Pressure test pack: cover and index

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Project	Test pack number	Revision

System	Subsystem	Area / module

Test type	Test medium	Design code

Test procedure	Planned test date	Prepared by

LINES COVERED BY THIS TEST PACK

No.	Line number	Size (NPS)	Spec / class	Design press. (barg)	Design temp. (°C)	Test press. (barg)	Isometric no. / rev
1							
2							
3							
4							
5							
6							
7							
8							

Test limits and boundaries (marked up on the P&ID: end valves, spades and blinds, equipment and instruments excluded, vents and drains)

PACK CONTENTS (INDEX)

No.	Document	Requirement	Included	Reference / page
1	P&ID marked up with the test boundaries	Highlight the lines under test; mark spades, vents, drains and the gauge		
2	Isometric drawings (latest revision)	Weld numbers marked		
3	Line list extract	Design and test conditions per line		
4	Weld summary and NDE status	All welds complete; NDE to the specified extent and accepted		
5	PWHT records and hardness results	Where required by the line class		
6	Spades and blinds list	See the Spades and blinds sheet		
7	Test gauge and chart recorder certificates	In calibration on the test date		
8	Relief valve certificate	Set pressure protects the test		
9	Test procedure	Approved revision		
10	Punch list	No category A items open within the test limits		
11	Pressure test record	See the Test record sheet		
12	Reinstatement record	After the test (line reinstatement checklist)		
13	Flushing or cleaning record	Where specified before the test		

Included: 0 Missing: 0 N/A: 0 of 13 documents

ASME B31.3, 345.4: hydrostatic test pressure at least 1.5 × design pressure × ST/S (ST/S not above 6.5), held for at least 10 minutes. 345.5: pneumatic test at 1.1 × design pressure, with a relief device set to protect the test. Check that the test pressure stays within the rating of every component in the test limits. The calculator is on the Test record sheet.

Released for test

The lines listed above are mechanically complete within the test limits, the pack is complete, and the system is released for pressure testing.

Sign-off	Name	Signature	Date
Construction			
Contractor QC			
Company			

Pressure test record

Record of the test itself. The calculator gives the minimum test pressure; the procedure and the line list govern.

Test pack number	Date of test	Test type

Test medium	Medium temperature (°C)	Location of the gauge

TEST PRESSURE CALCULATOR (ASME B31.3)		
Design pressure P (barg)		From the line list
Allowable stress at test temperature ST (MPa)		From ASME B31.3 Table A-1
Allowable stress at design temperature S (MPa)		From ASME B31.3 Table A-1
Ratio ST/S		Capped at 6.5; 1.0 where the design temperature does not reduce the allowable stress
Hydrostatic test pressure (barg)		1.5 × P × ST/S (345.4.2)
Pneumatic test pressure (barg)		1.1 × P (345.5.4)
Test pressure used (barg)		As stated in the approved procedure

GAUGES AND RECORDERS

No.	Gauge or recorder number	Range (barg)	Certificate no.	Calibration due	Location	Remarks
1						
2						
3						

Relief valve tag	Set pressure (barg)	Certificate no. and date

PRESSURE AND TIME LOG

No.	Stage	Time	Pressure (barg)	Ambient (°C)	Medium (°C)	Remarks
1	Line filled and vented					
2	Pressurised to 50 %; leak check					
3	Stepped up in 10 % increments					
4	Test pressure reached					
5	Hold period start					
6	Hold period					
7	Hold period					
8	Hold period end					
9	Reduced to design pressure; joints inspected					
10	Depressurised					

HOLD AND RESULT		
Hold start (time)		
Hold end (time)		
Hold duration (min)		Calculated
Minimum hold (min)	10	ASME B31.3: at least 10 minutes; your procedure may ask for more
Pressure at hold start (barg)		
Pressure at hold end (barg)		
Pressure change (bar)		Explain any change (temperature) in the remarks
Hold time met		Calculated

Result (Accepted / Rejected)	
Leaks found and repairs made (retest required?)	

Certificate

We certify that the lines in this test pack have been pressure tested in accordance with the procedure and the design code, at the test pressure and for the hold time recorded above, and that the test was accepted.

Sign-off	Name	Signature	Date
Contractor			
Company			
Third party			

Spades and blinds register

Every temporary spade, blind and spectacle blind fitted for the test. The pack is not closed until each one is removed and verified.

Test pack number	System / subsystem	Register owner

Status

Fitted: 0 Removed: 0 Still in place: 0 Verified: 0

No.	Location / flange	Line number	Size	Rating	Type	Installed by	Installed	Removed by	Removed	Verified	Remarks
1	*Upstream flange of XV-1001*	*6"-P-1001-A1A*	*6"*	*300#*	*Spade*						*Example*
2											
3											
4											
5											
6											
7											
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