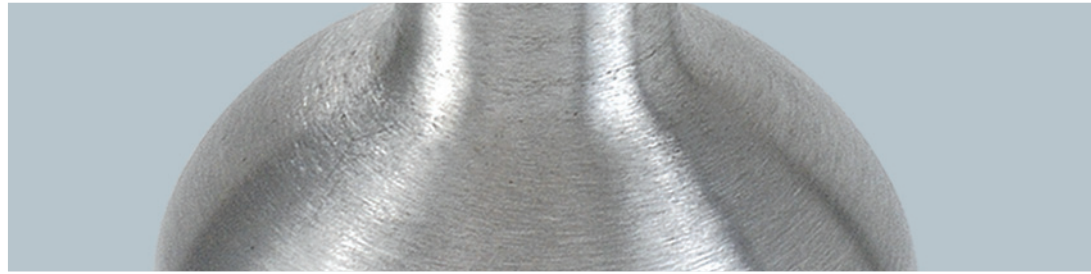


HAM-LET SAMPLE CYLINDER



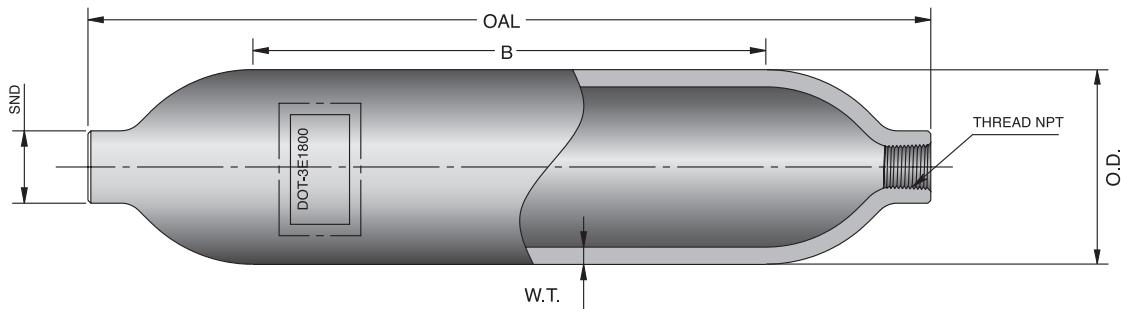
APPLICATION:

Sampling Cylinders permit the extraction of a sample from a remote process location and provide safe containment for storage and transportation to the laboratory for analysis. These cylinders are rated to 1800 psi at room temperature for liquids and gases. Some applications include hydrocarbon sampling in refineries, gas sampling in chromatography and

condensate sampling in fossil-fuel and nuclear-power plants. In similar applications, petrochemical facilities and gas processing plants utilize sample cylinders. Pressure surge accumulators or reaction vessels are other common uses for sample cylinders.

PROPERTIES: TABLE 1

No.	Description	Material	Pressure Rating (psi)	DOT Stand	Min. Volume	Max. Weight	B	OAL	SND	Thread (NPT)	O.D.	W.T.
1	HSSC15-1AH	St.St.304	1800	3E	50 CC (3.05 IN ³)	0.5 LBS	1.64"	3.80"	0.72"	1/4-18	1.5"	0.083"
2	HSSC15-2AH				75 CC (4.6 IN ³)	0.6 LBS	2.72"	4.88"				
3	HSSC15-3AH				150 CC (9.2 IN ³)	1.0 LBS	6.09"	8.25"				
4	HSSC15-1BH	St.St.316			50 CC (3.05 IN ³)	0.5 LBS	1.64"	3.80"				
5	HSSC15-2BH				75 CC (4.6 IN ³)	0.6 LBS	2.72"	4.88"				
6	HSSC15-3BH				150 CC (9.2 IN ³)	1.0 LBS	6.09"	8.25"				
7	HSSC15-4BH	St.St.304	150 CC (9.2 IN ³)	1.0 LBS	6.09"	8.25"	0.85"	3/8-18	1/4-18	2"	0.095"	
8	HSSC20-1AH		300 CC (18.3 IN ³)	1.8 LBS	6.79"	9.25"	0.74"					
9	HSSC20-2AH		500 CC (30.5 IN ³)	2.5 LBS	11.42"	13.88"	0.74"					
10	HSSC20-1BH	St.St.316	300 CC (18.3 IN ³)	1.8 LBS	6.79"	9.25"	0.74"					
11	HSSC20-2BH		500 CC (30.5 IN ³)	2.5 LBS	11.42"	13.88"	0.74"					



Transportation Specifications: DOT-3E1800 per 49CFR 178.42

Material Traceability

Raw material is heat code traceable. This traceability follows each cylinder through manufacture, heat treating, cleaning and pressure testing.

Cylinder Manufacturing Standards

DOT CFCC, FRP-1, FRP-2, 3A, 3AA, 3AL, 3E, 3HT, 39, NGV2, FMVSS, HSE FW1/FW2, TUV, KHK, MIL-C-7905, MS26545, MIL-R-8573, EN1975, 12245 and others.

Approval of T.P.E.D. { Transportation Pressure Equipment Directive} is imminent.

Applicable Valves with Sample Cylinders

HAM-LET H-300 Needle Valve Series

Notes:

1. Dimensioning and tolerancing per ANSI Y 14.5M.
2. Cylinder manufactured and inspected in accordance with DOT '49 CFR 178.42 Specification 3E.
3. Material: seamless cold-finished stainless steel tubing per ASTM A269. (See table 1 for grade specification.)
4. Lot size 500 cylinders.
5. Heads formed using spinning process.
6. Sandblast inside surfaces.
7. Thread ends per ANSI B1.20.1.
8. Part free of grease, machine oil & other debris inside and out. Acid wash and rinse with deionized water.
9. Rotation sand entire cylindrical outer surface to finish 32µInch.
10. Destructive acceptance criteria (one cylinder per lot) per DOT 3E: - Cylinder burst between 6,000 and 12,000 psi without fragmentation; or -Cylinder holds 12,000 psi for 30 seconds without burst, and withstands flattening test to six times wall thickness without cracking.
11. Non-destructive acceptance criteria (all cylinders) per DOT 3E: hydrostatic proof test at 3,000 +100/- 0 psi for 30 seconds minimum without failure or evidence of defect.
12. Minimum water volume: see table 1.
13. Maximum cylinder weight: see table 1.
14. Cylinder operating pressure: 1800 psi.