

**Certificate/Serial/Job No:** ZB120

Quality Department: *John Ho*

Quantity	Size (NPS)	Class	Product	Description	Type	SONumber	Line	Sold to	Date
20	4	300	/ 103269	DSI 149LUN	SWING				11/4/2012

<b>Pressure Test:</b> API598	<input checked="" type="checkbox"/> Satisfactory	<b>Shell Pressure :</b> 1125 psi 7756.6 kPa	<b>BackSeat :</b> psi kPa	<b>Seat Pressure</b> 825 psi 5688.17 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 Yield [ksi] [MPa]	Elong [%]	Reduc [%]	Hard [HB]	Ch.1 [J]	Ch.2 [J]	Ch.3 [J]

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BODY	ASTM A216 WCB-2008	W 18288	0.207	0.45	0.90	0.026	0.009	0.053	0.054	0.008	0.046	0.007		0.044	0.38	78.01 537.86	49.01 337.9	27	46	162								N
CLAPPER	ASTM A105-2005	C 11170	0.20	0.20	0.9	0.018	0.006	0.02	0.04	0.004	0.06	0.000			0.36	78.30 539.86	50.03 344.9	27	69	161								N
COVER	ASTM A105-2005	C 30967	0.18	0.17	0.95	0.024	0.008	0.02	0.06	0.004	0.05	0.003			0.36	74.68 514.90	52.20 359.9	30	65	150								N

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BODY	ASTM A216 WCB-2008	W 17224	0.191	0.476	0.883	0.031	0.012	0.032	0.045	0.007	0.035	0.007		0.051	0.36	78.59 541.86	49.59 341.9	29	60	169								N
CLAPPER	ASTM A105-2005	C 11170	0.20	0.20	0.9	0.018	0.006	0.02	0.04	0.004	0.06	0.000			0.36	78.30 539.86	50.03 344.9	27	69	161								N
COVER	ASTM A105-2005	C 30967	0.18	0.17	0.95	0.024	0.008	0.02	0.06	0.004	0.05	0.003			0.36	74.68 514.90	52.20 359.9	30	65	150								N

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BODY	ASTM A216 WCB-2008	W 18312	0.198	0.48	0.90	0.031	0.009	0.046	0.052	0.007	0.044	0.007		0.044	0.38	82.80 570.89	53.80 370.9	29	52	155								N
CLAPPER	ASTM A105-2005	C 11170	0.20	0.20	0.9	0.018	0.006	0.02	0.04	0.004	0.06	0.000			0.36	78.30 539.86	50.03 344.9	27	69	161								N
COVER	ASTM A105-2005	C 30967	0.18	0.17	0.95	0.024	0.008	0.02	0.06	0.004	0.05	0.003			0.36	74.68 514.90	52.20 359.9	30	65	150								N

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BODY	ASTM A216 WCB-2008	W 18287	0.198	0.45	0.93	0.035	0.011	0.023	0.044	0.005	0.039	0.007		0.045	0.37	87.44 602.88	59.16 407.9	28	50	157								N
CLAPPER	ASTM A105-2005	C 11170	0.20	0.20	0.9	0.018	0.006	0.02	0.04	0.004	0.06	0.000			0.36	78.30 539.86	50.03 344.9	27	69	161								N
COVER	ASTM A105-2005	C 30967	0.18	0.17	0.95	0.024	0.008	0.02	0.06	0.004	0.05	0.003			0.36	74.68 514.90	52.20 359.9	30	65	150								N

**Heat Treatment Codes:**

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

Part	Material
BODY	ASTM A216 WCB
BOLTING	ASTM A193 B7M / ASTM A194 2HM
COVER	ASTM A105
DISC-WEDGE-CLAPPER	ASTM A105 + 316SS Overlay
HINGE PIN	ASTM A276-316
SEAT RING	ASTM A105 + Stl.6 Faced

Valves Tested per API598
Comply with the requirements of NACE MR0175-2002/MR0103
We hereby certify, that the material described above complies with the order requirements.

<b>EC Declaration of Conformity: JEV (Jiangyin Eastern Valve Co. Ltd.), Jiangsu Province, 214423, P.R. China</b> 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 assesment 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 Jiayin Eastern Valve company Ltd. : 
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