

Certificate/Serial/Job No: YB33

Quality Department: *John Ho*

Quantity	Size (NPS)	Class	Product	Description	Type	SONumber	Line	Sold to	Date
95	2	150	/ 103030	DSI 137XU	SWING				3/21/2012

<b>Pressure Test:</b> API598	<input checked="" type="checkbox"/> Satisfactory	<b>Shell Pressure :</b> 450 psi 3102.64 kPa	<b>BackSeat :</b> psi kPa	<b>Seat Pressure</b> 325 psi 2240.8 kPa	<b>Seat Air Pressure</b> psi kPa
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Part	Specif.	HEAT#	Chemical Composition [%]											Mechanical Properties										
			C	Si	Mn	P	S	Ni	Cr	Mo	Cu	V	W	Nb	Al	N	Ceq	Tensile [ksi] [MPa]	Yield [ksi] [MPa]	Elong [%]	Reduc [%]	Hard [HB]	Ch.1 [J]	Ch.2 [J]

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BODY	ASTM A216 WCB-2008	W 16106	0.210	0.47	0.92	0.030	0.013	0.033	0.040	0.006	0.038	0.007					0.38	83.96	54.96	31	59	166						N
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68									114.70	60.32	28	59	200						N
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002					0.38	78.01	52.93	33	60	141						N

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BODY	ASTM A216 WCB-2008	W 16106	0.210	0.47	0.92	0.030	0.013	0.033	0.040	0.006	0.038	0.007					0.38	83.96	54.96	31	59	166						N
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68									114.70	60.32	28	59	200						N
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002					0.38	78.01	52.93	33	60	141						N

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BODY	ASTM A216 WCB-2008	W 16105	0.193	0.41	0.87	0.029	0.010	0.020	0.041	0.003	0.032	0.006					0.35	80.33	51.48	27	46	173						N
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68									114.70	60.32	28	59	200						N
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002					0.38	78.01	52.93	33	60	141						N

YB33 / 41

BODY	ASTM A216 WCB-2008	W 16170	0.198	0.41	0.90	0.030	0.010	0.033	0.040	0.003	0.035	0.005					0.36	86.86	57.86	27	43	162						N
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68									114.70	60.32	28	59	200						N
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002					0.38	78.01	52.93	33	60	141						N

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BODY	ASTM A216 WCB-2008	W 16170	0.198	0.41	0.90	0.030	0.010	0.033	0.040	0.003	0.035	0.005	0.36	86.86	57.86	27	43	162		N
														598.88	398.9					
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68					114.70	60.32	28	59	200		N
														790.83	415.9					
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002	0.38	78.01	52.93	33	60	141		N
														537.86	364.9					

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BODY	ASTM A216 WCB-2008	W 16170	0.198	0.41	0.90	0.030	0.010	0.033	0.040	0.003	0.035	0.005	0.36	86.86	57.86	27	43	162		N
														598.88	398.9					
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68					114.70	60.32	28	59	200		N
														790.83	415.9					
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002	0.38	78.01	52.93	33	60	141		N
														537.86	364.9					

**YB33 / 44**

BODY	ASTM A216 WCB-2008	W 16169	0.198	0.46	0.90	0.027	0.010	0.049	0.034	0.002	0.040	0.006	0.36	86.28	57.28	27	50	171		N
														594.88	394.9					
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68					114.70	60.32	28	59	200		N
														790.83	415.9					
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002	0.38	78.01	52.93	33	60	141		N
														537.86	364.9					

**YB33 / 45**

BODY	ASTM A216 WCB-2008	W 16085	0.190	0.42	0.91	0.022	0.007	0.029	0.038	0.004	0.035	0.006	0.36	84.54	55.54	29	56	155		N
														582.88	382.9					
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68					114.70	60.32	28	59	200		N
														790.83	415.9					
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002	0.38	78.01	52.93	33	60	141		N
														537.86	364.9					

**YB33 / 46**

BODY	ASTM A216 WCB-2008	W 16085	0.190	0.42	0.91	0.022	0.007	0.029	0.038	0.004	0.035	0.006	0.36	84.54	55.54	29	56	155		N
														582.88	382.9					
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68					114.70	60.32	28	59	200		N
														790.83	415.9					
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002	0.38	78.01	52.93	33	60	141		N
														537.86	364.9					

**YB33 / 47**

BODY	ASTM A216 WCB-2008	W 16186	0.209	0.42	0.91	0.032	0.010	0.033	0.060	0.003	0.033	0.008	0.38	90.48	62.06	28	46	165		N
														623.84	427.9					
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68					114.70	60.32	28	59	200		N
														790.83	415.9					
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002	0.38	78.01	52.93	33	60	141		N
														537.86	364.9					

**YB33 / 48**

BODY	ASTM A216 WCB-2008	W 16186	0.209	0.42	0.91	0.032	0.010	0.033	0.060	0.003	0.033	0.008	0.38	90.48	62.06	28	46	165		N
														623.84	427.9					
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68					114.70	60.32	28	59	200		N
														790.83	415.9					
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002	0.38	78.01	52.93	33	60	141		N
														537.86	364.9					

**YB33 / 49**

BODY	ASTM A216 WCB-2008	W 16170	0.198	0.41	0.90	0.030	0.010	0.033	0.040	0.003	0.035	0.005	0.36	86.86	57.86	27	43	162		N
														598.88	398.9					
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68					114.70	60.32	28	59	200		N
														790.83	415.9					

COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002	0.38	78.01	52.93	33	60	141		N
														537.86	364.9					

YB33 / 50

BODY	ASTM A216 WCB-2008	W 16169	0.198	0.46	0.90	0.027	0.010	0.049	0.034	0.002	0.040	0.006	0.36	86.28	57.28	27	50	171		N
														594.88	394.9					
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68											
														114.70	60.32	28	59	200		
														790.83	415.9					
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002	0.38	78.01	52.93	33	60	141		N
														537.86	364.9					

YB33 / 51

BODY	ASTM A216 WCB-2008	W 16169	0.198	0.46	0.90	0.027	0.010	0.049	0.034	0.002	0.040	0.006	0.36	86.28	57.28	27	50	171		N
														594.88	394.9					
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68											
														114.70	60.32	28	59	200		
														790.83	415.9					
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002	0.38	78.01	52.93	33	60	141		N
														537.86	364.9					

YB33 / 52

BODY	ASTM A216 WCB-2008	W 16186	0.209	0.42	0.91	0.032	0.010	0.033	0.060	0.003	0.033	0.008	0.38	90.48	62.06	28	46	165		N
														623.84	427.9					
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68											
														114.70	60.32	28	59	200		
														790.83	415.9					
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002	0.38	78.01	52.93	33	60	141		N
														537.86	364.9					

YB33 / 53

BODY	ASTM A216 WCB-2008	W 16170	0.198	0.41	0.90	0.030	0.010	0.033	0.040	0.003	0.035	0.005	0.36	86.86	57.86	27	43	162		N
														598.88	398.9					
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68											
														114.70	60.32	28	59	200		
														790.83	415.9					
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002	0.38	78.01	52.93	33	60	141		N
														537.86	364.9					

YB33 / 54

BODY	ASTM A216 WCB-2008	W 16105	0.193	0.41	0.87	0.029	0.010	0.020	0.041	0.003	0.032	0.006	0.35	80.33	51.48	27	46	173		N
														553.86	354.9					
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68											
														114.70	60.32	28	59	200		
														790.83	415.9					
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002	0.38	78.01	52.93	33	60	141		N
														537.86	364.9					

YB33 / 55

BODY	ASTM A216 WCB-2008	W 15953	0.205	0.46	0.88	0.034	0.015	0.026	0.031	0.003	0.025	0.006	0.36	85.12	54.96	29	58	165		N
														586.88	378.9					
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68											
														114.70	60.32	28	59	200		
														790.83	415.9					
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002	0.38	78.01	52.93	33	60	141		N
														537.86	364.9					

YB33 / 56

BODY	ASTM A216 WCB-2008	W 16085	0.190	0.42	0.91	0.022	0.007	0.029	0.038	0.004	0.035	0.006	0.36	84.54	55.54	29	56	155		N
														582.88	382.9					
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68											
														114.70	60.32	28	59	200		
														790.83	415.9					
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002	0.38	78.01	52.93	33	60	141		N
														537.86	364.9					

YB33 / 57

BODY	ASTM A216 WCB-2008	W 16085	0.190	0.42	0.91	0.022	0.007	0.029	0.038	0.004	0.035	0.006	0.36	84.54	55.54	29	56	155		N
														582.88	382.9					
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68											
														114.70	60.32	28	59	200		
														790.83	415.9					
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002	0.38	78.01	52.93	33	60	141		N
														537.86	364.9					

BODY	ASTM A216 WCB-2008	W 16094	0.204	0.43	0.95	0.031	0.011	0.032	0.093	0.007	0.034	0.006	0.39	84.54	54.96	29	56	167		N
														582.88	378.9					
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68					114.70	60.32	28	59	200		N
														790.83	415.9					
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002	0.38	78.01	52.93	33	60	141		N
														537.86	364.9					

**YB33 / 58**

BODY	ASTM A216 WCB-2008	W 16169	0.198	0.46	0.90	0.027	0.010	0.049	0.034	0.002	0.040	0.006	0.36	86.28	57.28	27	50	171		N
														594.88	394.9					
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68					114.70	60.32	28	59	200		N
														790.83	415.9					
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002	0.38	78.01	52.93	33	60	141		N
														537.86	364.9					

**YB33 / 59**

BODY	ASTM A216 WCB-2008	W 16186	0.209	0.42	0.91	0.032	0.010	0.033	0.060	0.003	0.033	0.008	0.38	90.48	62.06	28	46	165		N
														623.84	427.9					
CLAPPER	ASTM A182F6a-2008a	C 116	0.10	0.45	0.48	0.029	0.0060	0.23	11.68					114.70	60.32	28	59	200		N
														790.83	415.9					
COVER	ASTM A105-2005	C 70152	0.21	0.21	0.94	0.015	0.012	0.02	0.04	0.005	0.04	0.002	0.38	78.01	52.93	33	60	141		N
														537.86	364.9					

**Heat Treatment Codes:**

**A** : Annealing      **AC** : Air Cooling      **DA** : Double Aged      **FT** : Furnace Treatment      **N** : Normalizing      **OQ** : Oil Quenched  
**Ph-3** : Precipitation Hardening      **SA** : Solution Annealed      **SQ** : Solution Quenched      **ST** : Solution Treatment      **T** : Tempering      **WC** : Water Cooling  
**WQ** : Water Quenched      **WT** : Water Quenched/ Tempered      **NT** : Normalized/Tempered

Part	Material
BODY	ASTM A216 WCB
BOLTING	ASTM A193 B7 / ASTM A194 2H
COVER	ASTM A105
DISC-WEDGE-CLAPPER	ASTM A182 F6A Cl. 13
HINGE PIN	ASTM A276 410
SEAT RING	ASTM A105 + Stl.6 Faced

Valves Tested per API598

We hereby certify, that the material described above complies with the order requirements.

**EC Declaration of Conformity: JEV (Jiangyin Eastern Valve Co. Ltd.), Jiangsu Province, 214423, P.R. China**

According to Annex VII of Pressure Equipment Directive 97/23/EC, hereby declare that the products detailed above are in compliance with PED 97/23/EC and have been manufactured in accordance with conformity assessment module B+D as approved Det Norske Veritas Inspection AB as Identification No 0575 (formally 0409). The products may cover Category I, II and III of pressure equipment. For the most specific risks of this equipment, safety and compliance with essential requirements of the Directive has been based on API 600, API598, ASME B16.34, ASME B16.5, ASME B16.10 latest edition.

Undersigned by Liu Jian Qing, representing Jianyin Eastern Valve company Ltd.:

