



HP Valves Oldenzaal BV

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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 : 166 / 000
Quantity : 1 pce

KKS No : 15HAH10AA104

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.	E1003E05-01-22	Date of Issue	2010. 07. 07
Item Description : Forged Steel S/CHECK Valves Class 1500# SA105N / 13Cr HF SW			
Tag No.		Size	1" Q'ty 1 Pcs

PRESSURE AND LEAK TEST(API 598 2004 Edition)				Result	Pass
Hydraulic	Shell	384.2 bar	Pneumatic	Seat	N/A bar
Test	Seat	283.2 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	S84107	F00	Normalized (843℃~ 927℃)
Cover	Forged Steel	SA105N	251371	HZ5	Normalized (843℃~ 927℃)
Seat Ring	Stainless Steel	A276-410	S86696		Stellite #6 HF
Disc	Stainless Steel	A276-410	S87308		Stellite #6 HF
Support	Stainless Steel	A276-316	S84717		Solution Treated

CHEMICAL COMPOSITION

Element	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Nb	N	Ti
min.		0.60			0.10								
Heat No. max.	0.35	1.05	0.035	0.040	0.35	0.40	0.30	0.12	0.40	0.08	0.020		
S84107	0.18	0.77	0.012	0.009	0.31	0.06	0.26	0.02	0.13	0.001	0.003	-	-
251371	0.23	0.87	0.006	0.006	0.27	0.05	0.11	0.03	0.18	0.002	0.004	-	-

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.O	min. 485.0	min. 250.0	min. 22.0	min. 30.0	max.187	
F00	569.4	290.1	38.4	57.4	163,169	
HZ5	521.4	338.1	34.1	50.2	181,185	

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

HP VALVES Medium & high pressure valves acc. ANSI, API, BS & DIN
Your ref. : 203/2010/900588
Our ref. : 2010 0006 Pos: 166/000
Qty. : 1 pce.

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

Witnessed/Reviewed by
QUALITY CONTROL
F. WOLBERS
08/07/10

Q.A Manager

C.K. Lee

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

ILSHIN VALVE CO., LTD.

Item No 22 of 23