



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 : 160 / 000
Quantity : 21 pcs

KKS No :

15HAC50AA101	15HAH50AA141	15LCA10AA112
15HAC50AA102	15HAH80AA112	15LCA10AA113
15HAD50AA111	15HAH80AA113	15LCA10AA116
15HAD50AA112	15HAJ50AA106	15LCA10AA117
15HAD80AA114	15HAJ50AA107	15LCA10AA154
15HAD80AA115	15HAN10AA116	15LCA10AA155
15HAH50AA140	15HNA10AA104	Spare Valves

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.	E1003E05-01-15	Date of Issue	2010. 07. 07

Item Description : Forged Steel GLOBE Valves Class 800# SA105N / 13Cr HF SW

Tag No.		Size	2"	Q'ty	21	Pcs
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PRESSURE AND LEAK TEST(API 598 2004 Edition)				Result	Pass
Hydraulic Test	Shell : 205.8 bar	Pneumatic Test	Seat/Back Seat : 149.9 bar	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	SA105N	VCS611	1BT	Normalized (843°C ~ 927°C)
Bonnet	Forged Steel	SA105N	196839	1AF	Normalized (843°C ~ 927°C)
			196839	1BI	
Seat Disc Stem	Stellite #6 Stainless Steel Stainless Steel	A217-CA15 A276-410	4S12/N5 S87910		Integral Seat Stellite #6 HF Hardened (Q.T)

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		
VCS611	0.20	0.84	0.015	0.006	0.28	0.00	0.00	0.00	0.00	0.000	0.001	-	-
196839	0.21	0.82	0.024	0.012	0.20	0.05	0.09	0.02	0.11	0.003	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	
1BT	562.6	318.5	39.5	58.2	165,170	
1AF	577.3	274.4	42.3	57.4	168,171	
1BI	579.2	309.7	41.7	57.2	169,174	

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. : 203120101900538	
Our ref. : 20100006	Pos: 1601000
Qty. : 21 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