



Swagelok® Grab Sampling System Checklist

Grab Sample Module (GSM) & Cylinder (GSC) Grab Sample Liquid (GSL) Quantity _____

Customer Information

Account _____ Project Name _____ Submitted by _____
Contact _____ Email _____ Phone _____
Today's Date _____ Date Bid Due _____ Need by Date _____

Process Fluid Data

Gas Liquid Process Fluid _____
Min/Max Pressure _____ Min/Max Temp _____
Inlet Pressure _____ Inlet Temp _____
Outlet Pressure _____ Max Outlet Temp _____
Vent/Flare Pressure _____ Viscosity at Temp _____
Purge Pressure _____ Tag#'s _____
Condensable? Yes No At what Temp? _____ Particulates? Yes No Size? _____

Fluid Hazard Conditions

Materials of Construction

Panel Components

- 316 Stainless
- SilcoNert2000 Coated 316SS
- Alloy 400 Monel
- C-276 Hastelloy
- Other _____

Tubing

- 316 Stainless
- SilcoNert2000 Coated 316SS
- Alloy 400 Monel
- C-276 Hastelloy
- Other _____

Seal Materials

- FKM
- EP
- KZ®
- PTFE
- PEEK
- Other _____

Sample Station Options

Cylinder

Quantity _____
Size: 150cc
 300cc
 400cc
 500cc
 1,000cc
 Other _____

Boston Round Bottle

Quantity _____
Size: 2oz
 4oz
 8oz
 16oz
 32oz
 Other _____

Media Bottle

Quantity _____
Size: 50 cm³
 100 cm³
 250 cm³
 500 cm³
 1000 cm³
 Other _____

Cylinder Material

- 304L 316L
- Alloy 400 Monel
- SilcoNert Coated 316ss

Bottle Description

- Clear Amber
- Safety Coated

Replacing Existing Station No Yes Supplier _____ Model _____
Continuous Flow No Yes
Purge No Yes
Relief Valve No Yes
Check Valves No Inlet Outlet Vent Purge
Isolation Valves No Inlet Outlet Vent Purge
Block Valves No Inlet
Flowmeter No Yes Range _____ gal/min or _____ ft³/min
Outage Tube No Yes Minimum Outage _____ %
Rupture Disc No Yes
Gauges No Pressure _____ Temp _____ General Industrial Safety Process
Inlet/Outlet Connections 1/4" 6mm Other _____
Sample Cooler No Yes Cooling Media _____ Operating Temp _____
Mounting Wall Pipe Stand Qty _____
Enclosure No Yes Insulated Heated? Steam Electric Material _____
Panel Material SS Aluminum Other _____ Decal _____
Quick Connects No QC4 QTM2 QC6 Other _____

Build a GSM solution ordering number by combining the designators in the sequence below.

	1	2	3	4	5	6	7	8
GSM	-		-		-		-	

1. Fluid Type

G = Gas L = Liquid

2. Flow Pattern

1 = Standard 2 = Continuous Flow

3. Dial Range

(primary scale: bar; secondary scale:psi)

B = 0 to 160 psi
 D = 0 to 400 psi
 E = 0 to 800 psi
 F = 0 to 1500 psi
 H = 0 to 3000 psi
 K = 0 to 10 bar
 M = 0 to 25 bar
 O = 0 to 60 bar
 P = 0 to 100 bar
 Q = 0 to 160 bar

4. Quick Connect

2 = QTM2
 4 = QC4
 6 = QC6 Not available with
 0 to 3000 psi or 0 to 160 bar gauge

5. Relief Valve

A = Proportional
 X = None

6. Cylinder Bracket Size

(GSC Specific)
 0150 = 150 cm³
 0300 = 300 cm³
 0400 = 400 cm³
 0500 = 500 cm³
 1000 = 1000 cm³

7. Purge

N = No purge
 P = Purge

8. End Connection

S4 = 1/4 inch Swagelok
 Tube Fitting
 6M = 6mm Swagelok
 Tube Fitting



Build a GSC assembly ordering number by combining the designators in the sequence below.

	1	2	3	4	5	6	7	8	9	10
GSC	-				-				-	

1. Cylinder Material

1 = 304L SS
 2 = 304L SS SilcoNert 2000
 3 = 316 SS
 4 = 316 SilcoNert 2000
 5 = Alloy 400

2. Valve Material

A = 316 SS
 B = 304L SS SilcoNert 2000
 C = Alloy400

3. Cylinder Size

0150 = 150 cm³
 0300 = 300 cm³
 0400 = 400 cm³ available only in 304L SS
 0500 = 500 cm³
 1000 = 150 cm³ available only in 304L SS

4. Purge

N = No Purge
 P = Purge

5. Quick Connect

2 = QTM2
 4 = QC4
 6 = QC6 pressure rating
 limited to 1500psig (103 bar)

6. Valve Type

1 = D Series

7. Rupture Disc

A = 1900 psig (130 bar)
 B = 2800 psig (192 bar)
 X = None

8. Outage Tube

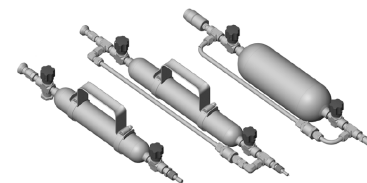
XX = None 10 = 10%
 20 = 20% 30 = 30%
 40 = 40% 50 = 50%

9. Cylinder Handle

H = Handle available on cylinders 400 cm³ or larger
 X = No Handle

10. Options

EP = Electropolished cylinder (Cannont combine with PTFE)
 LE = Laser etched cylinder, followed by specific information
 PD = TPED cylinder certification (Not available in Alloy 400)
 SB = Stem & body protectors (Not available on QTM2)
 T = PTFE cylinder coatings (cannot combine with electropolishing, not available with SilcoNert 2000 coating)



Build a GSL assembly ordering number by combining the designators in the sequence below.

	1	2	3	4	5	6
GSL	-			-		

1. System Type

1 = Simple
 2 = Simple with purge
 3 = Continuous Flow
 4 = Continuous Flow with purge
 5 = Simple with back purge
 6 = Fixed Volume
 7 = Fixed volume w/continuous flow

2. Bottle Fixture Size*

080Z = 8 oz Boston Round
 160Z = 16 oz Boston Round
 320Z = 32 oz Boston Round
 0250 = 250 cm³ media bottle
 0500 = 500 cm³ media bottle
 1000 = 1000 cm³ media bottle

3. Needles

Side-by-Side Needles

A = 0.065 in. (1.7 mm) process and vent needles
 B = 0.083 in. (2.1 mm) process and vent needles
 C = 0.109 in. (2.8 mm) process and 0.083 in. (2.1 mm) vent needle

Tube Stub and Vent Orifice

E = 0.025 in. (6.4 mm) tube stub

4. Sample Cooler primary scale Fahrenheit

X = no cooler or thermometer
 B = cooler w/-40 to 160° F thermometer
 C = cooler w/0 to 200° F thermometer
 D = cooler w/0 to 250° F thermometer
 E = cooler w/50 to 300° F thermometer
 F = cooler w/50 to 550° F thermometer

4. Sample Cooler (con't) primary scale Celsius

G = cooler w/-40 to 70° C thermometer
 H = cooler w/-15 to 90° C thermometer
 I = cooler w/-20 to 120° C thermometer
 J = cooler w/10 to 150° C thermometer
 K = cooler w/10 to 290° C thermometer

5. End Connection

S4 = 1/4 inch (1/2 in. cooling water)
 6M = 6 mm (12 mm cooling water)

6. Options

EN = Instrumentation will be provided in fractional units (psig/std ft³/h) in place of metric (bar/std L/min)[Ⓛ]
 KZ = Perfluorocarbon FFKM[Ⓛ]
 MP = Pressure gauges provided with MPa primary units and no secondary units.[Ⓛ]
 S = No PTFE tape allowed
 Omit = No options added

[Ⓛ] Check valves on purge line(s) provided with perfluorocarbon FFKM O-rings.

[Ⓛ] EN and MP options cannot be ordered together.

*Fixture accepts standard bottle without safety coating. Fixture applications requiring a safety coated bottle, please contact your authorized sales and service center.