



Installation, Operation, and Maintenance Manual

Welker[®] Spot Sample Manifold

Manual No. 114

The information in this manual has been carefully checked for accuracy and is intended to be used as a guide for the installation, operation, and maintenance of the Welker equipment described above. Correct operating and/or installation techniques, however, are the responsibility of the end user. Welker reserves the right to make changes to this and all products in order to improve performance and reliability.

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SPECIFICATIONS

1. GENERAL

1.1 INTRODUCTION

We appreciate your business and your choice of Welker products. The installation, operation, and maintenance liability for this product becomes that of the purchaser at the time of receipt. Reading the applicable *Installation, Operation, and Maintenance (IOM) Manual* prior to installation and operation of this equipment is required for a full understanding of its application and performance prior to use.*

If you have any questions, please call 1.281.491.2331.

Notes, Cautions, and Warnings



Notes emphasize information or set it off from the surrounding text.



Caution messages appear before procedures that, if not observed, could result in damage to equipment.



Warnings are alerts to a specific procedure or practice that, if not followed correctly, could cause personal injury.

The following procedures have been written for use with standard Welker parts and equipment. Assemblies that have been modified may have additional requirements and specifications that are not listed in this manual.

1.2 IMPORTANT INFORMATION

- Never use this product for sampling liquid or refrigerated gas.
- Never transport a cylinder with pressure exceeding D.O.T. regulations (see U.S. Government CFR 49 for D.O.T. regulations). **In cases where the cylinders are exposed to varying temperatures, do not allow the cylinder to exceed the maximum allowable operating pressure indicated in Table 1 on page 4.**
- Protect the cylinder at all times and handle with care. It is a precision instrument and may contain a flammable or caustic product as well as a valuable representation of your company's product.
- **Sample probe should not be installed in a header or blow-down stack and should be away from obstructions, elbows or partially closed valves.**

SPECIFICATIONS

1.3 SPECIFICATIONS



Note

The specifications listed in this section are generalized for this equipment. Welker can modify the equipment according to your company's needs. However, please note that ***the specifications may vary depending on the customization of your product.**

Table 1	
Materials of Construction:	316 Stainless Steel
Maximum Allowable Operating Pressure**:	1,800 PSI NOTE: 1,500 PSI if WFS or WFS3 is used **MAOP as a complete system (including cylinder) will be no more than 2,160 PSIG and will be determined by the cylinder MAOP.
Inlet Port:	1/4" NPT
Outlet Ports:	1/4" NPT
Products Samples:	Non-toxic natural gas or other gases compatible with the materials of construction.

1.4 SYSTEM COMPONENTS

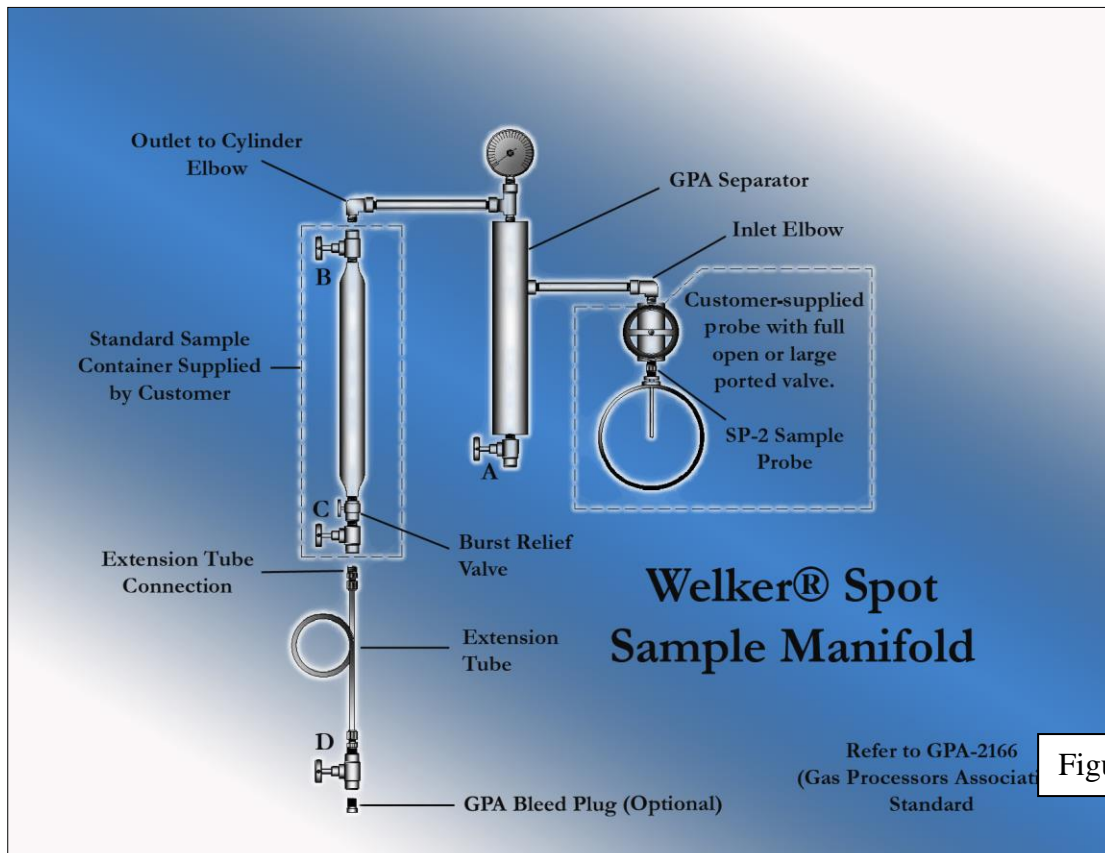


Figure 1

INSTALLATION, OPERATION & MAINTENANCE

2. INSTALLATION & OPERATION INSTRUCTIONS

2.1 GENERAL

- After unpacking the unit, check it for compliance and for any damages that may have occurred during shipment.
- Claims for damages caused during shipping must be initiated by the receiver and directed to the shipping carrier. Welker is not responsible for any damages caused from mishandling by the shipping company.
- When sealing fittings with PTFE tape, refer to the proper sealing instructions for the tape used.
- A sample probe should be located in the least turbulent area available of the flowing stream; i.e., not in a header or blow-down stack and away from obstructions, elbows or partially closed valves. The sample probe should be installed reaching approximately into the center one-third of the pipeline.
- The sample cylinder should be located as close to the sample point as possible.

2.2 INSTALLATION INSTRUCTIONS (REFER TO FIGURE 1 ON PAGE 4)

1. Make sure all valves are closed.
2. If necessary, install sample probe according to manufacturer's installation instructions.
3. Open the sample probe valve slowly, and allow gas to blow out any residual residue, then shut valve.
4. Connect the system as shown in Figure 1.
5. Close all valves.

2.3 SAMPLING PROCEDURES



Welker recommends using this system in accordance with the appropriate sampling procedures as outlined in the GPA Standard 2166, 2005 edition.

3. MAINTENANCE

3.1 GENERAL

The Spot Sample Manifold does not need regular maintenance. Welker recommends that the end user follow manufacturer's recommended maintenance procedures for sample probe and sample cylinder. Should the Manifold become clogged, remove the GPA Sample Separator and flush clean. Periodically check tubing and fittings for leaks and replace if necessary.



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