

The logo for SSP, consisting of the letters 'SSP' in a bold, white, sans-serif font on a dark blue rectangular background.

QUICK REFERENCE GUIDE

CNG FUELING STATIONS

SSP CNG Plus™ Means Leak-Free Connections For CNG Fueling Stations

INNOVATION NEVER STOPS

CNG Plus™ products include 316 stainless steel tubing, fittings, and valves which are developed for the challenges presented by CNG fueling station construction. These products are designed for 5,500 psi service per ASME B31.3. CNG Plus products and services are designed for safe installation in the uncontrolled outdoor environments of CNG fueling station construction.

Many other products produced by SSP meet the pressure requirements and are used in CNG construction applications. These include check valves, trunnion ball valves, and threaded and welded pipe fittings.

All of these products, combined with the SSP Mobile Construction Center and unparalleled service, make SSP the standard in this growing market.



The **SSP Mobile Construction Center** is an onsite consignment of mechanical and electrical components developed specifically for the CNG fueling station construction crew. This 22 foot trailer stays on the job site and you only pay for what you use. This tool crib on wheels saves time from finding local supplies. It is stocked with the common components required at a CNG fueling station construction job site:

- Coiled and stick tubing
- Power and hand tools
- Tube Fittings and Valves
- Piping and Hoses
- Electrical components

SSP CNG Plus Certified Installer Training

provides hands-on and online tube fitting installation training for system installers and inspectors. Upon completion of this training, participants will be Certified SSP CNG Plus installers, able to:



- Make leak-tight connections using SSP tubing and tube fittings
- Prepare tubing for bending and installation
- Measure, layout and bend stainless steel tubing



CNG PLUS™ TUBING

CNG Plus Tubing

CNG Plus tubing, both in coiled and stick configurations, is manufactured with Restricted Tolerance Controls to optimize the tubing for use with compression tube fittings. Stricter OD tolerance and softer Rockwell hardness allow for a superior connection.

CNG Plus Coiled Tubing

CNG Plus stainless steel coiled tubing is specifically engineered to optimize flow for CNG fueling station applications up to 5500 psig. All tubing receives 100% hydrostatic testing and Positive Material Identification. Tubing is fully heat and lot traceable for quality control.



1/2" SPECIFICATIONS		3/4" SPECIFICATIONS	
OD (in.)	1/2"	OD (in.)	3/4"
OD Tolerance (in.)	+0.005/-0.000	OD Tolerance (in.)	+0.005/-0.000
Wall Thickness (in.)	0.070	Wall Thickness (in.)	0.104
Wall Thickness Tolerance	±10%	Wall Thickness Tolerance	±10%
MAWP (psig)	5500	MAWP (psig)	5500
Tubing Hardness (Rockwell)	<80	Tubing Hardness (Rockwell)	<80
Coil Length (ft.) Min. - Max.	605 - 672	Coil Length (ft.) Min. - Max.	270 - 300
Standards	ASTM A269, A-213	Standards	ASTM A269, A-213

CNG Plus 1 inch x 0.120 Min Wall

CNG Plus 0.120 min. wall tubing (average wall 0.134 in.) is 1 in. OD seamless 316 stainless steel annealed tubing designed for working pressures up to 5300 psig, matching SSP Duolok 1 inch tube fittings. It is used in below -grade and above grade applications where higher flows are required. CNG Plus Min Wall tubing is optimized for welding.



SPECIFICATIONS	
OD (in.)	1"
OD Tolerance (in.)	+0.005/-0.000
Min Wall Thickness (in.)	0.120
Wall Thickness Tolerance	±10%
MAWP (psig)	5300
Tubing Hardness (Rockwell)	<80
Standards	ASTM A269, A-213

CNG PLUS™ FEATURED PRODUCTS



CNG Time-Fill Valves

L83 Series High-Pressure Ball Valves are specifically design for the frequent activation, high flow and low temperatures associated with CNG fueling application. 83 series valves are use for time fill nozzles, shut off, isolation, bypass and other application.

The 83 series offers:

- MAWP: 6000 psig (413 bar)
- Temperature: -40 to 185°F (-40 to 85°C)
- Orifice: 0.19 in. (4.8mm)
- Material
 - Body: 316SS
 - Seats: PEEK
 - O-rings: Buna 756
- End Connections
 - Type: Tube Fittings, NPT
 - Sizes: Tube Fittings 1/8 to 1/2 in. (6 to 12 mm) NPT 1/4 in.



Check Valves

CH Series check valves offer a poppet-style metal-to-metal seal for high pressure operation in high-pressure, high-flows, frequent actuation and low-temperatures CNG applications. CH-Series check valves maintain downstream pressure in the event of a pressure drop upstream of the valve.

Features:

- MAWP: Up to 6000 psig
- Temperature Range: -40 to 185° F
- Flow Coefficient: up to 4.7
- Material
 - Body: 316L Stainless Steel
 - Seat: 316L Stainless Steel
 - O-ring: Buna 756
- Cracking Pressures: 1/3, 1, 5, 10, 15, 25, 50, 100 psig
- End Connections Types: Duolok tube fitting, MNPT, FNPT, Male and Female BSPT
- End Connection Sizes:
 - Tube Fittings: 1/4 to 1/2 in. (6 and 8mm)
 - Pipe Fittings: 1/4 to 1/2 in.



Duolok® Tube Fittings for CNG

Duolok tube fittings are used throughout CNG fueling stations. The Duolok two-ferrule design with Expanite® hardening helps to ensure productivity and safety by making leak-tight installations fast and easy.

Features include:

- The lowest assembly torque available
- Reduces assembly errors, which is the leading cause of leaks
- Individually bagged fittings to ensure cleanliness and factory integrity of all components
- Sizes up to 1 inch
- Rated to 5500 psig (5300 psig for 1 inch)

Certifications: OnSpex certification to ASTM F-1387, American Bureau of Shipping (ABS), General Electric 362A2915, and more.



TurnPro® SX-2

Hand-Held Tube Fitting Installation Power Tool – for large tube fittings

The SSP SX-2 is a battery operated (18v), portable tool for installing 3/4" and 1" compression fittings on CNG Plus coiled tubing and stick tubing at the installation point, allowing quick (90 seconds), inline assembly to manufacturer specification.

Features:

- **Lightweight.** The operating head is approximately eight pounds.
- **Portable.** The SX-2 Hand-Held Swaging Tool is runs on a 18-volt lithium battery. There are no cords to pull and no generators to place.
- **Fast.** The SX-2 can pull up a 1 inch fitting in less than 90 seconds.
- **Easy.** No pre-swaging ferrule onto the tube. Minimal changing of tools and no pumping make the SX-2 the easiest way to swage larger fittings, even on heavy walled tubing.



CNG service is characterized by the challenges of containing high pressure gas in systems built outdoors under relatively uncontrolled conditions.

CNG Plus™ is SSP's commitment to helping solve those challenges.



Call to schedule the
SSP Mobile Construction Center
for your next project
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