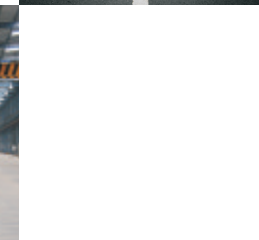
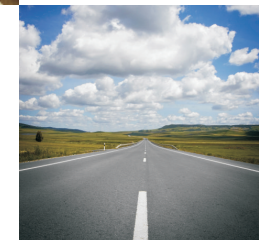
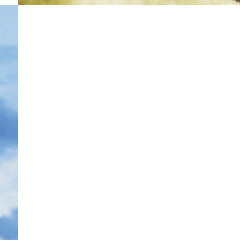
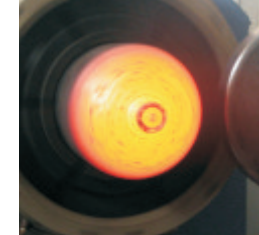
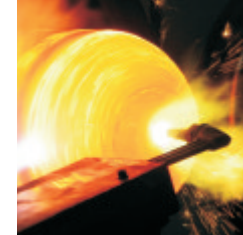


CNG



Global Export Markets



"Think CNG, Think Associate Cylinders..."

CNG cylinders for a
clean and green environment

Associate
CYLINDERS
your trusted partner...

Associate High Pressure Technologies Pvt. Ltd.
47 Victoria Road, Mumbai 400010. MS, India.
T : +91 22 2372 8820 | F : +91 22 2373 2222
info@associatecylinders.com | www.associatecylinders.com

Associate High Pressure Technologies Pvt. Ltd.
Factory: Plot No. 543-560, Kandla SEZ, Gandhidham, Kutch, Gujrat - 370 230.
plant@associatecylinders.com | www.associatecylinders.com

Associate
CYLINDERS
your trusted partner...



NGV

Natural Gas Vehicle



CNG cylinders that power your future

Associate High Pressure Technologies pvt. Ltd., an Associate group company, manufactures and offers the widest range of high pressure seamless steel CNG cylinders (Type1) for various on board automobile applications like trucks, buses, cars, utility vehicles etc and CNG storage and transportation cascades.

We supply the cylinders with or without valves, and we also customize neck thread according to the clients specifications and all cylinders are epoxy-coated on the outside to minimise corrosion.

Our versatile range includes cylinders from diameter(OD)108 mm to 406 mm with water capacities 3 litres to 200 litres with a working pressure up to 275 Bar.

CNG cylinder cascades are manufactured as per the specific requirement of gas distributing company. We manufacture various capacity for filling pressure of up to 275 Bar.

CNG cylinders at Associate High Pressure Technologies pvt. Ltd. are manufactured with state of the art manufacturing and testing facilities and comply with the highest national and international standards.

Safety:
"Associate" CNG cylinders are strong and lightweight and undergo stringent cyclic testing to assess fatigue strength, usage life and to ensure safety and reliability under extreme climate conditions.

Our Vision
We strive to create a new improved tomorrow through our products that make a clean and green environment.

Our Mission
To truly understand the clients perspective and to supply highest quality high pressure cylinders that talk safety and reliability.



Application

We manufacture these cylinders for a variety of on board CNG applications



Certification

Since compressed gas cylinders can have an explosive effect during accidents, they have to conform to the highest standards of safety. Associate High Pressure Technologies pvt. Ltd. offers the safest and most reliable CNG cylinders manufactured by high quality seamless steel tubes .

Approval Test

"Associate " cylinders adhere to highest International and National standards.



This has been made possible by assuring the highest levels of inspection in regard to heat treatment, steel tubes inspection.

Some of the Important Approval Tests that our cylinders undergo

- Ultrasonic Test
- Hardness Test
- Hydrostatic Stretch Test
- Air Leakage Test
- Bonfire Test
- Burst Test
- Bullet penetration test



Advanced R & D, Machinery and testing facility with a team of skilled, professional and experienced workforce makes sure that every cylinder that leaves our premises reflects the mark of safety and superior quality something which the Associate Group has always believed .

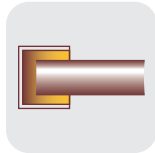
Process



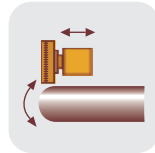
1. RawMaterial Reception



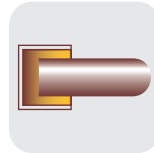
2. Length Cutting



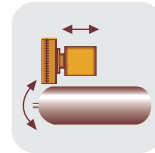
4. Induction Heating



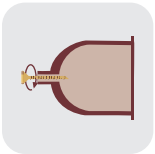
5. Bottom Spinning



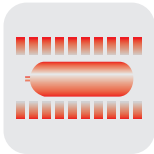
6. Induction Heating



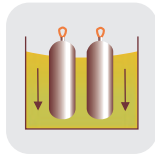
7. Shoulder and Neck Spinning



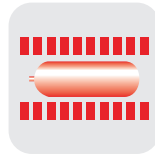
8. Neck Opening



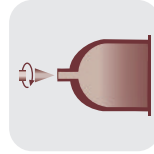
9. Hardening Furnace



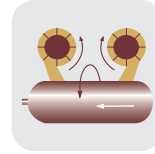
10. Quench Bath



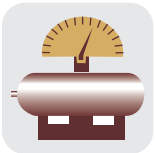
11. Tempering Furnace



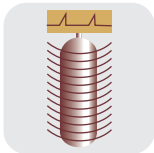
12. Neck Machining



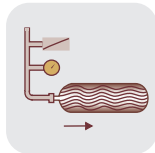
13. Internal & External Shot Blasting



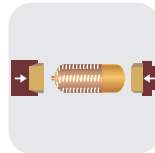
14. Mass Check & Hardness Test



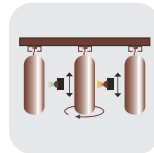
15. Ultrasonic Inspection



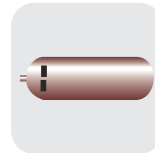
16. Hydrostatic Stretch Test



17. Air Leakage Test



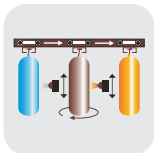
18. Pressure Cyclic Test



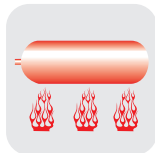
19. Stamping & Marking



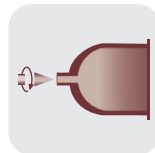
20. Internal Cleaning



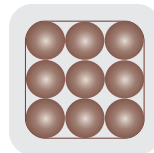
21. Painting & Final Inspection



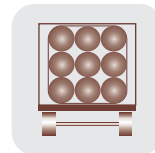
22. Bonfire Test



23. Final Threading



24. Packaging



25. Shipping

Raw material is in the form of seamless steel cylinder tubes of various sizes, grades. The seamless tubes are then cut into desired lengths as per cylinder water capacity. The cut tubes are fed to an end heating induction furnace, where one end of the tube is heated to around 1200 deg C. The heated tube is then fed to a hot spinning machine, which spins the heated tube end to dome shape in hot condition. The open end of the tube is now subjected to induction heating of around 1200 °C. The heated end is now fed into a hot spinning machine, which spins the heated end into a neck shape. The product is now fed into a heat treatment furnace to ensure the final product meets desired metallurgical properties required fo the application. Here several processes can be carried out depending on material grade, application, thickness available, working pressure, material properties, etc.

The hardness test is then carried out on hardness testing machine. The neck formed is now cut into desired length by a neck-cutting machine and then drilled by a neck-drilling machine. The neck is then threaded on a CNC machinine. The product is first checked for water capacity. Then the hydrostatic stretch test at 5/3 times of working pressure. The cylinder is then cleaned first externally and then internally by respective internal and external shot blasting machines. The cylinder is then weighed and then sent to a data-stamping machine, the cylinder is then primer painted on the painting conveyor. The product is then dispatched with or without valve and cap as per customer requirements.

Cylinder Range

Water Capacity Ltr.	Diameter D' mm 232/267/317/356/406	Length L' mm	Weight Approx (kg)
20	232	645	25
22	232	705	28
25	232	780	32
28	232	865	34
30	232	905	37
50	232	1445	54
30	267	730	36
35	267	820	40
40	267	920	44
45	267	1025	49
50	267	1120	53
60	267	1330	62
75	267	1320	77
80	267	1715	81
100	267	2125	97
45	317	775	49
50	317	835	52
55	317	910	57
60	317	975	61
65	317	1045	64
70	317	1120	69
75	317	1185	72
80	317	1260	76
90	317	1390	84
100	317	1550	92
60	356	815	66
62	356	840	67
63	356	850	68
65	356	865	69
70	356	925	76
75	356	980	80
80	356	1030	84
90	356	1145	91
100	356	1255	99
100	406	1020	107
110	406	1100	115
120	406	1185	123
198	406	1820	182



Why go CNG

As the nation continues to depend on imported oil to a greater degree every year and air quality challenges loom, NGV vehicles promise to become an important part of the solution.

Natural Gas - in the form of compressed (CNG) - is the cleanest transportation fuel available today. It is domestically abundant and if used broadly would greatly reduce our dependence on foreign energy sources while improving air quality.

Reduces GHGs. According to the California Energy Commission, critical greenhouse gas (GHG) emissions from natural gas are 23% lower than diesel and 30% lower than gasoline.

Safety handling measures

High Pressure CNG Cylinders Require Cautious Handling.

The Simple Rule of the Thumb is to use Common Sense.

- Don't let the cylinders drop. Lower them gently down to their place of storage.
- Be particularly careful when handling an empty Type-4 cylinder as they are extremely fragile.
- Don't use the pressure relief device (PRD) and/or valve as a handle.
- Don't drag or roll a cylinder along the ground.
- Be careful when using forklifts.
- Protect them from the environment (including UV exposure). This is important for all types of cylinders, but it is specially important for wrapped cylinders.
- Avoid unstable stacking which can result in cylinders falling.
- Handle and Store High-Pressure Cylinders with Care.

Recommendation for inspections

Inspect the cylinder to detect:

- Scratches, abrasions or cuts (if wrapped).
- Corrosion
- Impact damage - dents, gouges.
- Cylinder inspection must be performed away from any fire/flame source.
- Fire or heat damage.



CNG cylinders that power your future

Financial Members



www.associatecylinders.com



Associate High Pressure Technologies Pvt. Ltd.

47 Victoria Road, Mumbai 400010. MS, India.

T : +91 22 2372 8820 | F : +91 22 2373 2222

info@associatecylinders.com | www.associatecylinders.com