

Content

1 Purpose	1
2 Scope.....	1
3 References	1
4 Standard requirements	2
5 Introduction.....	2
6 Function Test	2
7 Documentation.....	3
8 Staff Qualification	3

1 Purpose

This LESER Global Standard (LGS) compiles the applicable requirements and defines the principles of the Function Test including the corresponding documentation at LESER.

2 Scope

This LGS applies to all members of the LESER quality cluster.

3 References

In the following references are listed, which find application in this LGS. In principle, the most current versions of the references listed below apply.

3.1 Internal LESER Standards

LGS 0212

3.2 External standards and regulations

DIN EN 12266-2, Industrial Valves- Testing of valves. Parts 2: Tests, test procedure and acceptance criteria.

AD2000, Merkblatt A2, Safety devices against excess pressure

Pressure Equipment Directive PED 2014/68/EU

protected

Disclosure cat.:	I	proofread by:	Ku	publish date:	09/17/19	effect.date:	09/19
author:	Mi	released by:	Win	replaces:	initial	status:	Published
resp. depart.:	QM	date of release:	09/17/19	revision No.:	4		
doc. type:	LGS	change rep. No.:	NA	retention	10y.		

4 Standard requirements

The regulations mentioned under references are considered and fulfilled with this standard (as far as applicable).

5 Introduction

A function test must be conducted on each LESER Safety valve, pilot operated safety valve and change-over-valve. The control unit (product series 700) have to be function tested as well, this is defined in LGS 0212 and not within this document.

6 Function Test

The function test, referred to as „Operability, Test F20“_ EN 12266-2, is defined as:

“Proof of the full Opening- and closing movement of the fitting and if applicable the flawless function of position indicators or other supplementing features“¹⁾

¹⁾ in house translation

6.1 Scope of testing

The tests specified in this LGS are standard tests and, provided that they are applicable, are generally performed on 100% of all safety valves during the assembly process.

6.2 Time of testing

The function test is always carried out during assembly.

6.3 Test conditions

The test shall be carried out under ambient pressure and temperature.

6.4 Test description – safety vavles

Spring loaded safety valves / pilot-operated safety valves

During the assembly process, the moving parts of safety valves must be checked for free movement, e.g. lifting, levers, discs.

The mobility of the closing unit is tested before and with the test of the set pressure.

Definition of closing unit:

Spring-loaded safety valve: Assembly group spindle-disc

Pilot-operated safety valves:

Pilot: Assembly group spindle-disc

Main valve: Piston body

protected

Disclosure cat.:	I	proofread by:	Ku	publish date:	09/17/19	effect.date:	09/19
author:	Mi	released by:	Win	replaces:	initial	status:	Published
resp. depart.:	QM	date of release:	09/17/19	revision No.:	4		
doc. type:	LGS	change rep. No.:	NA	retention	10y.		

6.4.1 Acceptance Criteria

The following acceptance criteria apply to safety valves:

- The closing unit must be moveable between open and closed position
- The components must move smoothly within the assembly unit

6.5 Test description – change-over valves

During the assembly process, the moving parts of the change-over valve must be checked for free movement:

Switchover must be possible and it must be possible to close both sides of the change-over valve using the handwheel.

6.5.1 Acceptance Criteria

The following acceptance criteria apply to safety valves:

- The change-over valve must be able to switchover
- The components must move smoothly within the assembly unit

7 Documentation

In general, the tests specified in these standard can be certified in an inspection test certificate 3.1 (according to DIN EN 10204).

8 Staff Qualification

The function tests of valves are conducted by qualified personnel only.

Disclosure cat.:	I	proofread by:	Ku	publish date:	09/17/19	effect.date:	09/19
author:	Mi	released by:	Win	replaces:	initial	status:	Published
resp. depart.:	QM	date of release:	09/17/19	revision No.:	4		
doc. type:	LGS	change rep. No.:	NA	retention	10y.		