

Recommended Practice for Installation, Maintenance and Repair of Surface Safety Valves and Underwater Safety Valves Offshore

API RECOMMENDED PRACTICE 14H
FIFTH EDITION, AUGUST 2007



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Upstream Segment

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1 Scope

1.1 One of the means of assuring positive wellstream shutoff is the use of the wellhead surface safety valve (SSV) or underwater safety valve (USV). It is imperative that the SSV/USV be mechanically reliable. It should therefore be operated, tested and maintained in a manner to assure continuously reliable performance.

1.2 The purpose of this Recommended Practice (RP) is to provide guidance for inspecting, installing, operating, maintaining, and onsite repairing SSVs/USVs manufactured according to API Spec 6A (17th Edition or later), Clause 10.20 or API Spec 14D (withdrawn). Included are procedures for testing SSVs/USVs.

1.3 This RP covers guidelines for inspecting, installing, maintaining, onsite repairing, and operating SSVs/USVs. Nothing in this RP is to be construed as a fixed rule without regard to sound engineering judgment nor is it intended to override applicable federal, state or local laws.

2 Definitions

The following definitions are related specifically to surface safety valves and underwater safety valves and are presented to define the terminology used in this standard.

2.1 failure: Improper performance of a device or equipment item that prevents completion of its design function.

2.2 heat sensitive lock open device: A device installed on a SSV actuator to maintain the SSV valve in a full open position until exposed to sufficient heat to cause the device to release and allow the SSV valve to close.

2.3 manufacturer: The principal agent in the design, fabrication, and furnishing of a SSV/USV actuator and/or SSV/USV valve. The SSV/USV valve and SSV/USV actuator define functional entities and do not necessarily represent the units as supplied.

2.4 operating manual: The publication issued by the manufacturer containing detailed data and instructions related to the design, installation, operation, and maintenance of SSV/USV equipment.

2.5 operator: The user of a SSV/USV who chooses to comply with this standard.

2.6 qualified part: A part manufactured under an authorized quality assurance program and, in the case of replacement, produced to meet or exceed the performance of the original part.

2.7 qualified person: An individual with characteristics or abilities gained through training or experience or both as measured against established requirements such as standards or tests that enable the individual to perform a required function.

2.8 remanufacture: Activity involving disassembly, reassembly, and testing of the SSV/USV, with or without the replacement of parts, where machining, welding, heat treating or other manufacturing operations are employed.

Note: Remanufacture does not include the replacement of bodies.

2.9 repair: Any activity that involves either replacement with qualified parts or disassembly/reassembly of the SSV/USV. Repair may be offsite or onsite as described below.

2.9.1 offsite repair: Activity performed at a location other than the equipment installation site which restores the equipment to its original performance meeting the requirements of the edition of API Spec 6A in effect at the time of original manufacture, as a minimum.

2.9.2 onsite repair: Activity performed in accordance with this RP at the equipment installation site.

2.10 Surface Safety Valve (SSV): An automatic wellhead valve assembly that will close upon loss of power supply. When used in this standard it includes the SSV valve, SSV actuator, and heat sensitive lock-open device.

2.11 SSV/USV actuator: The device that causes the SSV/USV valve to open when power is supplied and to automatically close when power is lost or released.

2.12 SSV/USV valve: The portion of the SSV/USV that contains the wellstream and shuts off flow when closed.