



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 : 158 / 000  
Quantity : 12 pcs

KKS No :  
15HAC50AA109 15LAF50AA126 15LCA10AA141  
15HAC50AA110 15LAF50AA127 15LCA10AA142  
15HAN10AA113 15LCA10AA134 15LCA10AA162  
15HAN10AA114 15LCA10AA135 15LCA10AA163

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





# INSPECTION / TEST CERTIFICATE

(EN 10204 TYPE 3.1)

Client	HP VALVES	P.O. No.	P100042/20100006
Report No.	E1003E05-01-12	Date of Issue	2010. 07. 07
Item Description : Forged Steel GLOBE Valves Class 800# SA105N / 13Cr HF SW			
Tag No.		Size	1-1/2" Q'ty 12 Pcs

PRESSURE AND LEAK TEST(API 598 2004 Edition)				Result	Pass
Hydraulic	Shell	205.8 bar	Pneumatic	Seat/Back Seat	N/A bar
Test	Seat/Back 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	S89465	VCT291	F01	D60	Normalized (843℃~ 927℃)
			VCS612		E32		
Bonnet	Forged Steel	SA105N	S87820		1BU		Normalized (843℃~ 927℃)
Seat	Stellite #6		4S12/N4 S87308				Integral Seat Stellite #6 HF Hardened (Q.T)
Disc	Stainless Steel	A217-CA15					
Stem	Stainless Steel	A276-410					

## 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		
S89465	0.19	0.80	0.016	0.013	0.28	0.07	0.19	0.02	0.13	0.002	0.002	-	-
VCT291	0.20	0.83	0.016	0.005	0.28	0.00	0.00	0.00	0.00	0.000	0.001	-	-
VCS612	0.20	0.84	0.018	0.007	0.29	0.00	0.00	0.00	0.00	0.000	0.001	-	-
S87820	0.18	0.81	0.009	0.011	0.27	0.08	0.19	0.03	0.16	0.001	0.002	-	-

## MECHANICAL PROPERTIES(0.2% Offset)

Item	Tensile Strength (N/mm <sup>2</sup> )	Yield Strength (N/mm <sup>2</sup> )	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	
F01	581.2	253.8	38.1	57.2	168,172	
E32	518.5	301.9	32.7	56.8	164,169	
D60	574.3	288.1	41.1	55.1	167,170	
1BU	495.9	304.8	38.9	56.8	167,170	

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: 158/000  
Qty. : 12 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