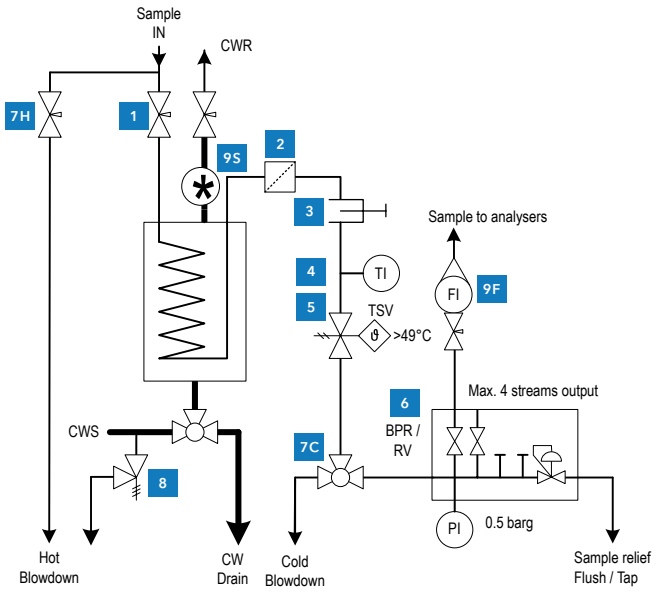
Steam Sample Conditioning - LPMT

Low Pressure Medium Temperature

Pressure < 35 bar Temperature < 250°C

Control Your Steam Quality

- Increase lifetime of your steam applications
- Prevent corrosion in boilers and pipelines
- Optimize steam chemical composition
- Extract true representative samples of your steam water cycle



Typical P&ID Steam Sample Conditioning System
Numbers correspond to the panel configurator on the next page

Mechatest Steam Sample conditioning panels are available in many configurations for as many applications in the industry. This sampling panel is used in power plants and mostly used in combination with water analyser equipment for analysis on chemical parameters like Conductivity, pH, Dissolved Oxygen, Silica and Sodium. The panels are used for sample conditioning and collection.

SPECIFICATIONS

Sample pressure (recommended)	< 35 bar
Sample temperature (recommended)	Max. 250 °C
Flow single phase samples (water/condensate)	Max. 72 L/h
Flow condensing samples (steam)	Not recommended
Cooling water flow	Max. 1100 L/h
Sample tube length and cooling area	5.5 m (0.11 m^2)
Standard panel dimension	850 x 500 mm

TYPICAL APPLICATOINS

- Demi water
- Feed water
- Boiler water
- Condensate

BUILT CONFORM

- ASME PTC 19.11-2008
- ASTM D1066
- ASTM D1192 / D3370
- SO 5667.7

MECHATEST SAMPLING SOLUTIONS

SCS Steam Panel Configurator - LPMT

Low Pressure Medium Temperature

Series	Cooler Type	Tube Material	Tube Design	Shell Material	Shell Design
LPMT	TSR-4225	1/4'' OD - 316 SS	345 bar @ 538°C	304 SS	31 bar @ 343°C
LPMTA	TSR-42B5	1/4'' OD - Inconel 625	345 bar @ 593°C	304 SS	31 bar @ 343°C
LPMTAA	TSR-4BB5	1/4'' OD - Inconel 625	345 bar @ 593°C	Inconel 625	31 bar @ 343°C

Designators			1	2	3	4	5	-	6	7	8	9	10		
Example Ordering No.	LPMT	-	1	1	1	1	1	-	0	0	0	0	X		
Ordering No.		-						-							

1 INLET BLOCK VALVE

- **0** No inlet valve
- **1** Needle valve 316 SS (Std. Swagelok)
- **2** Double inlet valve

2 FILTER (1)

- **0** No filter
- **1** T-Filter 90 micron 316 SS (Std. Swagelok)
- **2** Filter large volume 90 micron 316 SS (Std. Classic)

3 PRESSURE REGULATION

- **0** No pressure regulating valve
- **1** Regulating valve 316 SS (Std. Swagelok)

4 TEMPERATURE INDICATION (1)

- **0** No temperature gauge
- **1** Temperature gauge 0 - 60 °C 316 SS in flow chamber (Std.)

5 TEMPERATURE SAFETY (1)

- **0** No temperature shut-off valve
- **1** Automatic Temperature shut-off valve @ 46°C (Std.)
  (automatic open if temperature below setpoint)
- **2** Reset Temperature shut-off valve @ 46°C (Std. Centry)
  (reset to open if temperature below setpoint)
- **3** Electronic Temperature shut-off valve @ 46°C

6 BACK PRESSURE REGULATION

- **0** No BPR mounting plate
- **B** Mounting plate for Swan BPR on panel

7 SAMPLE BLOWDOWN OPTIONS

- **0** No sample blowdown (Std.)
- **C** Cold sample blowdown
- **H** Hot sample blowdown
- **CH** Cold and Hot sample blowdown

8 PRESSURE SAFETY OPTIONS

- **0** No pressure safety (Std.)
- **1** Pressure relief valve on C.W. connection
- **2** Pressure relief valve on Sample connection

9 FLOW INDICATION

- **0** No flow indication (Std.)
- **F** Flow indicator in sample line
- **S** Sight glass indicator in C.W. line

10 OPTIONS (2)

- **X** No options
- **A** Acid purging connection (T-conn. + valve)
- **E** Extension handle (on hot inlet valve)
- **L** Lab sample tablet / drain funnel
- **P** Portable (system on rack with wheels)

(1) Other sizes, ranges or specifications available on request
(2) Select from the ''options'' designator one or more options and fill in all these letters in the same colum

Mechatest Sampling Solutions
Tel: +31(0)153105183
sales@mechatest.com
www.mechatest.com

Koperslager 3
2631 RK Nootdorp
The Netherlands
Be part of the best solution

MECHATEST SAMPLING SOLUTIONS

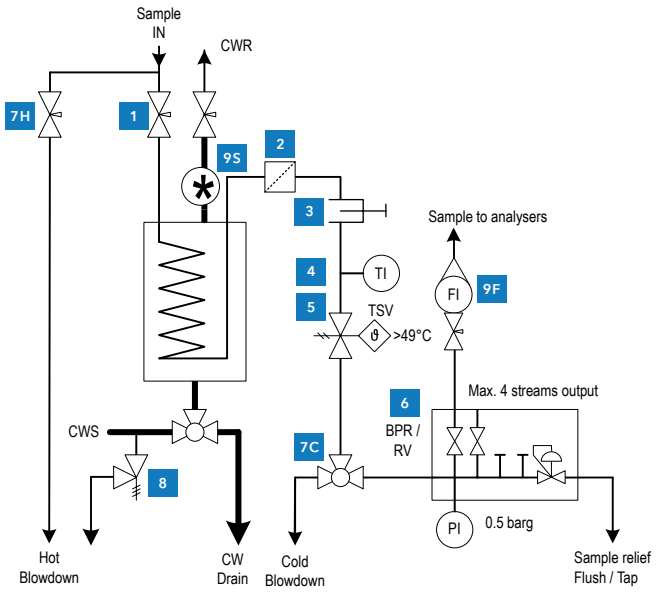
Steam Sample Conditioning - LPHT

Low Pressure High Temperature

Pressure < 35 bar Temperature < 538 °C

Control Your Steam Quality

- Increase lifetime of your steam applications
- Prevent corrosion in boilers and pipelines
- Optimize steam chemical composition
- Extract true representative samples of your steam water cycle



Typical P&ID Steam Sample Conditioning System
Numbers correspond to the panel configurator on the next page

Mechatest Steam Sample conditioning panels are available in many configurations for as many applications in the industry. This sampling panel is used in power plants and mostly used in combination with water analyser equipment for analysis on chemical parameters like Conductivity, pH, Dissolved Oxygen, Silica and Sodium. The panels are used for sample conditioning and collection.

SPECIFICATIONS

Sample pressure (recommended)	< 35 bar
Sample temperature (recommended)	Max. 538 °C
Flow single phase samples (water/condensate)	Max. 108 L/h
Flow condensing samples (steam)	Max. 60 L/h
Cooling water flow	Max. 1500 L/h
Sample tube length and cooling area	11 m (0.22 m^2)
Standard panel dimension	850 x 500 mm

TYPICAL APPLICATOINS

- Demi water
- Feed water
- Boiler water
- Condensate
- LP/HP Steam
- Life Steam

BUILT CONFORM

- ASME PTC 19.11-2008
- ASTM D1066
- ASTM D1192 / D3370
- SO 5667.7

MECHATEST
SAMPLING SOLUTIONS

SCS Steam Panel Configurator - LPHT

Low Pressure High Temperature

Series	Cooler Type	Tube Material	Tube Design	Shell Material	Shell Design
LPHT	TLR-4225	1/4'' OD - 316 SS	345 bar @ 538°C	304 SS	31 bar @ 343°C
LPHTA	TLR-42B5	1/4'' OD - Inconel 625	345 bar @ 593°C	304 SS	31 bar @ 343°C
LPHTAA	TLR-4BB5	1/4'' OD - Inconel 625	345 bar @ 593°C	Inconel 625	31 bar @ 343°C

Designators		1	2	3	4	5	-	6	7	8	9	10
Example Ordering No.	LPHT	-	1	1	1	1	-	0	0	0	0	X
Ordering No.		-					-					

1 INLET BLOCK VALVE

- **0** No inlet valve
- **1** Needle valve 316 SS (Std. Swagelok)
- **2** Double inlet valve

2 FILTER (1)

- **0** No filter
- **1** T-Filter 90 micron 316 SS (Std. Swagelok)
- **2** Filter large volume 90 micron 316 SS (Std. Classic)

3 PRESSURE REGULATION

- **0** No pressure regulating valve
- **1** Regulating valve 316 SS (Std. Swagelok)

4 TEMPERATURE INDICATION (1)

- **0** No temperature gauge
- **1** Temperature gauge 0 - 60 °C 316 SS in flow chamber (Std.)

5 TEMPERATURE SAFETY (1)

- **0** No temperature shut-off valve
- **1** Automatic Temperature shut-off valve @ 46°C (Std.)
  (automatic open if temperature below setpoint)
- **2** Reset Temperature shut-off valve @ 46°C (Std. Centry)
  (reset to open if temperature below setpoint)
- **3** Electronic Temperature shut-off valve @ 46°C

6 BACK PRESSURE REGULATION

- **0** No BPR mounting plate
- **B** Mounting plate for Swan BPR on panel

7 SAMPLE BLOWDOWN OPTIONS

- **0** No sample blowdown (Std.)
- **C** Cold sample blowdown
- **H** Hot sample blowdown
- **CH** Cold and Hot sample blowdown

8 PRESSURE SAFETY OPTIONS

- **0** No pressure safety (Std.)
- **1** Pressure relief valve on C.W. connection
- **2** Pressure relief valve on Sample connection

9 FLOW INDICATION

- **0** No flow indication (Std.)
- **F** Flow indicator in sample line
- **S** Sight glass indicator in C.W. line

10 OPTIONS (2)

- **X** No options
- **A** Acid purging connection (T-conn. + valve)
- **E** Extension handle (on hot inlet valve)
- **L** Lab sample tablet / drain funnel
- **P** Portable (system on rack with wheels)

(1) Other sizes, ranges or specifications available on request
(2) Select from the ''options'' designator one or more options and fill in all these letters in the same colum

Mechatest Sampling Solutions
Tel: +31(0)153105183
sales@mechatest.com
www.mechatest.com

Koperslager 3
2631 RK Nootdorp
The Netherlands
Be part of the best solution

MECHATEST SAMPLING SOLUTIONS

Mechatest is a Certified Industrial Sampling Systems Company with over 26 years of experience in design and manufacturing of fluid sampling systems. We understand how a sample behaves at the sample tap and transport into the lab. We offer the best knowledge, equipment and sampling solutions in the field.

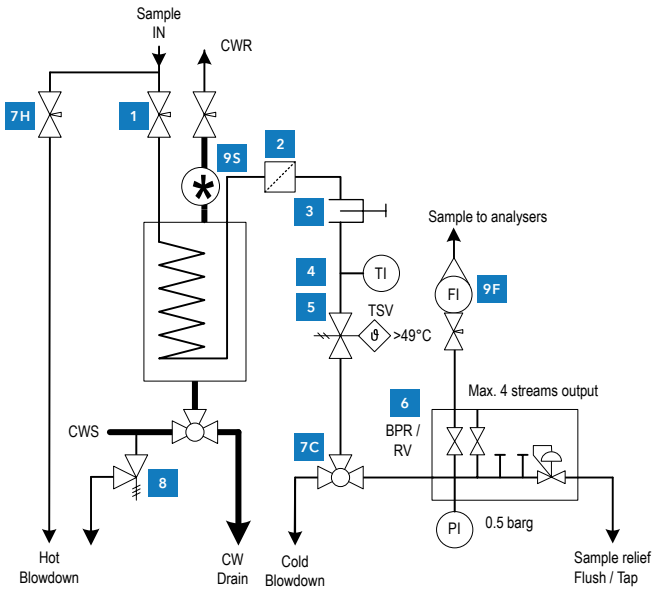
Steam Sample Conditioning - HPMT

High Pressure Medium Temperature

Pressure > 35 bar Temperature < 250°C

Control Your Steam Quality

- Increase lifetime of your steam applications
- Prevent corrosion in boilers and pipelines
- Optimize steam chemical composition
- Extract true representative samples of your steam water cycle



Typical P&ID Steam Sample Conditioning System
Numbers correspond to the panel configurator on the next page

Mechatest Steam Sample conditioning panels are available in many configurations for as many applications in the industry. This sampling panel is used in power plants and mostly used in combination with water analyser equipment for analysis on chemical parameters like Conductivity, pH, Dissolved Oxygen, Silica and Sodium. The panels are used for sample conditioning and collection.

SPECIFICATIONS

Sample pressure (recommended)	> 35 bar (Max. 345 bar)
Sample temperature (recommended)	Max. 250 °C
Flow single phase samples (water/condensate)	Max. 72 L/h
Flow condensing samples (steam)	Not recommended
Cooling water flow	Max. 1100 L/h
Sample tube length and cooling area	5.5 m (0.11 m^2)
Standard panel dimension	850 x 500 mm

TYPICAL APPLICATOINS

- Demi water
- Feed water
- Boiler water
- Condensate

BUILT CONFORM

- ASME PTC 19.11-2008
- ASTM D1066
- ASTM D1192 / D3370
- SO 5667.7

MECHATEST SAMPLING SOLUTIONS

SCS Steam Panel Configurator - HPMT

High Pressure Medium Temperature

Series	Cooler Type	Tube Material	Tube Design	Shell Material	Shell Design
HPMT	TSR-4225	1/4'' OD - 316 SS	345 bar @ 538°C	304 SS	31 bar @ 343°C
HPMTA	TSR-42B5	1/4'' OD - Inconel 625	345 bar @ 593°C	304 SS	31 bar @ 343°C
HPMTAA	TSR-4BB5	1/4'' OD - Inconel 625	345 bar @ 593°C	Inconel 625	31 bar @ 343°C

Designators		1	2	3	4	5	-	6	7	8	9	10
Example Ordering No.	HPMT -	1	1	1	1	1	-	0	0	0	0	X
Ordering No.							-					

1 INLET BLOCK VALVE

- **0** No inlet valve
- **1** Needle valve 316 SS (Std. Swagelok)
- **2** Double inlet valve

2 FILTER (1)

- **0** No filter
- **1** T-Filter 90 micron 316 SS (Std. Swagelok)
- **2** Filter large volume 90 micron 316 SS (Std. Classic)

3 PRESSURE REGULATION

- **0** No pressure regulating valve
- **1** VREL pressure valve 316 SS (Std. Swagelok)

4 TEMPERATURE INDICATION (1)

- **0** No temperature gauge
- **1** Temperature gauge 0 - 60 °C 316 SS in flow chamber (Std.)

5 TEMPERATURE SAFETY (1)

- **0** No temperature shut-off valve
- **1** Automatic Temperature shut-off valve @ 46°C (Std.)
  (automatic open if temperature below setpoint)
- **2** Reset Temperature shut-off valve @ 46°C (Std. Centry)
  (reset to open if temperature below setpoint)
- **3** Electronic Temperature shut-off valve @ 46°C

6 BACK PRESSURE REGULATION

- **0** No BPR mounting plate
- **B** Mounting plate for Swan BPR on panel

7 SAMPLE BLOWDOWN OPTIONS

- **0** No sample blowdown (Std.)
- **C** Cold sample blowdown
- **H** Hot sample blowdown
- **CH** Cold and Hot sample blowdown

8 PRESSURE SAFETY OPTIONS

- **0** No pressure safety (Std.)
- **1** Pressure relief valve on C.W. connection
- **2** Pressure relief valve on Sample connection

9 FLOW INDICATION

- **0** No flow indication (Std.)
- **F** Flow indicator in sample line
- **S** Sight glass indicator in C.W. line

10 OPTIONS (2)

- **X** No options
- **A** Acid purging connection (T-conn. + valve)
- **E** Extension handle (on hot inlet valve)
- **L** Lab sample tablet / drain funnel
- **P** Portable (system on rack with wheels)

(1) Other sizes, ranges or specifications available on request
(2) Select from the ''options'' designator one or more options and fill in all these letters in the same colum

Mechatest Sampling Solutions
Tel: +31(0)153105183
sales@mechatest.com
www.mechatest.com

Koperslager 3
2631 RK Nootdorp
The Netherlands
Be part of the best solution

MECHATEST SAMPLING SOLUTIONS

Mechatest is a Certified Industrial Sampling Systems Company with over 26 years of experience in design and manufacturing of fluid sampling systems. We understand how a sample behaves at the sample tap and transport into the lab. We offer the best knowledge, equipment and sampling solutions in the field.

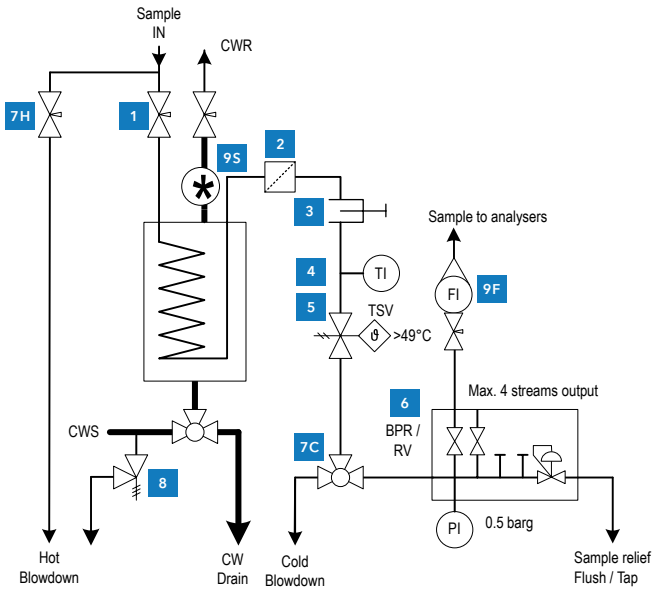
Steam Sample Conditioning - HPHT

High Pressure High Temperature

Pressure > 35 bar Temperature < 538 °C

Control Your Steam Quality

- Increase lifetime of your steam applications
- Prevent corrosion in boilers and pipelines
- Optimize steam chemical composition
- Extract true representative samples of your steam water cycle



Typical P&ID Steam Sample Conditioning System
Numbers correspond to the panel configurator on the next page

Mechatest Steam Sample conditioning panels are available in many configurations for as many applications in the industry. This sampling panel is used in power plants and mostly used in combination with water analyser equipment for analysis on chemical parameters like Conductivity, pH, Dissolved Oxygen, Silica and Sodium. The panels are used for sample conditioning and collection.

SPECIFICATIONS

Sample pressure (recommended)	> 35 bar (Max. 345 bar)
Sample temperature (recommended)	Max. 538 °C
Flow single phase samples (water/condensate)	Max. 108 L/h
Flow condensing samples (steam)	Max. 60 L/h
Cooling water flow	Max. 1500 L/h
Sample tube length and cooling area	11 m (0.22 m^2)
Standard panel dimension	850 x 500 mm

TYPICAL APPLICATOINS

- Demi water
- Feed water
- Boiler water
- Condensate
- LP/HP Steam
- Life Steam

BUILT CONFORM

- ASME PTC 19.11-2008
- ASTM D1066
- ASTM D1192 / D3370
- SO 5667.7

MECHATEST
SAMPLING SOLUTIONS

SCS Steam Panel Configurator - HPHT

High Pressure High Temperature

Series	Cooler Type	Tube Material	Tube Design	Shell Material	Shell Design
HPHT	TLR-4225	1/4'' OD - 316 SS	345 bar @ 538°C	304 SS	31 bar @ 343°C
HPHTA	TLR-42B5	1/4'' OD - Inconel 625	345 bar @ 593°C	304 SS	31 bar @ 343°C
HPHTAA	TLR-4BB5	1/4'' OD - Inconel 625	345 bar @ 593°C	Inconel 625	31 bar @ 343°C

Designators		1	2	3	4	5	-	6	7	8	9	10
Example Ordering No.	HPHT	-	1	1	1	1	1	-	0	0	0	0	X
Ordering No.		-						-					

1 INLET BLOCK VALVE

- **0** No inlet valve
- **1** Needle valve 316 SS (Std. Swagelok)
- **2** Double inlet valve

2 FILTER (1)

- **0** No filter
- **1** T-Filter 90 micron 316 SS (Std. Swagelok)
- **2** Filter large volume 90 micron 316 SS (Std. Classic)

3 PRESSURE REGULATION

- **0** No pressure regulating valve
- **1** VREL pressure valve 316 SS (Std. Swagelok)

4 TEMPERATURE INDICATION (1)

- **0** No temperature gauge
- **1** Temperature gauge 0 - 60 °C 316 SS in flow chamber (Std.)

5 TEMPERATURE SAFETY (1)

- **0** No temperature shut-off valve
- **1** Automatic Temperature shut-off valve @ 46°C (Std.)
  (automatic open if temperature below setpoint)
- **2** Reset Temperature shut-off valve @ 46°C (Std. Centry)
  (reset to open if temperature below setpoint)
- **3** Electronic Temperature shut-off valve @ 46°C

6 BACK PRESSURE REGULATION

- **0** No BPR mounting plate
- **B** Mounting plate for Swan BPR on panel

7 SAMPLE BLOWDOWN OPTIONS

- **0** No sample blowdown (Std.)
- **C** Cold sample blowdown
- **H** Hot sample blowdown
- **CH** Cold and Hot sample blowdown

8 PRESSURE SAFETY OPTIONS

- **0** No pressure safety (Std.)
- **1** Pressure relief valve on C.W. connection
- **2** Pressure relief valve on Sample connection

9 FLOW INDICATION

- **0** No flow indication (Std.)
- **F** Flow indicator in sample line
- **S** Sight glass indicator in C.W. line

10 OPTIONS (2)

- **X** No options
- **A** Acid purging connection (T-conn. + valve)
- **E** Extension handle (on hot inlet valve)
- **L** Lab sample tablet / drain funnel
- **P** Portable (system on rack with wheels)

(1) Other sizes, ranges or specifications available on request
(2) Select from the ''options'' designator one or more options and fill in all these letters in the same colum

Mechatest Sampling Solutions
Tel: +31(0)153105183
sales@mechatest.com
www.mechatest.com

Koperslager 3
2631 RK Nootdorp
The Netherlands
Be part of the best solution

MECHATEST SAMPLING SOLUTIONS

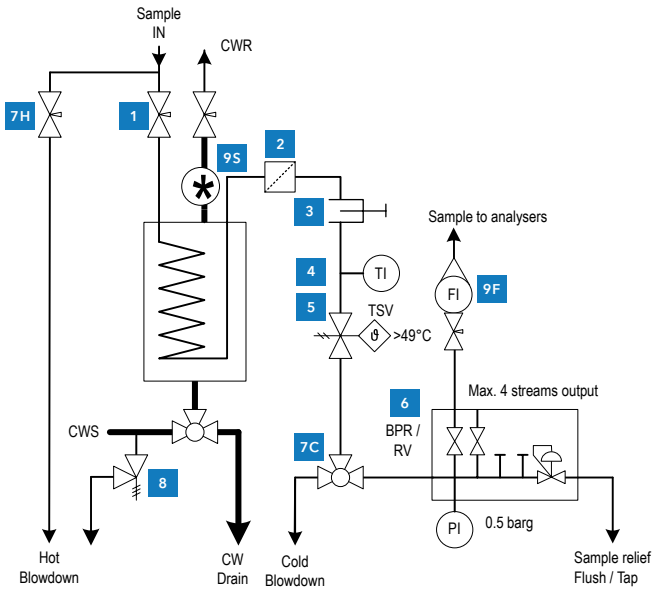
Steam Sample Conditioning - HPHF

High Pressure High Flow

Pressure > 35 bar Temperature < 538°C

Control Your Steam Quality

- Increase lifetime of your steam applications
- Prevent corrosion in boilers and pipelines
- Optimize steam chemical composition
- Extract true representative samples of your steam water cycle



Typical P&ID Steam Sample Conditioning System
Numbers correspond to the panel configurator on the next page

Mechatest Steam Sample conditioning panels are available in many configurations for as many applications in the industry. This sampling panel is used in power plants and mostly used in combination with water analyser equipment for analysis on chemical parameters like Conductivity, pH, Dissolved Oxygen, Silica and Sodium. The panels are used for sample conditioning and collection.

SPECIFICATIONS

Sample pressure (recommended)	> 35 bar
Sample temperature (recommended)	Max. 538 °C
Flow single phase samples (water/condensate)	Max. 210 L/h
Flow condensing samples (steam)	Max. 120 L/h
Cooling water flow	Max. 1500 L/h
Sample tube length and cooling area	11 m (0.33 m^2)
Standard panel dimension	850 x 500 mm

TYPICAL APPLICATOINS

- Demi water
- Feed water
- Boiler water
- Condensate
- LP/HP Steam
- Life Steam

BUILT CONFORM

- ASME PTC 19.11-2008
- ASTM D1066
- ASTM D1192 / D3370
- SO 5667.7

MECHATEST
SAMPLING SOLUTIONS

SCS Steam Panel Configurator - HPHF

High Pressure High Flow

Series	Cooler Type	Tube Material	Tube Design	Shell Material	Shell Design
HPHF	FLR-6225	1/4'' OD - 316 SS	345 bar @ 538°C	304 SS	31 bar @ 343°C
HPHF5	FLR-62B3	1/4'' OD - Inconel 625	345 bar @ 593°C	304 SS	31 bar @ 343°C
HPHFA	FLR-6BB3	1/4'' OD - Inconel 625	345 bar @ 593°C	Inconel 625	31 bar @ 343°C

Designators		1	2	3	4	5	-	6	7	8	9	10
Example Ordering No.	HPHF	-	1	1	1	1	-	0	0	0	0	X
Ordering No.		-					-					

1 INLET BLOCK VALVE

- **0** No inlet valve
- **1** Needle valve 316 SS (Std. Swagelok)
- **2** Double inlet valve

2 FILTER (1)

- **0** No filter
- **1** T-Filter 90 micron 316 SS (Std. Swagelok)
- **2** Filter large volume 90 micron 316 SS (Std. Classic)

3 PRESSURE REGULATION

- **0** No pressure regulating valve
- **1** VREL pressure valve 316 SS (Std. Swagelok)

4 TEMPERATURE INDICATION (1)

- **0** No temperature gauge
- **1** Temperature gauge 0 - 60 °C 316 SS in flow chamber (Std.)

5 TEMPERATURE SAFETY (1)

- **0** No temperature shut-off valve
- **1** Automatic Temperature shut-off valve @ 46°C (Std.)
  (automatic open if temperature below setpoint)
- **2** Reset Temperature shut-off valve @ 46°C (Std. Centry)
  (reset to open if temperature below setpoint)
- **3** Electronic Temperature shut-off valve @ 46°C

6 BACK PRESSURE REGULATION

- **0** No BPR mounting plate
- **B** Mounting plate for Swan BPR on panel

7 SAMPLE BLOWDOWN OPTIONS

- **0** No sample blowdown (Std.)
- **C** Cold sample blowdown
- **H** Hot sample blowdown
- **CH** Cold and Hot sample blowdown

8 PRESSURE SAFETY OPTIONS

- **0** No pressure safety (Std.)
- **1** Pressure relief valve on C.W. connection
- **2** Pressure relief valve on Sample connection

9 FLOW INDICATION

- **0** No flow indication (Std.)
- **F** Flow indicator in sample line
- **S** Sight glass indicator in C.W. line

10 OPTIONS (2)

- **X** No options
- **A** Acid purging connection (T-conn. + valve)
- **E** Extension handle (on hot inlet valve)
- **L** Lab sample tablet / drain funnel
- **P** Portable (system on rack with wheels)

(1) Other sizes, ranges or specifications available on request
(2) Select from the ''options'' designator one or more options and fill in all these letters in the same colum

Mechatest Sampling Solutions
Tel: +31(0)153105183
sales@mechatest.com
www.mechatest.com

Koperslager 3
2631 RK Nootdorp
The Netherlands
Be part of the best solution

MECHATEST SAMPLING SOLUTIONS

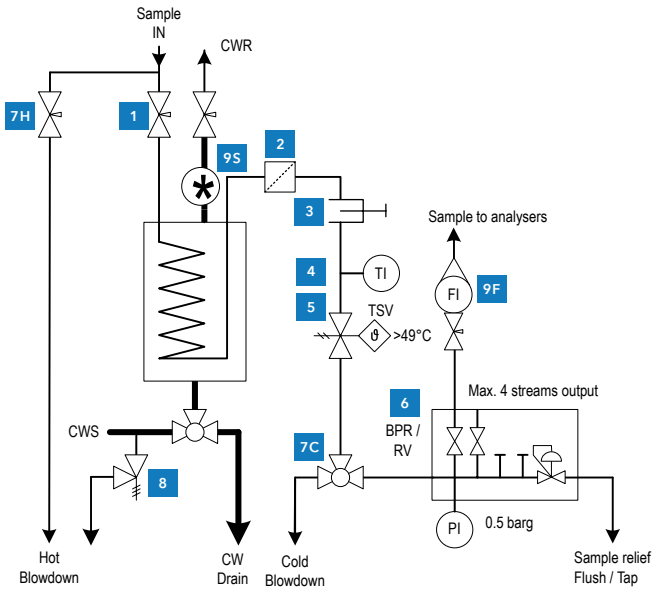
Steam Sample Conditioning - HPXF

High Pressure Extreme Flow

Pressure > 35 bar Temperature > 250°C

Control Your Steam Quality

- Increase lifetime of your steam applications
- Prevent corrosion in boilers and pipelines
- Optimize steam chemical composition
- Extract true representative samples of your steam water cycle



Typical P&ID Steam Sample Conditioning System
Numbers correspond to the panel configurator on the next page

Mechatest Steam Sample conditioning panels are available in many configurations for as many applications in the industry. This sampling panel is used in power plants and mostly used in combination with water analyser equipment for analysis on chemical parameters like Conductivity, pH, Dissolved Oxygen, Silica and Sodium. The panels are used for sample conditioning and collection.

SPECIFICATIONS

Sample pressure (recommended)	> 35 bar
Sample temperature (recommended)	Max. 538 °C
Flow single phase samples (water/condensate)	Max. 300 L/h
Flow condensing samples (steam)	Max. 120 L/h
Cooling water flow	Max. 2700 L/h
Sample tube length and cooling area	15 m (0.44 m^2)
Standard panel dimension	850 x 500 mm

TYPICAL APPLICATOINS

- Demi water
- Feed water
- Boiler water
- Condensate
- LP/HP Steam
- Life Steam

BUILT CONFORM

- ASME PTC 19.11-2008
- ASTM D1066
- ASTM D1192 / D3370
- SO 5667.7

MECHATEST
SAMPLING SOLUTIONS

SCS Steam Panel Configurator - HPXF

High Pressure Extreme Flow

Series	Cooler Type	Tube Material	Tube Design	Shell Material	Shell Design
HPXF	FXR-6222	1/4'' OD - 316 SS	345 bar @ 538°C	304 SS	31 bar @ 343°C
HPXF5	FXR-6225	1/4'' OD - Inconel 625	345 bar @ 538°C	304 SS	31 bar @ 343°C
HPXFA	FXR-62B3	1/4'' OD - Inconel 625	345 bar @ 593°C	Inconel 625	31 bar @ 343°C

Designators		1	2	3	4	5	-	6	7	8	9	10
Example Ordering No.	HPXF	-	1	1	1	1	1	-	0	0	0	0	X
Ordering No.		-						-					

1 INLET BLOCK VALVE

- **0** No inlet valve
- **1** Needle valve 316 SS (Std. Swagelok)
- **2** Double inlet valve

2 FILTER (1)

- **0** No filter
- **1** T-Filter 90 micron 316 SS (Std. Swagelok)
- **2** Filter large volume 90 micron 316 SS (Std. Classic)

3 PRESSURE REGULATION

- **0** No pressure regulating valve
- **1** VREL pressure valve 316 SS (Std. Swagelok)

4 TEMPERATURE INDICATION (1)

- **0** No temperature gauge
- **1** Temperature gauge 0 - 60 °C 316 SS in flow chamber (Std.)

5 TEMPERATURE SAFETY (1)

- **0** No temperature shut-off valve
- **1** Automatic Temperature shut-off valve @ 46°C (Std.)
  (automatic open if temperature below setpoint)
- **2** Reset Temperature shut-off valve @ 46°C (Std. Centry)
  (reset to open if temperature below setpoint)
- **3** Electronic Temperature shut-off valve @ 46°C

6 BACK PRESSURE REGULATION

- **0** No BPR mounting plate
- **B** Mounting plate for Swan BPR on panel

7 SAMPLE BLOWDOWN OPTIONS

- **0** No sample blowdown (Std.)
- **C** Cold sample blowdown
- **H** Hot sample blowdown
- **CH** Cold and Hot sample blowdown

8 PRESSURE SAFETY OPTIONS

- **0** No pressure safety (Std.)
- **1** Pressure relief valve on C.W. connection
- **2** Pressure relief valve on Sample connection

9 FLOW INDICATION

- **0** No flow indication (Std.)
- **F** Flow indicator in sample line
- **S** Sight glass indicator in C.W. line

10 OPTIONS (2)

- **X** No options
- **A** Acid purging connection (T-conn. + valve)
- **E** Extension handle (on hot inlet valve)
- **L** Lab sample tablet / drain funnel
- **P** Portable (system on rack with wheels)

(1) Other sizes, ranges or specifications available on request
(2) Select from the ''options'' designator one or more options and fill in all these letters in the same colum

Mechatest Sampling Solutions
Tel: +31(0)153105183
sales@mechatest.com
www.mechatest.com

Koperslager 3
2631 RK Nootdorp
The Netherlands
Be part of the best solution

MECHATEST SAMPLING SOLUTIONS

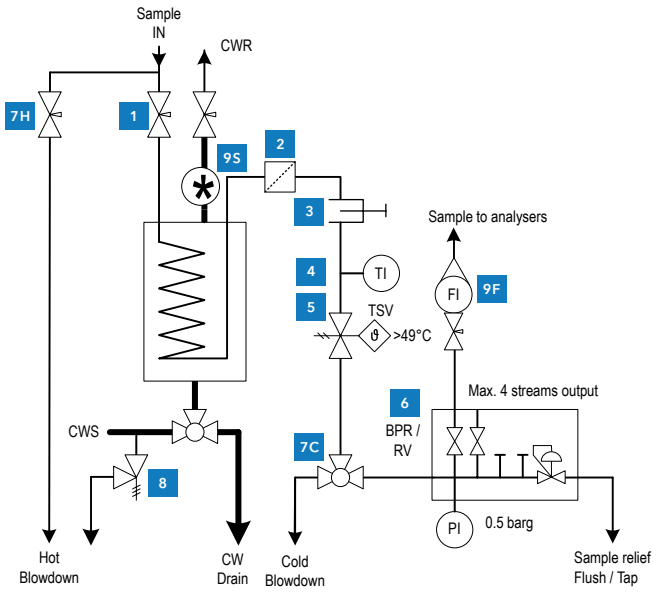
Steam Sample Conditioning - HPXT

High Pressure Extra HighTemperature

Pressure > 35 bar Temperature < 600°C

Control Your Steam Quality

- Increase lifetime of your steam applications
- Prevent corrosion in boilers and pipelines
- Optimize steam chemical composition
- Extract true representative samples of your steam water cycle



Typical P&ID Steam Sample Conditioning System
Numbers correspond to the panel configurator on the next page

Mechatest Steam Sample conditioning panels are available in many configurations for as many applications in the industry. This sampling panel is used in power plants and mostly used in combination with water analyser equipment for analysis on chemical parameters like Conductivity, pH, Dissolved Oxygen, Silica and Sodium. The panels are used for sample conditioning and collection.

SPECIFICATIONS

Sample pressure (recommended)	> 35 bar (Max. 345 bar)
Sample temperature (recommended)	Max. 600 °C
Flow single phase samples (water/condensate)	Max. 108 L/h
Flow condensing samples (steam)	Max. 60 L/h
Cooling water flow	Max. 1500 L/h
Sample tube length and cooling area	11 m (0.22 m^2)
Standard panel dimension	850 x 500 mm

TYPICAL APPLICATOINS

- HP Steam
- Life Steam

BUILT CONFORM

- ASME PTC 19.11-2008
- ASTM D1066
- ASTM D1192 / D3370
- SO 5667.7

MECHATEST SAMPLING SOLUTIONS

SCS Steam Panel Configurator - HPXT

High Pressure Extra High Temperature

Series	Cooler Type	Tube Material	Tube Design	Shell Material	Shell Design
HPXT	TLR-4225	1/4'' OD - 316 SS	345 bar @ 538°C	304 SS	31 bar @ 343°C
HPXTA	TLR-42B5	1/4'' OD - Inconel 625	345 bar @ 593°C	304 SS	31 bar @ 343°C
HPX TAA	TLR-4BB5	1/4'' OD - Inconel 625	345 bar @ 593°C	Inconel 625	31 bar @ 343°C

Designators		1	2	3	4	5	-	6	7	8	9	10
Example Ordering No.	HPXT	-	1	1	1	1	-	0	0	0	0	X
Ordering No.		-					-					

1 INLET BLOCK VALVE

- **0** No inlet valve
- **1** Needle valve 316 SS (Std. Swagelok)
- **2** Double inlet valve

2 FILTER (1)

- **0** No filter
- **1** T-Filter 90 micron 316 SS (Std. Swagelok)
- **2** Filter large volume 90 micron 316 SS (Std. Classic)

3 PRESSURE REGULATION

- **0** No pressure regulating valve
- **1** VREL pressure valve 316 SS (Std. Swagelok)

4 TEMPERATURE INDICATION (1)

- **0** No temperature gauge
- **1** Temperature gauge 0 - 60 °C 316 SS in flow chamber (Std.)

5 TEMPERATURE SAFETY (1)

- **0** No temperature shut-off valve
- **1** Automatic Temperature shut-off valve @ 46°C (Std.)
  (automatic open if temperature below setpoint)
- **2** Reset Temperature shut-off valve @ 46°C (Std. Centry)
  (reset to open if temperature below setpoint)
- **3** Electronic Temperature shut-off valve @ 46°C

6 BACK PRESSURE REGULATION

- **0** No BPR mounting plate
- **B** Mounting plate for Swan BPR on panel

7 SAMPLE BLOWDOWN OPTIONS

- **0** No sample blowdown (Std.)
- **C** Cold sample blowdown
- **H** Hot sample blowdown
- **CH** Cold and Hot sample blowdown

8 PRESSURE SAFETY OPTIONS

- **0** No pressure safety (Std.)
- **1** Pressure relief valve on C.W. connection
- **2** Pressure relief valve on Sample connection

9 FLOW INDICATION

- **0** No flow indication (Std.)
- **F** Flow indicator in sample line
- **S** Sight glass indicator in C.W. line

10 OPTIONS (2)

- **X** No options
- **A** Acid purging connection (T-conn. + valve)
- **E** Extension handle (on hot inlet valve)
- **L** Lab sample tablet / drain funnel
- **P** Portable (system on rack with wheels)

(1) Other sizes, ranges or specifications available on request
(2) Select from the ''options'' designator one or more options and fill in all these letters in the same colum

Mechatest Sampling Solutions
Tel: +31(0)153105183
sales@mechatest.com
www.mechatest.com

Koperslager 3
2631 RK Nootdorp
The Netherlands
Be part of the best solution

MECHATEST SAMPLING SOLUTIONS