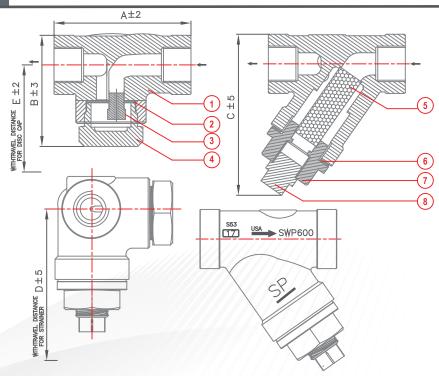


| DES | SCRIPTION | | |
|-----|-----------|----------------|----|
| NO. | PART NAME | MATERIAL(ASTM) | QT |
| 1 | BODY | CAST IRON | 01 |
| 2 | NOZZLE | SS TYPE 304 | 01 |
| 3 | END CAP | SS TYPE 304 | 01 |

| MODEL | S | IZE | Α | В | C | D | Е | F | G | Н | 1 | J | K | L | WEIGHT | PRESSURE RATING / STANDARD |
|--------|----|-------|----|----|-----|----|----|-----|-----|----|----|-----|----|---|--------|----------------------------|
| SP 32F | 32 | 11/4" | 32 | 78 | 140 | 40 | 18 | 170 | 135 | 70 | 42 | 100 | 18 | 4 | 4.7 KG | 15 BAR/210°c, API 598 |

SP-CRD Threaded And Socket Welds Type





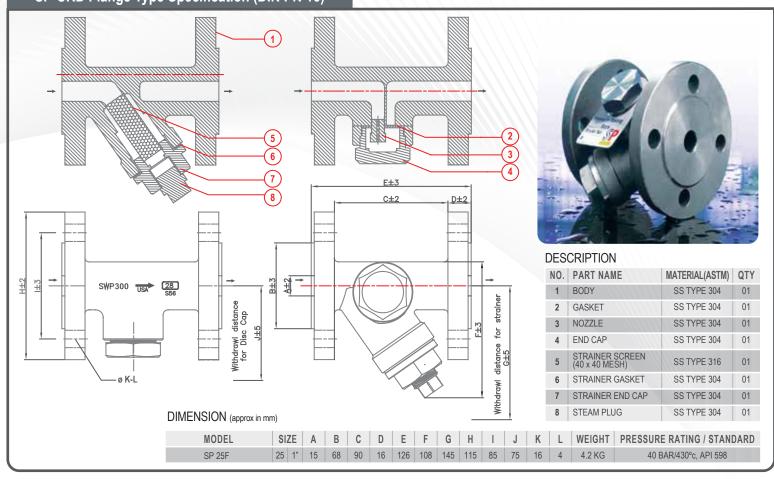
DESCRIPTION

| NO. | PART NAME | MATERIAL(ASTM) | QTY |
|-----|-----------------------------------|----------------|-----|
| 1 | BODY | SS TYPE 304 | 01 |
| 2 | GASKET | SS TYPE 304 | 01 |
| 3 | NOZZLE | SS TYPE 304 | 01 |
| 4 | ENDCAP | SS TYPE 304 | 01 |
| 5 | STRAINER SCREEN (40 x 40 MESH) | SS TYPE 316 | 01 |
| 6 | STRAINER GASKET | SS TYPE 304 | 01 |
| 7 | STRAINER ENDCAP | SS TYPE 304 | 01 |
| 8 | STEAM PLUG | SS TYPE 304 | 01 |

| DIMENSION | (appr | n i xc | mm) | Α | ND PII | PE CC | ONNE | CTIONS | - NPT or BSPT THREADED |
|-----------|-------|--------|-------|----|--------|-------|------|--------|----------------------------|
| MODEL | SI | ZE | Α | В | C | D | E | WEIGHT | PRESSURE RATING / STANDARD |
| SP 15T | 15 | 1/2" | 82 | 67 | 90.5 | 126 | 68 | 1.0 KG | 40 BAR/430°c, API 598 |
| SP 20T | 20 | 3/4" | 92.5 | 74 | 108 | 145 | 70 | 1.6 KG | 40 BAR/430°c, API 598 |
| SP 25T | 25 | 1" | 107.5 | 72 | 110 | 146 | 73 | 2.0 KG | 40 BAR/430°c, API 598 |

| DIMENSION (| (approx in n | nm) | Α | ND PII | PE CC | DNNE | CTIONS | - SOCKET WELDS |
|-------------|--------------|-------|----|--------|-------|------|--------|----------------------------|
| MODEL | SIZE | Α | В | C | D | E | WEIGHT | PRESSURE RATING / STANDARD |
| SP 15S | 15 1/2" | 82 | 67 | 90.5 | 126 | 68 | 1.0 KG | 60 BAR/430°c, API 598 |
| SP 20S | 20 3/4" | 92.5 | 74 | 108 | 145 | 70 | 1.6 KG | 60 BAR/430°c, API 598 |
| SP 25S | 25 1" | 107.5 | 72 | 110 | 146 | 73 | 2.0 KG | 60 BAR/430°c, API 598 |

SP-CRD Flange Type Specification (DIN PN 16)



Will our children have land to stay in future? It is very much depended on our decision today to conserve and go for green Technology.

SteamPro is the answer and friend of mother nature by providing environmental friendly solutions.

SteamPro Conservation Sdn Bhd is a total-service company combined with unique technology in steam and other energy savings. Using award-winning technology, SP's innovation sets new records in savings, efficiency, safety and longevity.

SP engineered products provide permanent steam solution. Our customize-to-need approach means that every solution provided is unique to suit the individual set-up and environment. As a result, our solution can be fitted into most of the existing set-ups with high durability and efficiency.

STEAMPRO PRESIDENT'S MESSAGE

In today's tough economic climate, companies in a wide variety of steam related industries are concerned about driving costs down and increasing their return on investment. This is important but no longer enough to maximize the effectiveness and create a stable and reliable steam system.

SteamPro understands what drives your steam operations and how these drivers intersect with the realities of your steam system infrastructure. SteamPro supports the principle of a custom engineered solution through a step wise building block approach to the steam conservation design.

We only have One Earth, and the earth needs our care, together let's make a difference by conserving with the most effective steam energy conservation solution provider in the world, SteamPro.

We serve with pride. Our customer's win is our win.



Email: info@steampro.com.my

