

National Board Number: 81

Mfg. Representative:

Chen Changyong

Date: 2015.11.14

Authorized Inspector:

Date: November 14, 2015

FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS
(Alternative Form for Single Chamber, Completely Shop or Field Fabricated Vessels only)
As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1/2

1. Manufactured and certified by Kunshan Bexelle Special Equipment Co., Ltd. No 198 Jujin Road, Zhangpu Town, Kunshan City, Jiangsu Province, 215321 People's Republic of China
(Name and address of Manufacturer)

2. Manufactured for Evonik Corporation
BDP International Inc. 1690 Kenneth Road York, PA 17408 USA
(Name and address of Purchaser)

3. Location of installation 4201 Evonik Road, Theodore, AL 36582
(Name and address)

4. Type Horizontal Tank 15-A3179 / BSA15-306-00, Rev.Final 81 2015
(Horizontal or vertical, tank) (Manufacturer's serial number) (CRN) (Drawing number) (National Board number) (Year built)

5. ASME Code Section VIII, Div. 1 2013 Edition / 1
[Edition and Addenda, if applicable (date)] (Code Case numbers) [Special Service per UG-120(d)]

6. Shell SA-240 316L 10 mm 0mm 3048 mm 4797 mm
(Material spec. number grade) (Nominal thickness) (Corr. Allow.) (inner diameter) [Length (overall)]

Body Flange on Shells													
NO.	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Location	Bolting				
									Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material	
1	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	/	/	/	/	/

7. Seams type (1) Spot 85 / / type (1) Spot 85 3
[Long. (welded, dbl., sngl., lap, butt)] [R.T. (spot or full)] (Eff., %) (H.T. temp.) (Time, hr) [Girth (welded, dbl., sngl., lap, butt)] [R.T. (spot or full)] (Eff., %) (No. of courses)

8. heads: (a) Material SA-240 316L (b) Material SA-240 316L
(Spec. no., grade) (Spec. no., grade)

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat diameter	Side to pressure (Convex or Concave)
(a)	Left	10mm	0mm	/	/	2:1	/	/	/	Convex & Concave
(b)	Right	10mm	0mm	/	/	2:1	/	/	/	Convex & Concave

Body Flange on Heads													
	Location	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Bolting				
									Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material	
(a)	/	/	/	/	/	/	/	/	/	/	/	/	/
(b)	/	/	/	/	/	/	/	/	/	/	/	/	/

9. MAWP 3.1 barg -1.013 barg at max temp. 250°C 250°C
(Internal) (External) (Internal) (External)

Min. design metal temp. -28.9°C at 3.1 barg Hydro., Pneu., or comb. test pressure 4.5 barg

Proof test /

10. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
Vent A1	1	250(10")	Cl.150 WNRf	SA-312 TP316L	SA-182 F316L	9.27mm	0mm	SA-240 316L	Fig.UW16.1(d)	Spot 0.85	/
Vent A3	1	50(2")	Cl.150 WNRf	SA-312 TP316L	SA-182 F316L	3.91mm	0mm	Inherent	Fig.UW16.1(c)	None, 0.7	/
Vent A4	1	250(10")	Cl.150 WNRf	SA-312 TP316L	SA-182 F316L	9.27mm	0mm	SA-240 316L	Fig.UW16.1(d)	Spot 0.85	/
Vent V1	1	50(2")	Cl.150 WNRf	SA-312 TP316L	SA-182 F316L	3.91mm	0mm	inherent	Fig.UW16.1(c)	None, 0.7	/
Drain D1	1	50(2")	/	SA-312 TP316L	/	3.38mm	0mm	inherent	Fig.UW16.1(c)	/	/
see U-4	/	/	/	/	/	/	/	/	/	/	/

11. Supports: Skirt No Lugs / Legs / Other Two saddles Attached welded to the shell
(Yes or no) (Number) (Number) (Describe) (Where and how)

12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report: /
(Name of part, item number, Manufacturer's name and identifying number):

1. Impact test of the vessel is exempted as per UHA-51
See U-4

Chen Changyong
November 14, 2015

National Board Number: 81

Mfg. Representative: Chen Chongyong

Authorized Inspector: [Signature]

Date: 2015.11.14

Date: November 14, 2015

FORM U-1A (Back)

CERTIFICATE OF SHOP/FIELD COMPLIANCE

We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1."U" Certificate of Authorization Number 36,365 expires January 25, 2016

Date 2015.11.14

Co. name Kunshan Bexcelle Special Equipment Co., Ltd.
(Manufacturer)

Signed Chen Chongyong
(Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

Vessel constructed by Kunshan Bexcelle Special Equipment Co., Ltd. at No 198 Jujin Road, Zhangpu Town, Kunshan City, Jiangsu Province, 215321 People's Republic of China

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by ABSG Consulting Inc., an Affiliate of ABS Bolier & Marine Insurance Company

have inspected the component described in this Manufacturer's Data Report on November 14, 2015, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. By signing this certificate neither the Inspector nor his/her employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his/her employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date November 14, 2015

Signed [Signature]
(Authorized Inspector)

Commissions 15084A
(National Board (incl. endorsements))

2/2

FORM U-4 MANUFACTURER'S DATA REPORT SUPPLEMENTARY SHEET
As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1. Manufactured and certified by Kunshan Bexcelle Special Equipment Co., Ltd. No 198 Jujin Road, Zhangpu Town, Kunshan City, Jiangsu Province, 215321 People's Republic of China
(Name and address of Manufacturer)

2. Manufactured for Evonik Corporation
BDP International Inc. 1690 Kenneth Road york, PA 17408 USA
(Name and address of Purchaser)

3. Location of installation 4201 Evonik Road ,Theodore, AL 36582
(Name and address)

4. Type Horizontal Tank 15-A3179
(Horizontal, vertical, or sphere) (Tank, separator, heat exch., etc.) (Manufacturer's serial number)
/ BSA15-306-00, Rev.Final 81 2015
(CRN) (Drawing number) (National Board number) (Year built)

Data Report Item Number	Remarks
-------------------------	---------

Nozzles, inspection, and safety valve openings

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
Level indication L1	1	50(2")	/	SA-312 TP316L	/	3.91mm	0mm	Inherent	Fig.UW16.1(c)	/	/
Level Indication L2	1	50(2")	Cl.150 WNRf	SA-312 TP316L	SA-182 F316L	3.91mm	0mm	Inherent	Fig.UW16.1(c)	None 0.7	/
Level transmitter L3	1	80(3")	Cl.150 WNRf	SA-312 TP316L	SA-182 F316L	5.49mm	0mm	Inherent	Fig.UW16.1(c)	None 0.7	/
Level Switch L4	1	80(3")	Cl.150 WNRf	SA-312 TP316L	SA-182 F316L	5.49mm	0mm	Inherent	Fig.UW16.1(c)	None 0.7	/
Connection L5	1	100(4")	Cl.150 WNRf	SA-312 TP316L	SA-182 F316L	6.02mm	0mm	SA-240 316L	Fig.UW16.1(d)	None 0.7	/
Manway M1	1	609.6(24")	Cl.150 WNRf	SA-240 316L	SA-182 F316L	10mm	0mm	SA-240 316L	Fig.UW16.1(d)	Spot 0.85	Left head
Manway M2	1	609.6(24")	Cl.150 WNRf	SA-240 316L	SA-182 F316L	10mm	0mm	SA-240 316L	Fig.UW16.1(d)	Spot 0.85	Shell
Inlet N1	1	40(1-1/2")	Cl.150 WNRf	SA-312 TP316L	SA-182 F316L	3.68mm	0mm	Inherent	Fig.UW16.1(c)	None 0.7	/
Pressure transmitter P1	1	25(1")	Cl.150 WNRf	SA-312 TP316L	SA-182 F316L	3.38mm	0mm	Inherent	Fig.UW16.1(c)	None 0.7	/
Pressure Relief R1	1	250(10")	Cl.150 WNRf	SA-312 TP316L	SA-182 F316L	9.27mm	0mm	SA-240 316L	Fig.UW16.1(d)	Spot 0.85	/
Pressure Relief R2	1	80(3")	Cl.150 WNRf	SA-312 TP316L	SA-182 F316L	5.49 mm	0mm	Inherent	Fig.UW16.1(c)	None 0.7	/
Spare S1	1	80(3")	Cl.150 WNRf	SA-312 TP316L	SA-182 F316L	5.49mm	0mm	Inherent	Fig.UW16.1(c)	None 0.7	/
Spare S2	1	50(2")	Cl.150 WNRf	SA-312 TP316L	SA-182 F316L	3.91mm	0mm	Inherent	Fig.UW16.1(c)	None 0.7	/
Temperature transmitter T1	1	40(1-1/2")	Cl.150 WNRf	SA-312 TP316L	SA-182 F316L	3.68mm	0mm	Inherent	Fig.UW16.1(c)	None 0.7	/

Remarks:

2. For nozzle M1, there is a matched flange cover, total screw studs and nuts, the flange cover material is SA-182 F316L;stud size is 1-1/4"-8UNC-2A L=200, material is SA193 B7, number is 20pcs; nuts size is 1-1/4"-8UNC-2B,material is SA194 2H,number is 40 pcs.

3. For nozzle M2, there is a matched flange cover, total screw studs and nuts, the flange cover material is SA-182 F316L;stud size is 1-1/4"-8UNC-2A L=200, material is SA193 B7, number is 20pcs; nuts size is 1-1/4"-8UNC-2B,material is SA194 2H,number is 40 pcs.

4. The category A and B of this tank was examined by spot RT.The category A butt joint of the head was examined by full RT.

Certificate of Authorization: Type: U No. 36,365 Expires January 25, 2016

Date 2015.11.14 Name Kunshan Bexcelle Special Equipment Co., Ltd. Signed Chen Dongyang
(Manufacturer) (Representative)

Date November 14, 2015 Name [Signature] Commission 15084A
(Authorized Inspector) [National Board (incl. endorsements)]