

We herewith certify that the material described herein has been made in accordance to the above specification and also with the requirement called for above order.

Content of delivery

Item No.	No. of Pieces	Article	Size	Pressure	Drawing / Type No.
12	2	2-PC WCB BALL VALVE	DN50	PN 40	
13	2	2-PC WCB BALL VALVE	DN80	PN 16	
14	20	2-PC 1.4408 BALL VALVE	DN40	PN 40	
15	30	2-PC 1.4408 BALL VALVE	DN50	PN 40	
16	12	2-PC 1.4408 BALL VALVE	DN65	PN 16	
17	12	2-PC 1.4408 BALL VALVE	DN100	PN 16	
18	50	SS316 3-PC BALL VALVE	DN50	1000 WOG	
19	10	SS316 3-PC BALL VALVE	DN65	1000 WOG	
20	20	SS316 3-PC BALL VALVE	DN15	1000 WOG	
21	50	SS316 3-PC BALL VALVE	DN50	1000 WOG	
22	50	1.4408 3-PC BALL VALVE	DN25	1000 WOG	
23	50	1.4408 3-PC BALL VALVE	DN32	1000 WOG	
24	150	1.4408 3-PC BALL VALVE	DN40	1000 WOG	
25	30	3-PC 1.4408 BALL VALVE	DN15	1000 WOG	
26	20	3-PC 1.4408 BALL VALVE	DN20	1000 WOG	
27	4	SS316 Y-STRAINER	DN25	800 WOG	

Test Results

	According	Result
Check of Calculation and Safety Requirements Acc. to	Standard	Acceptable
Visual and Functional Tests	Standard	Acceptable
NDE, Material Certificates (See Material Certificate, as Annexed)	N/A	N/A

Leak and Pressure test according to API 598

Item No.	Pressure test(Water)		Leak test(Water)		Leak test(Air)		Test Result		
							Shell	Seat - Water	Seat - Air
12	60 BAR	15 sec	N/A	N/A	6 BAR	15 sec	Acceptable	N/A	Acceptable
13	24 BAR	60 sec	N/A	N/A	6 BAR	60 sec	Acceptable	N/A	Acceptable
14	60 BAR	15 sec	N/A	N/A	6 BAR	15 sec	Acceptable	N/A	Acceptable
15	60 BAR	15 sec	N/A	N/A	6 BAR	15 sec	Acceptable	N/A	Acceptable
16	24 BAR	60 sec	N/A	N/A	6 BAR	60 sec	Acceptable	N/A	Acceptable
17	24 BAR	60 sec	N/A	N/A	6 BAR	60 sec	Acceptable	N/A	Acceptable
18	1500 PSI	15 sec	N/A	N/A	80 PSI	15 sec	Acceptable	N/A	Acceptable
19	1500 PSI	60 sec	N/A	N/A	80 PSI	60 sec	Acceptable	N/A	Acceptable
20	1500 PSI	15 sec	N/A	N/A	80 PSI	15 sec	Acceptable	N/A	Acceptable
21	1500 PSI	15 sec	N/A	N/A	80 PSI	15 sec	Acceptable	N/A	Acceptable
22	1500 PSI	15 sec	N/A	N/A	80 PSI	15 sec	Acceptable	N/A	Acceptable
23	1500 PSI	15 sec	N/A	N/A	80 PSI	15 sec	Acceptable	N/A	Acceptable
24	1500 PSI	15 sec	N/A	N/A	80 PSI	15 sec	Acceptable	N/A	Acceptable
25	1500 PSI	15 sec	N/A	N/A	80 PSI	15 sec	Acceptable	N/A	Acceptable
26	1500 PSI	15 sec	N/A	N/A	80 PSI	15 sec	Acceptable	N/A	Acceptable
27	1200 PSI	60 sec	N/A	N/A	N/A	N/A	Acceptable	N/A	N/A

Annexes/

1)Material certificates of pressure parts

2)Material list of other parts

Taichung

2020/10/27

Bibby

Place

Date

Approved by

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Content of delivery

Item No.	No. of Pieces	Article	Size	Pressure	Drawing / Type No.
28	2	SS316 Y-STRAINER	DN40	800 WOG	
29	4	SS316 Y-STRAINER	DN50	800 WOG	
30	12	1.4408 Y-PATTERN SPRING LOADED CHECK VALVE	DN15	800 PSI	
31	4	1.4408 Y-PATTERN SPRING LOADED CHECK VALVE	DN20	800 PSI	
32	100	1.4408 Y-PATTERN SPRING LOADED CHECK VALVE	DN50	800 PSI	
33	20	1.0619 END CAP FOR SERIES 35S	DN32	N/A	
34	40	1.4408 END CAP FOR SERIES 35S	DN50	N/A	
35	20	1.4408 END CAP FOR SERIES 35S	DN80	N/A	
36	10	3-PC 1.4408 BALL VALVE	DN50	1000PSI	
37	20	3-PC 1.4408 BALL VALVE	DN50	1000PSI	
38	40	1.4408 END CAP FOR SERIES 35S	DN15	N/A	
39	30	3-PC 1.4408 BALL VALVE CENTER SECTION ONLY!	DN15	N/A	
40	20	3-PC 1.4408 BALL VALVE CENTER SECTION ONLY!	DN50	N/A	
41	20	3-PC 1.4408 BALL VALVE CENTER SECTION ONLY!	DN80	N/A	

Test Results

	According	Result
Check of Calculation and Safety Requirements Acc. to	Standard	Acceptable
Visual and Functional Tests	Standard	Acceptable
NDE, Material Certificates (See Material Certificate, as Annexed)	N/A	N/A

Leak and Pressure test according to API 598

Item No.	Pressure test(Water)		Leak test(Water)		Leak test(Air)		Test Result		
							Shell	Seat - Water	Seat - Air
28	1200 PSI	60 sec	N/A	N/A	N/A	N/A	Acceptable	N/A	N/A
29	1200 PSI	60 sec	N/A	N/A	N/A	N/A	Acceptable	N/A	N/A
30	1200 PSI	15 sec	880 PSI	15 sec	80 PSI	15 sec	Acceptable	Acceptable	Acceptable
31	1200 PSI	15 sec	880 PSI	15 sec	80 PSI	15 sec	Acceptable	Acceptable	Acceptable
32	1200 PSI	15 sec	880 PSI	15 sec	80 PSI	15 sec	Acceptable	Acceptable	Acceptable
33	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
35	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
36	1500 PSI	15 sec	N/A	N/A	80 PSI	15 sec	Acceptable	N/A	Acceptable
37	1500 PSI	15 sec	N/A	N/A	80 PSI	15 sec	Acceptable	N/A	Acceptable
38	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
39	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
40	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
41	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Annexes/

1)Material certificates of pressure parts

2)Material list of other parts

Taichung
Place

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Date

Bibby

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Inspection Certificate: (EN10204-3.1)	Certificate-No.01 202 TWN/Q-02-0056	Report No. : 2020W1027J252	Page 36 of 37
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Article : SERIES 35S END CAP(LONG BW),1.4408 END CAP FOR SERIES 35S,LONG BUTTWELD END
S/C NO.200821XA, Customer P/O No.748337

Umfang der Lieferung (Detail of Casting Pieces)

Item No.	Heat No.	Article	Size	Quantity
1	6V33	CAP	DN 15	40

A) Chemische Analyse /Chemical Analysis

Schmelze Nr.	C %	Si %	Mn %	P %	S %	Ni %	Cr %	Mo %	Cu %	V %	N %
Heat No.	≤0.07	≤1.50	≤1.50	≤0.04	≤0.03	9-12	18-20	2.0-2.5	≤0.5	-	-
6V33	0.021	0.707	0.795	0.030	0.008	9.335	18.484	2.341	0.187		

B)Mechanische Pruefung: Zugpruefung / Tensile Test Harte / Hardness

Kerbschlagarbeit / Charpy

Probe Nr. Specimen	Prueftemp Test Temp	Rp 0.2 Proof stress	Rp 1.0 Proof stress	Zugfestigkeit Tensile Strength	Bruchdehnung Elongation	Harte Hardness	Kerbschlagarbeit ISO V Probe Energy Charpy Impact			
Nr./No	°C	N/mm ²	N/mm ²	N/mm ²	%	HB	Joule>=60			
			≥ 210	440-640	≥ 30		1	2	3	AVE
6V33			354	551	45	146	175	186	194	185

Place Taichung Taiwan Date 2020/10/27 Inspector Bibby
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