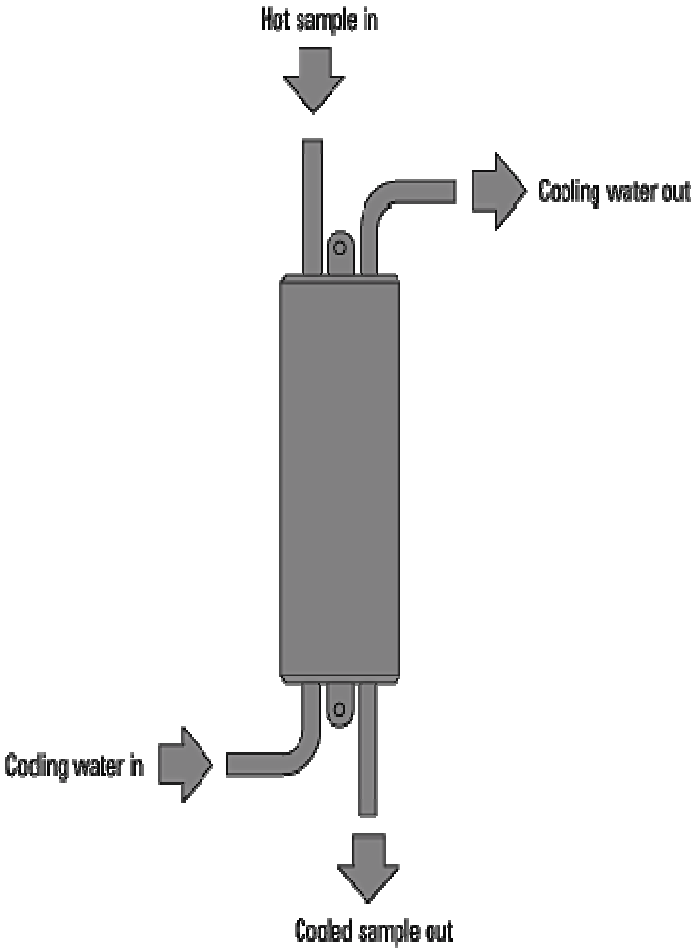
SAMPLE COOLER Model: SWAS 06



The New Model :SWAS 06 Sample Cooler has been designed to cater to meet sampling requirement of today's highly efficient high-pressure power plants. These coolers are compact yet more effective in terms of heat extraction capacity.

Very close approach temperatures with minimal cooling water requirement.

A complete single piece coil assures trouble free operations with no risks of failure of joints inside the shell.

It's very compact compared with the service it is put to. The double helix coil design makes it's size almost half the size of conventional single helix designs.

Facilitates routine on-site maintenance easy. Coils can be cleaned in-place.

Specifications for Sample Cooler

Sample Coil :

- Material : Stainless Steel ASTM A 213, TP 316
- Design Pressure : 250 Kg/Cm2
- Design Temperature : Maximum 560° C
- Tube Size : 1/4" OD, 20 SWG
- Test Pressure (hydrostatic) : 375 Kg/Cm2

Shell:

- Material : Stainless Steel ASTM A 240, TP 304
- Design Pressure : 10 Kg/Cm2
- Tube Size : 360 mm OD (No ERW joints)
- Test Pressure (hydrostatic) : 15 Kg/Cm2

Installation Data :

- Sample (Inlet / Outlet) : ¼" OD Pipe
- Cooler (Inlet / Outlet) : 1/2" NPT (Female)
- Cooler flow rate at max: 800 Ltr/Hr.
- Shell test process : 10 Kg/cm²
- Max cooler process : 7 Kg/cm²

End Connection :

- Sample (Inlet / Outlet) : Double ferrule compression fittings for 1/4" OD Tube
- Cooling Water (Inlet / Outlet) : 1/2" NPT (F)
- Shell Relief Valve : Double ferrule compression fittings for 1/4" OD Tube

Data necessary for selection of Sample Cooler

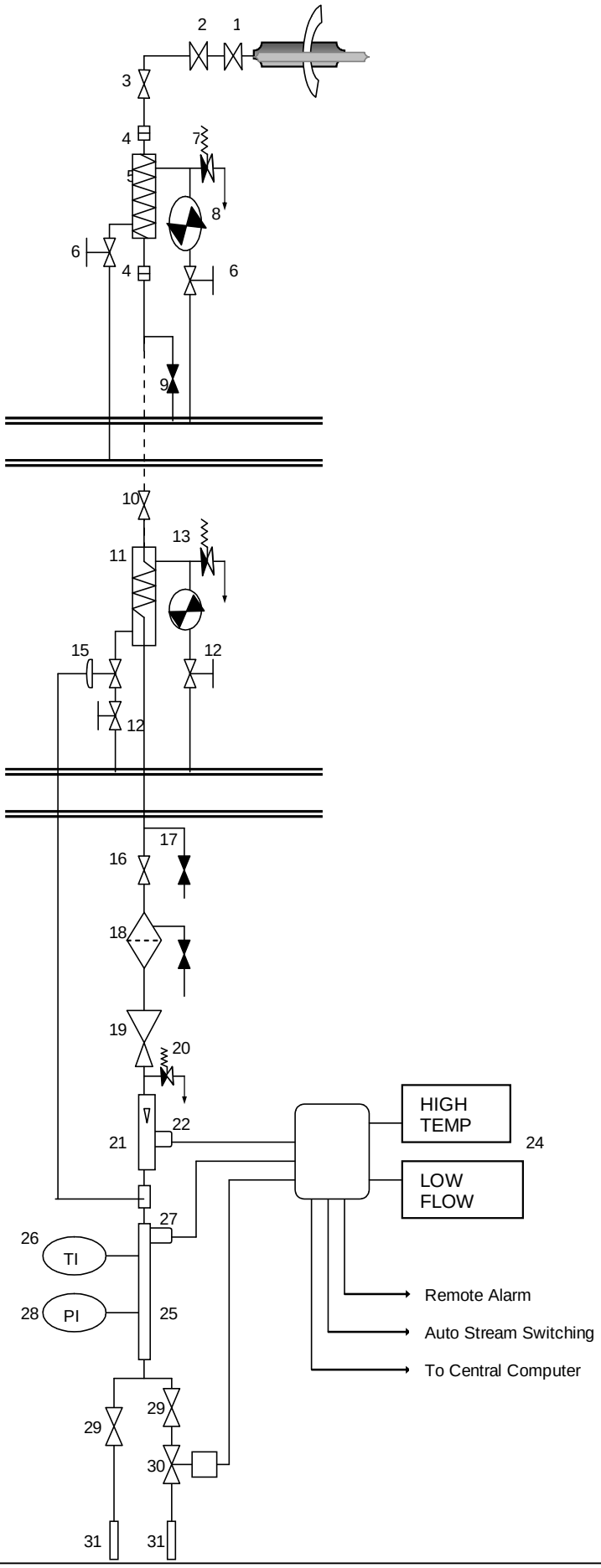
- Sample Composition
- Sample Pressure
- Sample Temperature
- Sample Flow Rate
- Required Sample outlet Temperature
- Temperature available for cooling water
- Pressure available for cooling water
- Maximum permissible cooling water discharge temperature.

Wavetek Electronics are highly reputed for their flexibility and experience in the design and manufacture of “CUSTOM BUILT” systems for widely different applications. However there is much benefit to be gained from the use of standardized arrangements wherever possible and we offer a variety of these ranging in complexity from a single cooler and valve assembly to the advanced sample conditioning system illustrated below. Our technical department will be pleased to recommend the most effective solution for each application.

1.Sample extraction probe and stub.
2. Probe isolation valves.
3. Primary cooler inlet valve
4. Special high duty coupling
5. Primary sample cooler
6. Cooling water isolating valve
7. Cooler shell relief valve
8. Cooling water flow indicator
9. Local grab sample and blowdown valve
10. Secondary cooler inlet valve
11. Secondary cooler
12. Chilled water isolating valve
13. Cooler shell relief valve
14. Chilled water flow indicator
15. Chilled water modulating valve
16. Block valve (to prevent ingress of debris when blowing down sample lines)
17. Blowdown Valve
18. Filter with optional blow out facility
19. Pressure reducing valve
20. Sample relief valve
21. Sample flow meter
22. Proximity switch to sense low sample flow
23. Electrical control unit
24. Local alarm indicators
25. L. P Sample manifold
26. Temperature gauge
27. Temperature switch
28. Pressure gauge
29. Sample Control valve
30. Solenoid valve
31. Outlet bulkhead connector
32. Stainless steel drain tray

One line of a typical sample conditioning system in a large central monitoring laboratory
Systems may be built using any combination of components.

STANDARD SYSTEM FOR SAMPLE COOLER



WAVETEK ELECTRONICS

21, Milap society, Off Deenanath Mageshkar Hospital Road, Erandwane, Pune -411004(INDIA)Telefax:+91-20-25453955.
Email: wavetekelectronics@yahoo.com, info@wavetekindia.com Visit us at: www.wavetekindia.com