



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 : 159 / 000
Quantity : 2 pcs

KKS No : 15HAC50AA112 15HAC50AA113

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.	E1003E05-01-14	Date of Issue	2010. 07. 07
Item Description : Forged Steel GLOBE Valves Class 800# SA182-F11 / 13Cr HF SW			
Tag No.		Size	1-1/2" Q'ty 2 Pcs
PRESSURE AND LEAK TEST(API 598 2004 Edition)			Result Pass
Hydraulic Test	Shell : 206.8 bar Seat/Back Seat: 151.9 bar	Pneumatic Test	Seat/Back Seat : N/A bar
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	SA182-F11 (CL.2)	A23686	F41	Normalized (min 900°C) & Tempered (min 620°C)
Bonnet	Forged Steel	SA182-F11 (CL.2)	261869	Q79	Normalized (min 900°C) & Tempered (min 620°C)
Seat Disc Stem	Stellite #6 Stainless Steel Stainless Steel	A217-CA15 A276-410	4S12/N4 S87308		Integral Seat Stellite #6 HF Hardened (Q.T)

CHEMICAL COMPOSITION

Element	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Nb	N	Ti
Heat No.	min.	0.10	0.30		0.50		1.00	0.44					
	max.	0.20	0.80	0.040	0.040	1.00	1.50	0.65					
A23686	0.14	0.69	0.014	0.001	0.65	-	1.30	0.49	-	-	-	-	-
261869	0.17	0.54	0.021	0.007	0.53	-	1.25	0.45	-	-	-	-	-

MECHANICAL PROPERTIES(0.2% Offset)

Item	Tensile Strength (N/mm²)	Yield Strength (N/mm²)	Elongation (%)	Reduction of Area (%)	Hardness (HB)	Remarks
Lot No. S.T.D	min. 485.0	min. 275.0	min. 20.0	min. 30.0	143 to 207	
F41	532.2	367.5	37.1	50.3	171,176	
Q79	590.0	410.7	34.2	49.5	180,183	

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

HP VALVES Medium & high pressure valves acc. ANSI, API, BS & DIN
Your ref. : 203/2010/900588
Our ref. : 2010 0006 Pos: 15g/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
F. WOLBERS

Q.A Manager

C.K. Lee