



HP Valves Oldenzaal BV

P.O. Box 151
7570 AD Oldenzaal
The Netherlands

Telephone +31 (0)541 519555
Telefax +31 (0)541 522045
Internet www.hpvalves.com
E-mail info@hpvalves.com

COVERPAGE TO INSPECTION / TEST CERTIFICATE

Customer : CMI (HRSG + Energy Services)
Project : Yajva SBV
Customer P/O no : 203/2010/900588
Shop order no : 2010 0006
Item no : 162 / 000
Quantity : 2 pcs

KKS No : 15HAD50AA137 15HAD80AA164

Medium & high-pressure valves in
accordance with ASME, API, BS & DIN

Bank ABN-AMRO SWIFT-address ABNANL2A
EUR-account 59.55.41.437 IBAN-code NL88ABNA0595541437
USD-account 57.60.74.780
Trade register Enschede 060.567.50
VAT no NL 008671242B01

Member of Indutrade AB





INSPECTION / TEST CERTIFICATE

(EN 10204 TYPE 3.1)

Client	HP VALVES	P.O. No.	P100042/20100006
Report No.	E1003E05-01-18	Date of Issue	2010. 07. 07
Item Description : Forged Steel L/CHECK Valves Class 800# SA105N / 13Cr HF SW			
Tag No.		Size	1" Q'ty 2 Pcs

PRESSURE AND LEAK TEST(API 598 2004 Edition)				Result	Pass
Hydraulic	Shell	: 205.8 bar	Pneumatic	Seat	: N/A bar
Test	Seat	: 149.9 bar	Test		
Dimension Inspection : GOOD		Visual Inspection : GOOD		Function Test : GOOD	

MATERIAL SPECIFICATION(ASME 2007 sect. II part A)

Product Name	Material	ASTM/ASME	Heat No.	Lot No.	Remarks
Body	Forged Steel	SA105N	S87820	V43	Normalized (843°C~ 927°C)
Cover	Forged Steel	SA105N	S57172	V49	Normalized (843°C~ 927°C)
Seat Disc	Stellite #6 Stainless Steel	A276-410	S86697		Integral Seat Stellite #6 HF

CHEMICAL COMPOSITION

Element	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Nb	N	Ti
Heat No.	min.	0.60			0.10								
	max.	0.35	1.05	0.035	0.040	0.35	0.40	0.30	0.12	0.40	0.08	0.020	
S87820	0.18	0.81	0.009	0.011	0.27	0.08	0.19	0.03	0.16	0.001	0.002	-	-
S57172	0.17	0.94	0.013	0.014	0.21	0.05	0.11	0.02	0.10	0.002	0.001	-	-

MECHANICAL PROPERTIES(0.2% Offset)

Item	Tensile Strength (N/mm ²)	Yield Strength (N/mm ²)	Elongation (%)	Reduction of Area (%)	Hardness (HB)	Remarks
Lot No. S.T.D	min. 485.0	min. 250.0	min. 22.0	min. 30.0	max.187	
V43	530.2	290.1	35.2	58.9	162,167	
V49	503.8	290.1	30.7	58.2	163,166	

Notes 1. These Standards for inspection conform to ASME B16.34/API 598(2004 Edition).

2. Spring Loaded



Medium & high pressure valves
acc. ANSI, API, BS & DIN

Your ref. : 203/2010/900588

Our ref. : 20100006 Pos: 162/000

Qty. : 2 pcs

We hereby certify that the result mentioned above are true and correct in every details.

Witnessed/Reviewed by

HP VALVES BV
QUALITY CONTROL
E. WOLBERS

Q.A Manager

C.K. Lee

FORM : QAP-1001-05(Rev.1)

ILSHIN VALVE CO., LTD.

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