Vic-Press™ Specification for Schedule 10S Stainless Steel Pipe

2” (DN50) and Smaller

1.01 General:

A. Specification Includes:

1. General.
2. Materials:
   a. Pipe
   b. Victaulic Vic-Press™ Couplings and Fittings
   c. Victaulic Vic-Press™ Valves
3. Execution.

B. Submittals:

1. Vic-Press™ products shall be shown on drawings and product submittals.

C. References:

   a. ASTM A-276 – Stainless Steel Bars and Shapes.
   b. ASTM A-312 - Seamless and Welded Austenitic Stainless Steel Pipe.

D. Quality Assurance:

1. All Vic-Press™ fittings, couplings, and valves shall be the products of Victaulic.

2. Tools used for marking pipe and installing Vic-Press™ materials shall be manufactured by Victaulic and be of the proper size and type.
2.01 Materials

A. **Pipe:** ASTM A312, Type [[304/304L] [316/316L], Sch. 10S, pipe, dimensions conforming to ANSI/ASME B36.19M-1985.

B. **Fittings:**

1. **Vic-Press 304™:** ASTM A-312 stainless steel housings with ASTM A-276 and A-312 outlets and austenitic stainless steel plain or grooved ends, type 304, complete with synthetic rubber Grade “H” (HNBR) seals rated for applicable services to +210 Deg F [+98 Deg C]; Grade “E” EPDM for applicable services to +250 Deg F [+120 Deg C]; or Grade “O” Fluoroelastomer for applicable services to +300 Deg F [+149 Deg C]. System shall be rated to 500 psi (3447 kPa) unless noted otherwise.

   a. **Flange Adapters:** ANSI Class 150 flange adapter, Van Stone type with stainless steel back-up flange and Vic-Press™ ends. Rated for services to 275 psi (1876 kPa). Victaulic Style P565.
   b. **Unions:** Threaded union, 304/304L stainless steel, with Vic-Press™ ends. Victaulic Style P584.
   c. **Vic-Press with HNBR or EPDM seals** shall be ANSI/NSF 61 Annex G Certified for Potable Water.
   d. **Vic-Press system shall be FM approved for fire protection services.**

2. **Vic-Press 316™:** ASTM A-312 stainless steel housings with ASTM A-276 and A-312 outlets and stainless steel plain or grooved ends, type 316, complete with synthetic rubber Grade “H” (HNBR) seals rated for applicable services to +210 Deg F [+98 Deg C]; Grade “E” EPDM for applicable services to +250 Deg F [+120 Deg C]; or Grade “O” Fluoroelastomer for applicable services to +300 Deg F [+149 Deg C]. System shall be rated to 500 psi (3447 kPa) unless noted otherwise.

   a. **Flange Adapters:** ANSI Class 150 flange adapter, Van Stone type with stainless steel back-up flange and Vic-Press™ ends. Rated for services to 275 psi (1876 kPa). Victaulic Style P566.
   b. **Unions:** Threaded union, 316/316L stainless steel, with Vic-Press™ ends. Victaulic Style P585.
   c. **Vic-Press with HNBR or EPDM seals** shall be ANSI/NSF 61 Annex G Certified for Potable Water.
   d. **Vic-Press system shall be FM approved for fire protection services.**

C. **Valves:**
1. CF8M stainless steel body, ball, and stem, PTFE seats, 304 stainless steel handle, nut, and stem washer, with Schedule 10S stainless steel type 316 Vic-Press™ and/or grooved ends. Rated for services to 400 psi (2750 kPa). Victaulic Series P569. The valves shall have a blow-out proof stem and self-adjusting floating ball which provides uniform sealing. The full port design minimizes pressure drop for maximum flow efficiency. Valves shall be three-piece swing-out design to permit easy in-line maintenance.

2. ASTM B30 forged brass body, chrome-plated brass ball and stem, PTFE seats, zinc-plated carbon steel handle, with austenitic stainless steel ends for use with Vic-Press™ couplings and fittings. Rated for services to 300 psi (2065 kPa). Victaulic Series 589.

D. Tooling:

1. Victaulic Vic-Press™ Tool for Schedule 10S pipe, Model PFT510.
2. Tools shall be fitted with the proper sized Victaulic jaws for pressing.

3.01 Execution:

A. Installation:

1. Install in accordance with manufacturer’s latest recommendations. Follow the instructions listed in the latest Victaulic I-P500 assembly manual.

2. Pipe shall be square cut, plus or minus 0.030”, properly deburred and cleaned.

3. Pipe ends shall be marked at the required location, using a manufacturer-supplied gauge, to ensure full insertion into the coupling or fitting during assembly. Use a Victaulic “PFT-510” series tool with the proper sized jaw for pressing.

4. The Vic-Press™ System meets the support and hanging requirements of ASME B31.1, B31.3, and B31.9.

B. Training:

1. Victaulic’s factory trained representative shall provide on-site training for contractor’s field personnel prior to installation in the use of PFT tools, application, and installation of products.

C. Application:
1. Use Vic-Press™ in lieu of soldered copper, or socket-welded or butt-welded steel, or threaded steel for pipe sizes ½” (DN15) through 2” (DN50).

2. Use Vic-Press™ end valves where possible. Install Vic-Press 304™ flange or threaded adapters where flanged or threaded valves are required.

3. Services shall be verified as suitable for the temperature range and the seal elastomer. Suggested applications may include:
   
   a. Compressed Air.
   b. Instrument Air.
   c. Lube Oil.
   d. Cooling Water.
   e. Deionized / Demineralized Water.
   f. Eye Wash / Emergency Shower Station Water.
   g. Potable Water.
   h. Fire Protection / Sprinkler.

4. Victaulic’s representative shall periodically visit the jobsite and review installation. Contractor shall remove and replace any joints deemed improperly installed.