



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](http://www.hpvalves.com)  
E-mail [info@hpvalves.com](mailto:info@hpvalves.com)

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

## 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 : 150 / 000  
Quantity : 1 pce  
  
KKS No : 15HAC10AA116



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Medium & high-pressure valves in  
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## INSPECTION / TEST CERTIFICATE

EN 10204:2004 - 3.1

Customer : CMI (HRSG + Energy Services)					
Project : Yajva SBV					
Cust. P/O no : 203/2010/900588					
HP order reference : 20100006					
Item no : 150/000					
Qty	Nominal size	Description			
1 pcs	2" / DN 50	<p>Figure no : 41A01S0CAA10H</p> <p>2500 lbs</p> <p>piston type check valve, straight pattern, screwed cap and pressure sealed cover,</p> <p>body: ASTM A105N, disc: stellite, seat: stellite,</p> <p>cap: C.S., gasket: A182 F316.</p> <p>end-to-end: 300 mm.</p> <p>with SW-ends for pipe size 60,3 x 11,07mm acc. ASME B16.11</p> <p>Marking body : Y</p> <p>Marking bonnet : 422470</p>			
Tests performed in accordance with : ASME B16.34 / API 598 / MSS SP 61					
TEST DESCRIPTION	P bar	REMARKS	TESTED	RESULTS	
SHELL TEST	647		✓	Accepted	
BACKSEAT TIGHTNESS TEST	N.A				
HIGH PRESSURE CLOSURE TEST	474	In the appropriate direction only; except for gate valves	✓	Accepted	
LOW PRESSURE CLOSURE TEST (AIR)	N.A	In the appropriate direction only; except for gate valves			
FUNCTIONAL TEST	Closing or opening time			N.A	
In case of actuating devices, closing and opening will be checked at 50 Hz					
DIMENSIONAL CHECK	SATISFACTORY	FUNCTIONAL CHECK	SATISFACTORY	VISUAL CHECK	SATISFACTORY
✓ = Test results were acceptable considering the applicable procedures and requirements. General inspections have confirmed that workmanship and finish are in accordance with the acceptance criteria.					
Signed HP VALVES BV :		<div style="border: 1px solid black; padding: 5px; display: inline-block;">HP VALVES BV QUALITY CONTROL F. WOLBERS OLDENZAAL 07-07-2010</div>			Signed THIRD PARTY:

Bank: ABN-AMRO BIC: ABNANL2A  
EUR-account: 59.55.41.437 IBAN: NL88ABNA0595541437  
USD-account: 57.60.74.780  
Trade register Enschede: 060.567.50  
VAT no: NL 008671242 B 01



# Abnahmeprüfzeugnis EN 10 204 / 3.1

Inspection certificate  
Certificat de Réception  
Certificato Collaudo materiali

KB Schmiedetechnik GmbH, Postfach 60 02 03, 58138 Hagen

H.P. Valves B.V.

Postfach 1 51

NL - 7570 AD Oldenzaal

## KB Schmiedetechnik GmbH

Postfach 60 02 03 - 58138 Hagen-Halden  
Gesensschmiede - Zerspanungstechnik  
Telefon: 02331/3508-0, Telefax: 3508-30

Prüf-Nr. - Inspection-no. -  
Certificat No.-No. di collaudo: 081476

Blatt-Nr. - Sheet-no. - Page-No. - Pag-No.: 1 / 2

Bestell-Nr. - Order-no. - No. de la commande -  
No. dell'ordine: P082697

vom - dated - date - in data: 02.10.08

Werks-Nr. - Works-no. -  
No. usine - Commesse No.: 081476

Hersteller - Manufacturer - Fabrikant - Produttore: KB Schmiedetechnik GmbH  
Prüfgegenstand - Article - Produit - Prodotto: Gesensschmiedestücke/drop forgings  
Prüfgrundlagen/Anforderungen-Technical requirements/Demand-Spécifications techniques/Exigences-Norma di controllo/requisiti  
F 02.15-20 Rev. 2,  
NACE MR-01-75/ISO 15156,  
F 02.15-00 Rev. 1

Werkstoff - Material - Matière - Material: P 250 GH (1.0460), A 105, SA 105  
entsprechend - according to - suivant - accondo: DIN EN 10222-2, ASTM A 105, ASME Sect. II Part A  
Ausgabe - Edition - Edizione: 04/2000, 2005, Edition 2007

Lieferzustand - State of delivery - Etat de livraison - Stato di fornitura:  
normalgeglüht/normalized

Erschmelzungsart - Steelmaking process - Procédé d'élaboration - Procedimento di elaborazione:  
E

Kennzeichnung - Marking - Marquage - Punzonatura: Y  
0460  
Werkstoff - Material - Matière - Materiale: SA 105 N  
H 83

Herstellerzeichen - Brand of Manufacturer -  
Marque du fabricant - Marchio del produttore:  
Stempel des Sachverständigen - Inspector's stamp -  
Poinçon de l'expert - Marchio del collaudatore:

KB  
WBA

Pos.-Nr. Item-No. Poste-No No. pos.	Stückzahl Piece number Qty Numero pezzi	Gegenstand Article Désignation du produit Tipo di prodotto	Schmelze-Nr. Heat-no. No. de coulée No. Colata	Probe-Nr. Test-no. No. d'éprouvette No. di prova
1	501	Gehäuse/bodies H 83.8600.000000 KB-Art.: 08648-0.2025.001 Gesenk-Nr./die-no.: 8648 Gewicht/weight: 22,3 kg	141369	198-199

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

☒ Reviewed  
☐ Witnessed  
☐ .....

F. Wolters - Q.C.  
Date 02.10.08

Die gestellten Anforderungen sind lt. Anlage erfüllt. - the Requirements are fulfilled as per annex. - Les conditions imposées sont satisfaites suivant annexes. - I risultati sono conformi ai requisiti richiesti come da allegati.

58093 Hagen, Buschmühlenstr. 62  
(Ort - Location - Lieu - Località)

24.02.09  
(Datum - Date - data)

## KB Schmiedetechnik GmbH

Der Werkssachverständige - Works-Surveyor  
L'expert d'usine - L'ispettore del commessa

Wolter

**Ergebnis der Prüfungen**  
**Test Results**  
**Résultats des Essais**  
**Risultati delle Prove**

**KB Schmiedetechnik GmbH**

Postfach 60 02 03 - 58138 Hagen-Halden  
 Gesenkschmiede - Zerspanungstechnik  
 Telefon: 02331/3608-0, Telefax: 3608-30

Anlage - Annex - Annexe - Allegato

Prüf-Nr. 081476

Inspection No.  
 Certificat No.  
 No. di collaudo

Blatt-Nr. 2/2  
 Sheet-No.  
 Page No.  
 Pag No.

**Mechanische Prüfungen - Mechanical tests - Essais mecaniques - Prove meccaniche**

Prüfart - Test type - Type d'essai - Tipo di prova: Probeart - Specimen type - Type de l'éprouvette - Tipo di provetta: Probenzustand - state of delivery of specimen - traitement de l'éprouvette - Stato delle p			ZUGVERSUCH RUNDPROBE DIN EN 10.002					KERBSCHLAGBIEGEVERS. KV CharpyV DIN EN 10.045			
Probe-Nr. Test No. No. d'éprouvette No. di prova	Probenabmessung Dim. of specimen Dim. de l'éprouvette Dim. della povetta		Prüftemperatur Test temperature Température d' essai Temperatura di prova	Streck-/Dehngrenze Yield point/Proof stress Limite d'élasticité Lim. di snervamento	Zugfestigkeit Tensile strength Resistance à la traction Carico di rottura	Bruchdehnung Elongation Allongement Allungamento	Bruchreduktion Reduction of area Striction/Strizione	X1 = Schlagarbeit - Energy of impact Energie de rupture - Energia di rottura [J]			
	Richtung Direction Senso	Breite ø Width ø Largeur, ø Largh, ø						2 = Krist. Bruchanteil - Cryst proportion Partie cristalline - Proporzione cristallina [%]			
								3 = Breitung - Expansion - Elargissement [mm]			
								Werte - Values - Valeurs - Valon			
								1	2	3	Σ / n
Anforderungen Requirements	Q L			250 ReH	485-540	22 25	30	31 44			
198 199	L "	10,0 "	20 "	362 358	525 518	28/30 29/31	68 66	1)= 114-132-115 1)= 129-120-117			

Warmbehandlung/Heat treatment: 910°C normalgeglüht/normalized - 1 h - Abkühlung/cooling: Luft/air

Ceq = 0,373 %

Härteprüfung/hardness test HBW 10/3000 = 146-152

Oberflächenriß-Prüfbericht/surface-crack test-report - siehe Anlage/see annex

Besichtigung u. Ausmessung: ohne Beanstandung/without objection  
 Inspection and control of dimension:  
 Examen et contrôle dimensionnel:

Schmelze-Nr. Heat-No. No. Coalea Colata No.	Analyse nach Werkstoffherstellangaben analysis acc. to the data of the material manufacturer										
	C %	Si %	Mn %	P %	S %	Al %	Cu %	Cr %	Mo %	Ni %	V %
141369	0,20	0,30	0,77	0,014	0,006	0,028	0,18	0,12	0,02	0,08	0,00
	Nb %										
141369	0,00										

**KB Schmiedetechnik GmbH**

Der Werkssachverständige - Works-Surveyor  
 L'expert d'usine - L'ispettore del commessa

58093 Hagen, Buschmühlenstr. 62

24.02.09

(Ort Location - Lieu Località)

(Datum Date - data)

(Mitarbeiter)

KB Schmiedetechnik GmbH  
HAGEN-HALDEN

Hagen, den 24.02.2009

**Oberflächenriß-Prüfbericht**  
Surface-crack test-report

Nr./no. 081476

Pos./item 1

Kommission/Com.-no.: 081476      Besteller/purchaser: H.P. Valves BV, NL-OLDENZAAL  
 Bestell-Nr./order-no.: P082697 - 02.10.2008  
 Anforderungen/requirements: F 02.15-20 Rev. 2  
 ASTM A 275 acc. ANSI B16.34 appendix II + DIN EN 10228-01 QC 3

Prüfumfang/range of test:  % H       Stück geprüft/pieces tested  
 Oberfläche bearbeitet/surface machined: ☐ ja/yes      ☒ nein/no      ☒ gestrahlt/blasted  
 Warmbehandlung/heat treatment: ja/yes  
 Beurteilung/valuation: rißfrei/free of cracks

**MAGNETPULVERPRÜFUNG / magnetic particle test**

Magnetisierungsart / magnetization kind: Jochmagnetisierung / yoke method  
 Prüfergerät / test detector: Selbstdurchflutung / prod method  
 Prüfmittel / test medium: UW 600 Fa. Deutsch  
 Feldstärke / field strength: HRS 9306 - fluoreszierend / fluorescent  
 Restmagnetismus/remainder-magnetism: > 2,5 kA/m  
 Betrachtungsbedingungen/observing conditions: < 800 A/m  
 Bestrahlungsstärke auf der Oberfläche/ray-treatment-strength on the surface: Hintergrundbeleuchtung/lighting-background < 20 lx  
 > 10 W/qm

Pos./ item	Gegenstand/ Produkt	Gesenk-Nr./ die-no.	Werkstoff/ material	Schmelze/ heat-no.	Kennz./ marking:
1	Gehäuse/bodies H 83.8600.000000 KB-Art.: 08648-0.2025.001	8648	1.0460 (S)A 105	141369	Y

Sachverständiger/inspector:

Prüfaufsicht/examination supervisor:

Hersteller/manufacture:



Unterschrift/signature

Unterschrift/signature

Level II



# WORKSCERTIFICATE

## EN10204-3.1

HP Valves Oldenzaal BV


P.O. Box 151  
7570 AD Oldenzaal  
The Netherlands

Zutphenstraat 1,  
7575 EJ, Oldenzaal

Telephone +31 (0)541 519555  
Fax +31 (0)541 522045  
Internet [www.hpvalves.com](http://www.hpvalves.com)  
E-mail [info@hpvalves.com](mailto:info@hpvalves.com)

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

Your order no. : -

Manufactures mark\* : 

Prod. No : 57784

Personal mark\* :  .....

Our order no. : -

Personal mark\* :  .....

**REStampING HAS BEEN CARRIED OUT IN ACCORDANCE WITH THE ORIGINAL MARKS**

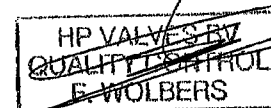
Item no.	Qty	Description	Material	Heat no.
001	99	BONNET 32-50MM PN640 CH/STR. ACC.DRAWING B26.3100.497536	316/L	422470

Item no.	See attached certificate(s) of base material supplier(s)
001	Cert. No. MEST732968/2009/

\*Due to geometry it may occur that material not have been marked with personal and manufactures mark

**VISUAL AND DIMENSIONAL INSPECTION SATISFACTORY**

Signed



Date

: 10-11-2009

9017428

# Acciaierie Valbruna S.p.A.



## CERTIFICATO DI COLLAUDO ABNAHMEPRUEFZEUGNIS INSPECTION CERTIFICATE CERTIFICAT DE RECEPTION EN 10204 (2005) , 3.1

36100 VICENZA (Italia) - Viale della scienza, 25 z.l.  
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

Cliente / Besteller/Käufer/Klijent  
VALBRUNA NEDERLAND B.V.  
UTRECHTHAVEN 15 (STRAAT NR. 55)  
3433-PN NIEUWEGEIN NL-NL

Produttore: ACCIAIERIE VALBRUNA S.P.A.  
Hersteller/Lever/Usine productrice

Avviso di Spedizione: D-VI090074/5  
Lieferanzeige/Packing list/B.L.

Ordine nr: 903008010 STOCK  
Bestell/Your order/Commande

Certificato nr: MEST732968/2009/  
Prüfung/Test/Essai

Conferma ordine nr: EI09001300  
Weiss/Our Order/Bel nr.

Marchio di Fabbrica:  
Zeichen des Lieferwerkes  
Trade mark  
Sigle de l'usine productrice

Punzone del Collaudatore:  
Stempel des Werksachverständigen  
Inspector's stamp/Poligon de l'assesseur

Oggetto Prove: - Annealed Peeled/Polished  
Prüfgegenstand/Item inspected/Finissage

Tipo di Elaborazione: E+AOD  
Ercheinungsart/Making process/Mode d'elaboration

Specifiche:  
Anforderungen / Requirements / Exigences

VAL STOCK 2005 1.4404/316L A  
AMS 5648 K S31600 A  
ASME SA182 2007 S31603 A 1  
ASME SA276 2007 S31603 A 4  
ASME SA479 2007 S31603 A 7  
ASTM A193 2008B B8M CLASS1  
ASTM A276 2008A S31603 A  
ASTM A479 2008 S31600 A  
DIN 17440 96 1.4404 A  
EN 10269 99 1.4401  
EN 10272 2007 1.4404 A  
QQ-S-763 F 316 A

AISI 316  
AMS 5653 F S31603 A  
ASME SA193 2007 B8M CLASS1 2  
ASME SA320 2007 B8M CLASS1 5  
ASTM A182 2008A S31600 A 8  
ASTM A262 2002A PRACTICE E  
ASTM A314 2008 S31600  
ASTM A479 2008 S31603 A  
EN 10088-3 2005 1.4401 A  
EN 10269 99 1.4404  
NACE MR0175\* 2003 S31600 A  
QQ-S-763 F 316L A

AISI 316L  
ASME SA182 2007 S31600 A (1)  
ASME SA276 2007 S31600 A (3)  
ASME SA479 2007 S31600 A (8)  
ASTM A182 2008A S31603 A (9)  
ASTM A276 2008A S31600 A  
ASTM A320 2008 B8M CLASS1  
DIN 17440 96 1.4401 A  
EN 10088-3 2005 1.4404 A  
EN 10272 2007 1.4401 A  
NACE MR0175\* 2003 S31603 (8)

0 Chemical analysis only and mechanical properties.  
1 Chemical analysis only and mechanical properties.  
3 SEC. II PT. A 2007 EDITION ADD. 2008a  
5 SEC. II PT. A 2007 EDITION ADD. 2008a  
7 SEC. II PT. A 2007 EDITION ADD. 2008a  
8 Chemical analysis only and mechanical properties.  
B\* ISO 15156-3

Qualität: 1.4404/316/316L

Werkstoff/Grade/Ruance

Marcas: MVAPML MAXIVAL

Markenbezeichnung/Brand/Ruance

Punzonatura: 1.4404/316/316L

Kennzeichnung/Marking/Marque

Pos. nr. Pos. nr. Item nr. Nr. de poste	Oggetto Gegenstand Produit description Descript. du produit	Dimensioni - mm Abmessungen Dimension Dimension	Tolleranza Toleranz Allowance Tolerance	Lunghezza - mm Länge Length Longueur	Colata Schmelze Heat Coulée	Pezzi Stückzahl Pieces Pièces	Peso - KG Gewicht Weight Poids	Lotto nr. Losnr. Lot nr. Lot nr.
0010	Round	50,000	h9	2900 / 3100	422470		967,0	806504960

Sono state soddisfatte tutte le condizioni richieste  
Die gestellten Anforderungen sind in. Anlage erfüllt  
The material has been furnished in accordance with the requirements  
Le matériel a été livré conforme aux exigences

Controllo antimescolanza: OK  
Verwechslungsprüfung: spektralanalytisch durchgeführt  
Antimixing testing performed: OK  
Contrôle antimélange fait: r.a.a.

Controllo visivo e dimensionale: soddisfatta le esigenze  
Beachtung und Ausmessung: ohne Beanstandung  
Visual inspection and dimensional checks satisfactory  
Contrôle visuel et dimensionnel: satisfaisant

TEST	Provette/probe/test Specimen/Essai/Probe Leng./Dim./Größe Brake/Dim./Dicke Weld/Dim./Epaisseur Leng./Dim./épais mm	°C	Posiz. Saggo Profilage L'alignement	Snervamento Streckgrenze Yield Stress Limite élastique Rp 0,2% N/mm2	Snervamento Streckgrenze Yield Stress Limite élastique Rp 1% N/mm2	Resistenza Zugfestigkeit Tensile strength Résistance à traction Rm N/mm2	Allungamento Bruchdehnung Elongation A5 % E 4d %	Strizione Einziehdehnung Reduction of area Striction Z % RA %	Resilienza Kerbschlagarbeit Impact Value Resilience KV J	Durezza Härte Hardness Cure HB
	Valori richiesti 1 Anforderungen/Required values Valeurs demandées	min max		207	240	517 690	40 40	- 50	100	140 215
A	10	20	L	334	378	638	54 57	68 68	236 231 231	184

1) L=lunghezza/length, T=traversale/cross, Q=Tangenziale/tangential

Grain size for ASTM E112

: 6

### Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata/Heat Schmelze/Coulée	min - max 0,030	1,00	1,25 2,00	16,50 18,00	2,00 2,50	1,00	10,00 13,00	0,040	0,030	0,100	0,005	0,005	0,005	0,005	0,005	0,005
	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	N %					
422470	0,013	0,49	1,53	16,96	2,05	0,55	10,17	0,079	0,026	0,029	0,060					

Intergranular corrosion test per ASTM A262 pract. E: ok.

I. Korrosion nach EN ISO 3651-2A Sensibilisierung : T1 : OK

Corrosion test per EN ISO 3651-2A sensitized T1 : OK

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

HP VALVES

☒ Reviewed  
☐ Witnessed  
☐ .....

F. Wolbers - Q.C.  
Date: 26/03/09

Vicenza, 26/03/09  
VCO008  
(Mod. MCER)

Il collaudatore di stabilimento / der Werksachverständiger / Works Inspector / Agent d'usine

M. Rizzotto

Pagina - 1 di 2

# Acciaierie Valbruna S.p.A.



## CERTIFICATO DI COLLAUDO ABNAHMEPRUEFZEUGNIS INSPECTION CERTIFICATE CERTIFICAT DE RECEPTION EN 10204 (2005) , 3.1

36100 VICENZA (Italia) - Viale della scienza, 25 z.l.  
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

Cliente / Besteller/Purchaser/Cliant  
VALBRUNA NEDERLAND B.V.  
UTRECHTHAVEN 15 (STRAAT NR. 55)  
3433-PN NIEUWEGEIN NL-NL

Produttore: **ACCIAIERIE VALBRUNA S.P.A.**  
Hersteller/fabrik/Usine productrice

Oggetto Prove: - Annealed Peeled/Polished  
Prüfgegenstand/Item inspected/Finissage

Avviso di Spedizione: D-VI09007445  
Lieferanzahl/Packing list/V.B.L.

Ordine nr: 903008010 STOCK  
Bestell/Your order/Commande

Tipo di Elaborazione: E+AOD  
Erschmelzungsart/Smelting process/Mode d'elaboration

Certificato nr: MEST732968/2009/  
Prüfung/Test/Essai

Conferma ordine nr: EI09001300  
Werkz/Our Order/Ref nr.

Marchio di Fabbrica:  
Zeichen des Lieferwerkes  
Trade mark  
Signe de l'usine productrice

Punzone del Collaudatore:  
Stempel des Werksachverständigen  
Inspector's stamp/Poligon de l'essayeur



Melted and manufactured in Italy No welding or weld repair Material free from Mercury or radio-activity contamination  
The Quality Management System is Certified acc. Pressure Equipment Directive (97/23/EC) Annex 1, s., 4.3 by TUEV and LLOYD'S

Vicenza, 26/03/09  
VCQ008  
(Mod. MCER)

Il collaudatore di stabilimento / der Werksachverständige / Works Inspector / L'agent d'usine  
M. Rizzotto

Pagina - 2 di 2