



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
E-mail 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 : 105 / 000
Quantity : 1 pce

KKS No : 15LAB50AA111



INSPECTION / TEST CERTIFICATE
EN 10204:2004 - 3.1

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

| | | | | | |
|--|--------------|---|--|-----------------|----------------|
| Customer : CMI (HRSG + Energy Services) | | | | | |
| Project : Yajva SBV | | | | | |
| Cust. P/O no : 203/2010/900588 | | | | | |
| HP order reference : 20100006 | | | | | |
| Item no : 105/000 | | | | | |
| Qty | Nominal size | Description | | | |
| 1 pcs | 2" / DN 50 | <p>Figure no : 21P12A3CBA10E</p> <p>900 lbs</p> <p>throttle type globe valve, straight pattern, bonnetless, floating backseat, c/w topflange type A acc. ISO 5210 F10 suitable for electric actuator.</p> <p>body: ASTM A182 F12, stem/disc: 17Cr/stellited, seat: stellite,</p> <p>packing: graphite, bolting: A193 B7 / A194 2H,</p> <p>end-to-end: 300 mm.</p> <p>with SW-ends for pipe size 60,3 x 5,54mm acc. ASME B16.11</p> <p>valve c/w Limitorque MX05 - A electric actuator</p> <p>Marking body : TU12</p> | | | |
| Tests performed in accordance with : ASME B16.34 / API 598 / MSS SP 61 | | | | | |
| TEST DESCRIPTION | | P bar | REMARKS | TESTED | RESULTS |
| SHELL TEST | | 233 | | ✓ | Accepted |
| BACKSEAT TIGHTNESS TEST | | N.A | | | |
| HIGH PRESSURE CLOSURE TEST | | 171 | 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 In case of actuating devices, closing and opening will be checked | | Closing or opening time at 50 Hz | | ✓ | 15 sec |
| 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 22-07-2010 </div> Signed- THIRD PARTY: | | | |

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: 081223

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

Bestell-Nr. - Order-no. - No. de la commande -
No. dell'ordine: P081557

vom - dated - date - in data: 12.06.07

Werks-Nr. - Works-no. -
No. usine - Commesse No.: 081223

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 02.15-21 Rev. 1,

F 02.15-00 Rev. 1

Werkstoff - Material - Matière - Material:

entsprechend - according to - suivant -
accondo:

Ausgabe - Edition - Edizione:

13 CrMo 4-5 (1.7335), A 182 F 12,
SA 182 F 12 Class 2

DIN EN 10222-2, ASTM A 182,
ASME Code Sect. II Part A

04/2000, 2005,
Edition 2007

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

vergütet/normalized + tempered

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

E

Kennzeichnung - Marking - Marquage - Punzonatura:

TU 12
7335

Herstellerzeichen - Brand of Manufacturer -

Marque du fabricant - Marchio del produttore:

Werkstoff - Material - Matière - Materiale:

SA 182 F 12 Cl.2
H 83

Stempel des Sachverständigen - Inspector's stamp -

Poinçon de l'expert - Marchio del collaudatore:

| Pos.-Nr. Item-No. Poste-No No. pos. | Stückzahl Piece number Qte 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 |
|--|--|--|--|---|
| 4 | 112 | Gehäuse/bodies H 83.8700.000000 KB-Art.: 08648-0.2041.001 Gesens-Nr./die-no.: 8648 Gewicht/weight: 22,0 kg | 141273 | 1771 |

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

HP VALVES

☒ Reviewed
☐ Witnessed
☐

F. Wolter - O.C.
Date 22.09.08

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. 32

(Ort - Location - Lieu - Località)

19.12.08

(Datum - Date - data)

KB Schmiedetechnik GmbH

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

Wolter

Anlagen - Annex - Annexes - Allegati: Ergebnis der Prüfungen - Test results - Risultati dei Test - Risultati delle Prove

Ergebnis der Prüfungen
Test Results
Résultats des Essais
Risultati delle Prove

KB Schmiedetechnik GmbH

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

Anlage - Annex - Annexe - Allegato

Prüf-Nr. 081223

Inspection No.

Certificat No.

No. di collaudo

Blatt-Nr. 2 / 2

Sheet-No.

Page No.

Pag No.

Mechanische Prüfungen - Mechanical tests - Essais mécaniques - 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 | | | 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 provetta | Richtung Direction Senso | Breite ø Width ø Largeur, ø Largh. ø | Prüftemperatur Test temperature Temperature d'essai Temperature di prova | Streck-/Dehngrenze Yield point Proof stress Limite d'élasticité Lim. di snervamento | Zugfestigkeit Tensile strength Résistance 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] | | | |
| | | | | | | | | | 2 = Krist. Bruchanteil - Cryst. proportion Partie cristalline - Proporzione cristallina [%] | | | |
| | | | | | | | | | 3 = Breitung - Expansion - Elargissement [mm] | | | |
| | | | | | | | | | Werte - Values - Valeurs - Valori | | | |
| | | | | | | | | | 1 | 2 | 3 | Σ / n |
| Anforderungen | Q | | | | 295 | 485-590 | 20 | 30 | 27 | | | |
| Requirements | L | | | | ReH | | | | 44 | | | |
| 1771 | L | 10,0 | 20 | 346 | 507 | 31/33 | 73 | 1)= 153-139-160 | | | | |

Warmbehandlung/Heat treatment: Härten/normalized 940°C - 1 h - Abkühlung/cooling: Luft/air
 Anlassen/tempered 680°C - 2 h - Abkühlung/cooling: Luft/air

Härteprüfung/hardness test HBW 10/3000 = 159-167

Prüfung auf Werkstoffverwechslung (Spektroskop) - ohne Beanstandung
 spectroscopic check for mix up of material - without objection

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 Werkstoffherstellerangaben analysis acc. to the data of the material manufacturer | | | | | | | | | | |
|--|---|-------|------|-------|-------|-------|------|------|------|------|------|
| | C % | Si % | Mn % | P % | S % | Al % | Cu % | Cr % | Mo % | Ni % | V % |
| 141273 | 0,13 | 0,25 | 0,51 | 0,012 | 0,005 | 0,024 | 0,06 | 0,92 | 0,48 | 0,05 | 0,00 |
| | | | | | | | | | | | |
| | Nb % | Sn % | | | | | | | | | |
| 141273 | 0,00 | 0,005 | | | | | | | | | |
| | | | | | | | | | | | |

KB Schmiedetechnik GmbH

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

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

19.12.08
 (Datum - Date - data)

Wolter

Abnahmeprüfzeugnis/inspection certificate DIN EN 10204 / 3.1

KB Schmiedetechnik GmbH
HAGEN-HALDEN

Hagen, den 19.12.2008

Oberflächenriß-Prüfbericht
Surface-crack test-report

Nr./no. 081223

Pos./item 4

Kommission/Com.-no.: 081223 Besteller/purchaser: H.P. Valves BV, NL-OLDENZAAL
 Bestell-Nr./order-no.: P081557 - 12.06.2008
 Anforderungen/requirements: F 02.15-21 Rev. 1
 ASTM A 275 acc. ANSI B16.34 annex C

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

| Pos./ Item | Gegenstand/ Produkt | Gesenk-Nr./ die-no. | Werkstoff/ material | Schmelze/ heat-no. | Kennz./ marking: |
|---------------|---|------------------------|------------------------|-----------------------|---------------------|
| 4 | Gehäuse/bodies H 83.8700.000000 KB-Art.: 08648-0.2041.001 | 8648 | 1.7335 (S)A182 F12 | 141273 | TU 12 |

Sachverständiger/inspector:

Prüfaufsicht/examination supervisor:

Hersteller/manufacturer:

Unterschrift/signature

Unterschrift/signature


