





## **ASME Ground Storage**

- Pressures up to 15,000 psi or 1,000 bar.
- Well suited for helium, hydrogen and natural gas storage.
- Range in lengths from 6 to 40' with diameters up to 24 inches.
- Certified by American Society of Mechanical Engineers.
- National Board registered.

## Tubes that are certified by the American Society of Mechanical Engineers (ASME) are used to store high pressure gases and usually remain stationary.

ASME tubes are an important part of numerous stationary gas storage applications including CNG fueling stations, nuclear power plants, oil refineries and industrial gas. These tubes are particularly well-suited for the storage of helium and hydrogen, which may be impractical to store in a liquid phase. These vessels are certified to withstand pressures of up to 15,000 psi and range from 6' to 40' with diameters up to 24 inches. Currently, unlike DOT tubes, periodic requalification of ASME pressure vessels

is not required by ASME code. Often, ASME pressure vessels are used in conjunction with other means of storage. For example, to improve the efficiency of their cylinder fill plants, helium and hydrogen distributors often order from FIBA a complete system that incorporates a tube trailer (mobile), fill stanchion, ASME receiver (stationary) and pressure reducing station. When used together, these components can accommodate fast-filling operations with optimal efficiency.

Whether new or like-new, our stationary, receiver assemblies are manufactured in accordance with ASME codes and shipped completely assembled (excepting, in some cases, the vent stacks on the safety relief valves). Our assemblies are also designed to comply with the recommendations of the Compressed Gas Association (CGA) and the National Fire Protection Association (NFPA). ASME assemblies to meet nearly any gas capacity and dimensional requirements can be fabricated. When we offer tubes from our inventory, all other components are new.



## SIZES, CAPACITIES AND DESIGN PRESSURES OF FIBA, ASME-CODED PRESSURE VESSELS

ASME GAS CONTAINER DESIGN PRESSURE* (BAR) (SF=3**)	MATERIAL			OUTSIDE DIAMETER		MINIMUM WALL		NOMINAL WALL***		WEIGHT PER FOOT		MAXIMUM LENGTH		NOMINAL WATER VOLUME		VESSEL WEIGHT	
	Specification	Grade	Class	in.	mm	in.	mm	in.	mm	lbs./ft.	kg/m	ft.	mm	cu. ft.	liters	lbs.	kg
2,450 (169)	SA372	J	65	24	610	0.817	20.8	0.934	23.7	232.2	345.6	24	7,315	60.2	1,705	5,522	2,505
2,800 (193)	SA372	J	70	24	610	0.817	20.8	0.934	23.7	232.2	345.6	24	7,315	60.2	1,705	5,522	2,505
3,500 (241)	SA372	J	65	24	610	1.154	29.3	1.319	33.5	321.6	478.6	20	6,096	46.1	1,306	6,390	2,898
4,000 (276)	SA372	J	70	24	610	1.154	29.3	1.319	33.5	321.6	478.6	20	6,096	46.1	1,306	6,390	2,898
4,811 (332)	SA372	J	65	20	508	1.304	33.1	1.489	37.8	296.1	440.6	23	7,010	34.1	966	6,771	3,071
5,500 (379)	SA372	J	70	20	508	1.304	33.1	1.489	37.8	296.1	440.6	23	7,010	34.1	966	6,771	3,071
5,833 (402)	SA372	J	65	16	406	1.250	31.8	1.429	36.3	223.6	332.8	30	9,144	27.0	765	6,671	3,026
6,667 (460)	SA372	J	70	16	406	1.250	31.8	1.429	36.3	223.6	332.8	30	9,144	27.0	765	6,671	3,026
6,809 (469)	SA372	J	65	16	406	1.444	36.6776	1.65	41.91	233.5	347.5	29	8,839	25.5	721	6,769	3,070
7,777 (536)	SA372	J	70	16	406	1.444	36.6776	1.65	41.91	233.5	347.5	29	8,839	25.5	721	6,769	3,070

<sup>\*</sup> Design pressure can be custom ordered.

<sup>\*\*\*</sup> Nominal wall = Minimum wall ÷ .875



- Industry recognition.
- Lifetime test.
- Inspected, certified and pressure tested
- Flexible payload for increased capacity as required.
- Customized assembly matched to the installation site.



<sup>\*\*</sup> Design pressures shown are based on a maximum operating temperature of +200°F [93°C]. Higher operating temperature designs are available at reduced pressures.