Lloyd's Register

Project: FIRE TEST FOR SOFT-SEATED FLANGED BALL VALVE

Certificate Number: BCL 9800596/1

Client: J.C. FABRICA DE VALVULAS, S.A.

Office: BARCELONA

Client's Order Number: -----

Date: 15.06.98

Order Status: complete

Inspection Dates

First: 15.05.98

Final: 15.05.98

This certificate is issued to Messrs. J.C. FABRICA DE VALVULAS, S.A. upon their request that the undersigned Surveyor to this Society did attend their works at Rubi - Barcelona (Spain) for the purpose of witnessing the FIRE TEST in accordance with the requirements specified in API 607-1993 on the following type of valve:

A manually operated soft seated flanged ball valve of 2" full bore, bi-directional as per Fig. 2515 A.I.T. DN 2", ANSI 150# RF,FB
Body material : A-216- WCB
Seats: PTFE
Ball material: A-351 CF8M
Manufacturers identifying numbers: BODY: 2.515.501
Body connector: 2.515.502
Mass: 13 Kgs
Marks:

BODY	:	C253
BODY CONNECTOR	:	C253

The test conducted on the valve previously subject to hydraulic pressure was as follows:

The valve, filled with water under test pressure, was put in a box and exposed to flames with and environmental temperature between 760 - 980ºC. All measure temperatures shall be above 705ºC. The body temperature shall be at 593º C minimun and bonnet temperature of 650ºC minimum for a period of during 30 minutes and established the leakage through the seat and external to atmosphere during this period.The temperature was checked and recorded every each thirty seconds, while leakages were determined using containers collecting the water leaked during burn period. Afterwards water spray so that it is rapidly cooled to below 100ºC within ten minutes. Internal leakage measure during cooling time. Following operational test. Subsequently manual opened up and closed to under test pressure differential and finally the valve was hidrotested during five minutes and during this period internal and external leakage were measured.

../..

All the following values were determined and recorded together with temperatures, times and pressures as shown on manufacturers Fire Safe Test Report no. API 607-2515/2"

1.-Internal leakage during burning test - Satisfactory
2.-External leakage during burning and cooling test - Satisfactory
3.-Operatibility to full open position test - Satisfactory
4.-Internal and External leakage during after operational test - Satisfactory

The valve was subject to a visual examination with satisfactory results and subsequently dismantled in order to verify that valves components comply with the drawing and parts list supplied by the manufacturer, while seat rings were found partially destroyed.

The manufacturers Fire Safe Test Report no. API 607-2515/2" and drawing 1303/2515NAIT50-M1 herewith attached were satisfactory checked and signed.

The above is considered in accordance with the mentioned specifications requirements, therefore the subject valve has satisfactorily passed the prescribed fire test and can be also qualified as follows:

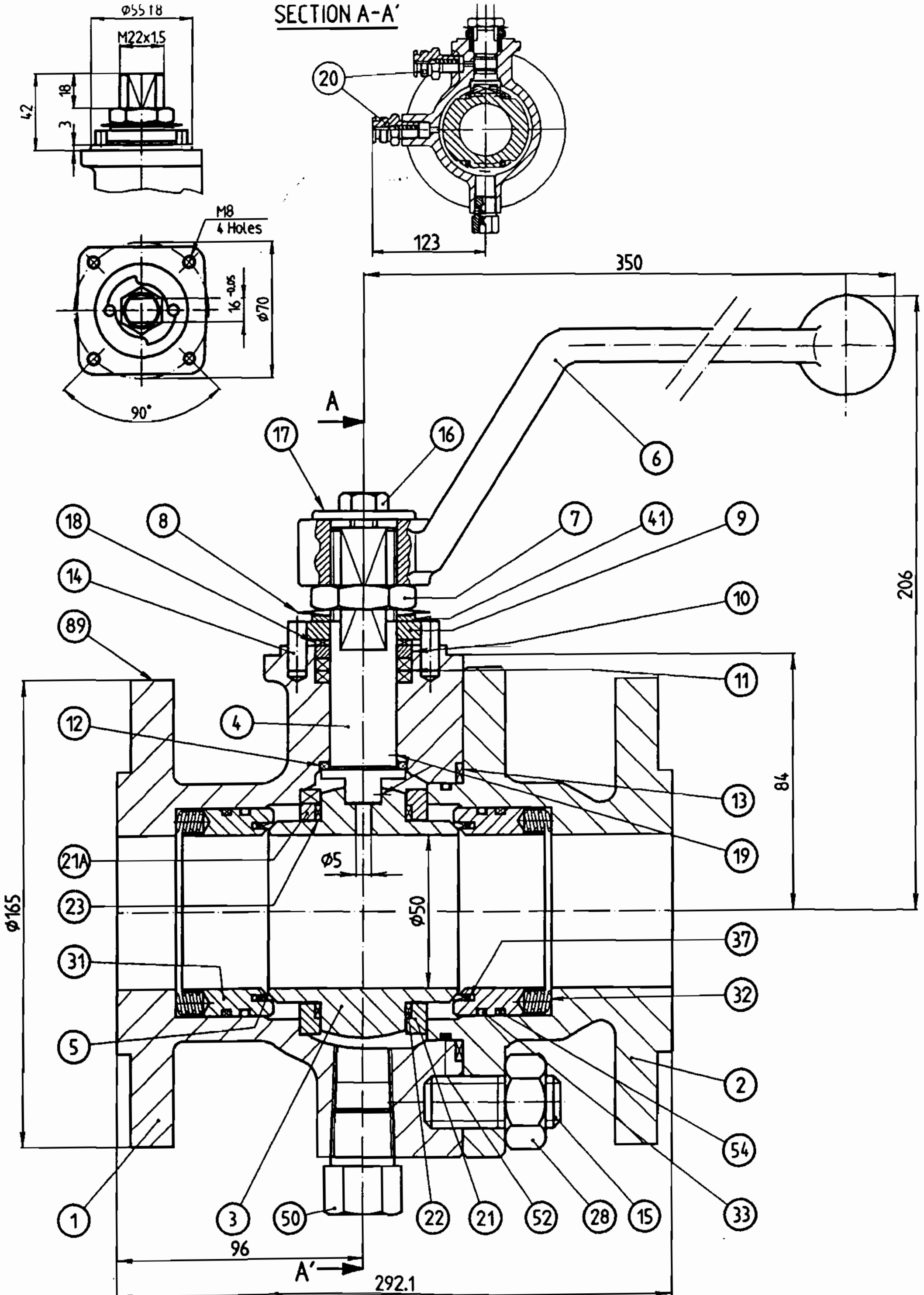
NPS	CLASS RATING	MATERIALS
1½, 2, 2½, 3	150# and 300#	Carbon steel, (see drawing)

LLOYD'S REGISTER OF SHIPPING
BARCELONA

for J.Gil for P. Picazo
Surveyors to Lloyd's Register

DOCUMENTS ATTACHED:
11 sheets reviewed and stamped accordingly

1303



Marca	Cant.	DENOMINACION	MATERIAL	Nº DE PLANO	FECHA
	2	PLASTIC CAP	PLASTIC		
89	1	IDENTIFICATION PLATE	STAINLESS ST.	PL2515A	03-05-94
54	2	SEAT SEAL	GRAPHITE	67.9 x 63.6 x 3	
52	1	"O" RING	VITON	75.87 x 2.62	
50	1	DRAIN PLUG	CARBON ST.	1/2" NPT	
41	1	SPACER	CARBON ST.	200065/41	24-07-87
37	2	"O" RING	VITON	52 x 1.25	
33	2	SEAT SEAL	VITON	61.6 x 2.62	
32	16	SEAT SPRING	INCONEL-750	MR1002515	20-05-94
31	2	SEAT CARRIER	E.N.P CARBON ST.	SA502515-M1	16-11-94
28	4	NUT	A 194 Gr. 2HM	N251550	16-03-94
23	2	BEARING	PTFE	38 x 28 x 0.3	
22	2	TRUNNION BEARING	GLACIER DU	MB2805DU	
21A	1	BALL TRUNNION	E.N.P CARBON ST.	GBS502515	08-12-95
21	1	BALL TRUNNION	E.N.P CARBON ST.	GB1502515	16-11-94
20	2	INJECTION FITTING	ZINC PLATED CARBON ST.	ENNPT38	25-03-94
19	2	ANTISTATIC DEVICE	STAINLESS ST.		
18	1	THRUST WASHER	25% G.F. PTFE	32 x 22 x 2	
17	1	WASHER	ZINC PLATED CARBON ST.	5165/17	24-07-87
16	1	BOLT	DIN 933 5.6	DIN 933 M8 x 15	
15	8	STUD	A 193 Gr.B7 (M1)	S251550	16-03-94
14	2	STOP PIN	CARBON ST.	6 x 18 DIN 6325	
13	1	BODY CONNECTOR SEAL	AISI-316L + GRAPHITE	15001300	11-11-92
12	1	STEM THRUST SEAL	25% G.F. PTFE	28.7 x 23 x 2.5	
11	2	GLAND PACKING	GRAPHITE	32 x 22 x 5	
10	1	GLAND	AISI-303	5165/10-1	24-07-87
9	1	STOP PLATE	CARBON ST.	00650930	23-07-92
8	2	DISK SPRING	CARBON ST.	DN65 B45 DIN2093	
7	1	GLAND NUT	CARBON ST.	5165/07	24-07-87
6	1	WRENCH	NODULAR IRON	M65ND	31-01-94
5	2	SEAT RING	PTFE	A251550	15-03-94
4	1	STEM	A 276/479 Tp.316	E251550	15-03-94
3	1	BALL	A 351 Gr. CF8M	B251550-M1	24-08-94
2	1	BODY CONNECTOR	A 216 Gr. WCB (C ≤ 0.25%)	L2515A50-M2	08-94
1	1	BODY	A 216 Gr. WCB (C ≤ 0.25%)	C2515A50SI	14-11-94

NOTED AND FOUND CORRECT ATTACHED TO LR CERTIFICATE No. Bcl 990596 SHEET 11 OF 11

mm Dimensiones	Dibujado	08-03-96	Víctor F.
	Comprobado	26.05.98	
Peso (Kg)	Vº.Bº.Ing.		
Sustituido por	Escala. —		
Sustituye a 1303 / 2515NAIT50			

JC Fábrica de válvulas, s.a.
Hospitalet de Ll. (Barcelona)

JC ® BALL VALVE
FIG.2515; A.I.T; DN 2"; ANSI150 FB

Lloyd's Register of Shipping — Ref.
1303/2515NAIT50-M1

Lloyd's Register

Project: FIRE TEST FOR SOFT-SEATED FLANGED BALL VALVE

Certificate Number: BCL 9800596/2

Client: J.C. FABRICA DE VALVULAS, S.A.

Office: BARCELONA

Client's Order Number: ------

Date: 15.06.98

Order Status: complete

Inspection Dates
First: 15.05.98

Final: 15.05.98

This certificate is issued to Messrs. J.C. FABRICA DE VALVULAS, S.A. upon their request that the undersigned Surveyor to this Society did attend their works at Rubi - Barcelona (Spain) for the purpose of witnessing the FIRE TEST in accordance with the requirements specified in API 607-1993 on the following type of valve:

A manually operated soft seated flanged ball valve of 4" full bore, bi-directional as per Fig. 2515 A.I.T. DN 4", ANSI 150# RF,FB
Body material : A-216- WCB
Seats: PTFE
Ball material: A-351 CF8M
Manufacturers identifying numbers: BODY: 25151001
Body connector: 25151002
Mass: 49 Kgs
Marks:

BODY	:	801
BODY CONNECTOR	:	790

The test conducted on the valve previously subject to hydraulic pressure was as follows:

The valve, filled with water under test pressure, was put in a box and exposed to flames with and environmental temperature between 760 - 980ºC. All measure temperatures shall be above 705ºC. The body temperature shall be at 593º C minimun and bonnet temperature of 650ºC minimum for a period of during 30 minutes and established the leakage through the seat and external to atmosphere during this period.The temperature was checked and recorded every each thirty seconds, while leakages were determined using containers collecting the water leaked during burn period. Afterwards water spray so that it is rapidly cooled to below 100ºC within ten minutes. Internal leakage measure during cooling time. Following operational test. Subsequently manual opened up and closed to under test pressure differential and finally the valve was hidrotested during five minutes and during this period internal and external leakage were measured.

../..

All the following values were determined and recorded together with temperatures, times and pressures as shown on manufacturers Fire Safe Test Report no. API 607-2515/4"

1.-Internal leakage during burning test - Satisfactory
2.-External leakage during burning and cooling test - Satisfactory
3.-Operatibility to full open position test - Satisfactory
4.-Internal and External leakage during after operational test - Satisfactory

The valve was subject to a visual examination with satisfactory results and subsequently dismantled in order to verify that valves components comply with the drawing and parts list supplied by the manufacturer, while seat rings were found partially destroyed.

The manufacturers Fire Safe Test Report no. API 607-2515/4" and drawing 2270/2515HAIT100SI herewith attached were satisfactory checked and signed.

The above is considered in accordance with the mentioned specifications requirements, therefore the subject valve has satisfactorily passed the prescribed fire test and can be also qualified as follows:

NPS	CLASS RATING	MATERIALS
3,4,5,6	150# and 300#	Carbon steel, (see drawing)

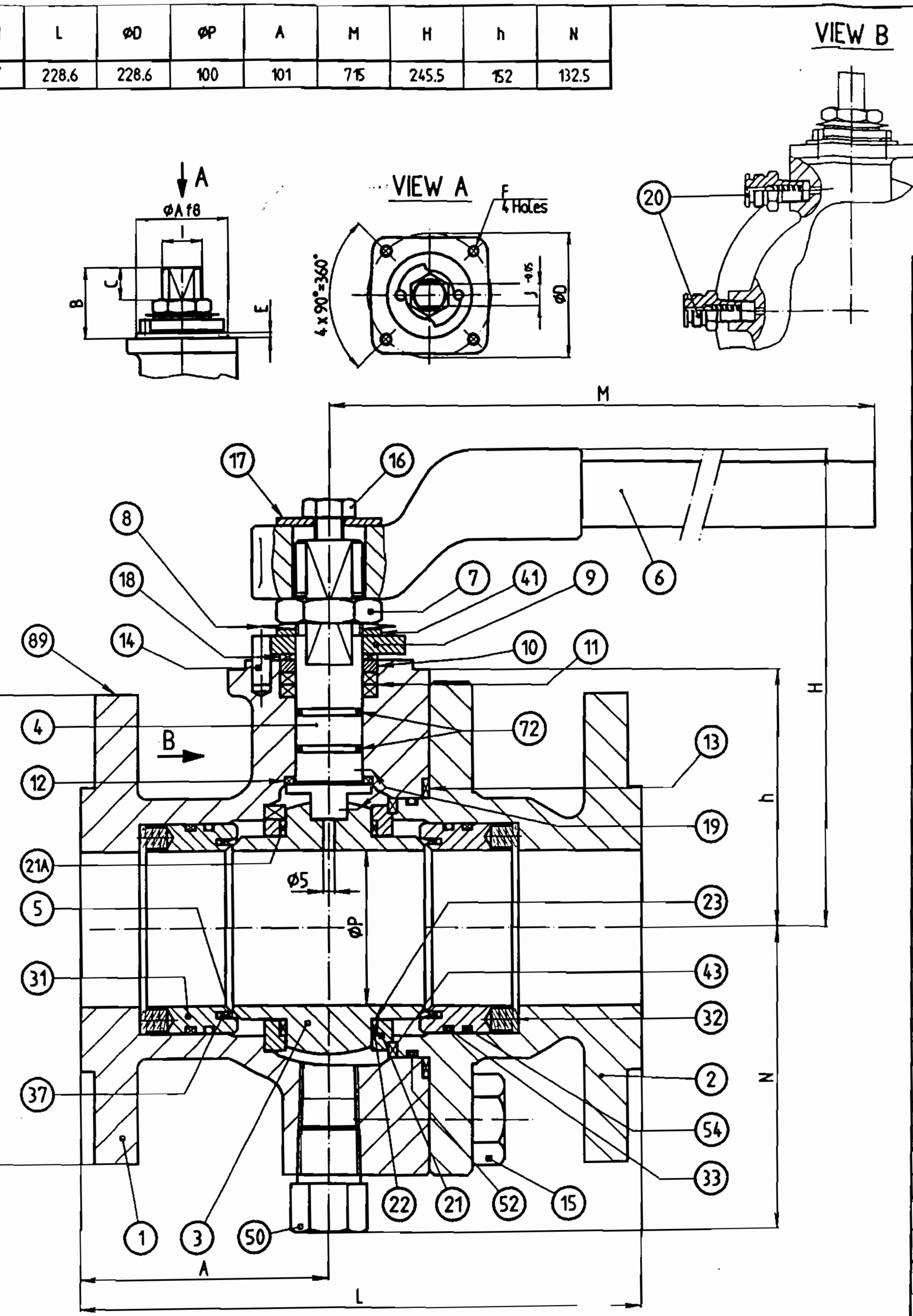
LLOYD'S REGISTER OF SHIPPING
BARCELONA

J.Gil for P. Picazo
Surveyors to Lloyd's Register

DOCUMENTS ATTACHED:
11 sheets reviewed and stamped accordingly

DN	L	ØD	ØP	A	M	H	h	N
4"	228.6	228.6	100	101	715	245.5	152	132.5

BALL VALVES.FREE STEM DIMENSIONS									PESO (Kg.) WEIGHT	CANTIDAD QUANTITY	POS. ITEM
DN	ØA	B	C	ØD	E	F	I	J			
4"	85	56	28	125	3	M12	M35x2	25	49		



Marca	Cant.	DENOMINACION	MATERIAL	Nº DE PLANO	FECHA
	2	PLASTIC CAP	PLASTIC		
89	1	IDENTIFICATION PLATE	STAINLESS ST.	140 mm x 13 mm x 0,4 ~ 0.5 mm	
72	2	"O" RING	VITON	Ø28 x Ø3,53	
54	2	SEAT SEAL	GRAPHITE	JA100G2515SI	24 / 4 / 96
52	1	"O" RING	VITON	Ø152,07 x Ø2,62	
50	1	DRAIN	A 105	DT12NPT2515-M1	5 / 97
43	2	KEY	AISI 316	DIN 6885 A 4 x 4 x 10	
41	1	SPACER	CARBON ST.	200125 / 41	18 / 5 / 82
37	2	"O" RING	VITON	Ø105 x Ø1,5	
33	2	SEAT SEAL	VITON	Ø113,97 x Ø2,62	
32	20	SPRING	INCONEL - 750	MR1002515	20 / 5 / 94
31	2	SEAT CARRIER	A 351 Gr. CF8M	SA1002515-M1	23 / 3 / 94
23	2	BEARING	PTFE	Ø 70 x Ø 55 x 0.3	
22	2	TRUNNION BEARING	AISI 316 WITH INSIDE IN PTFE	Ø 60 x Ø 55 x 10	
21 / 21A	1 / 1	BALL TRUNNION	A 351 Gr. CF8M	GB1002515-M1 / GBS1002515-M1	9 / 96
20	2	FITTING INJECTION	A 105	ENNPT38	25 / 3 / 94
19	2	ANTISTATIC DEVICE	STAINLESS ST.		
18	1	THRUST WASHER	25% G.F. PTFE	Ø 45 x Ø 35 x 2	
17	1	WASHER	ZINC PLATED CARBON ST.	5182 / 17	3 / 5 / 82
16	1	BOLT	DIN 933 5.6 ZINC PLATED	DIN 933 M12 x 20	
15	8	STUD	A 193 Gr. B7	UNC 9/16-12 x 1 1/2" ANSI B18.2.1 HEAVY HEX HEAD	
14	1	STOP PIN	CARBON ST.	8 x 20 DIN 6325	
13	1	BODY CONNECTOR SEAL	AISI 316L + GRAPHITE	1500300 (Ø182.5xØ164x3.2)	11 / 11 / 92
12	1	STEM THRUST SEAL	25% G.F PTFE	Ø45.7 x Ø35 x 3	
11	3	GLAND PACKING	GRAPHITE	Ø45 x Ø35 x 6.4	
10	1	GLAND	AISI 303	5182 / 10 - 1	31 / 1 / 86
9	1	STOP PLATE	CARBON ST.	00820920	16 / 12 / 91
8	2	DISK SPRING	CARBON ST.	5182 / 08	27 / 5 / 83
7	1	GLAND NUT	CARBON ST.	5182 / 07	4 / 7 / 78
6	1	WRENCH	NODULAR IRON	M125ND-M1	6 / 97
5	2	SEAT RING	PTFE	A2515100	22 / 3 / 94
4	1	STEM	A 276/479 Tp 316	E2515100	24 / 3 / 94
3	1	BALL	A 351 Gr. CF8M	B2515100-M2	8 / 94
2	1	BODY CONNECTOR	A 216 Gr. WCB (C ≤ 0.25%)	L2515A100-M3	10 / 96
1	1	BODY	A 216 Gr. WCB (C ≤ 0.25%)	C2515A100SI	13 / 11 / 94

LLOYD'S REGISTER OF SHIPPING
NOTED AND FOUND CORRECT
ATTACHED TO CERTIFICATE
NO. Bd 9800596/2...
SHEET 11 OF 11

mm Dimensiones	Dibujado	19-05-98	Victor F.	JC Fábrica de válvulas, s.a. Hospitalet de Ll. (Barcelona)
	Comprobado	20-5-98		
Peso (Kg)	Vº.Bº.Ing.			
Sustituido por	Escala. ----	JC® BALL VALVE FIG.2515; A.I.T ; DN 4" ; ANSI150 RF ; FB SEALING INJECTION		Ref.
Sustituye a				Plano nº 2270 15HAIT100SI

2270

Lloyd's Register

Project:	FIRE TEST FOR SOFT-SEATED FLANGED BALL VALVE	*Certificate Number:*	BCL 9800603/2A1
Client:	J.C. FABRICA DE VALVULAS, S.A.	*Office:*	BARCELONA
Client's Order Number:	------	*Date:*	30.06.98
		Order Status:	complete
Inspection Dates First:	26.05.98	*Final:*	26.05.98

This certificate is issued to Messrs. J.C. FABRICA DE VALVULAS, S.A. upon their request that the undersigned Surveyor to this Society did attend their works at Rubi - Barcelona (Spain) for the purpose of witnessing the FIRE TEST in accordance with the requirements specified in API 607-1993 on the following type of valve:

A manually operated soft seated flanged ball valve of 8" full bore, bi-directional as per Fig. 2515 A.I.T. DN 8", ANSI 150# RF,FB
Body material : A-216- WCB
Seats: PTFE
Ball material: A-351 CF8M
Manufacturers identifying numbers: BODY: 25152001
Body connector: 25152002
Mass: 184 Kgs
Marks:

BODY	:	D-08
BODY CONNECTOR	:	N-02

The test conducted on the valve previously subject to hydraulic pressure was as follows:

The valve, filled with water under test pressure, was put in a box and exposed to flames with and environmental temperature between 760 - 980ºC. All measure temperatures shall be above 705ºC. The body temperature shall be at 593º C minimun and bonnet temperature of 650ºC minimum for a period of during 30 minutes and established the leakage through the seat and external to atmosphere during this period.The temperature was checked and recorded every each thirty seconds, while leakages were determined using containers collecting the water leaked during burn period. Afterwards water spray so that it is rapidly cooled to below 100ºC within ten minutes. Internal leakage measure during cooling time. Following operational test. Subsequently manual opened up and closed to under test pressure differential and finally the valve was hidrotested during five minutes and during this period internal and external leakage were measured.

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All the following values were determined and recorded together with temperatures, times and pressures as shown on manufacturers Fire Safe Test Report no. API 607-2515/8"

1.-Internal leakage during burning test - Satisfactory
2.-External leakage during burning and cooling test - Satisfactory
3.-Operatibility to full open position test - Satisfactory
4.-Internal and External leakage during after operational test - Satisfactory

The valve was subject to a visual examination with satisfactory results and subsequently dismantled in order to verify that valves components comply with the drawing and parts list supplied by the manufacturer, while seat rings were found partially destroyed.

The manufacturers Fire Safe Test Report no. API 607-2515/8" and drawing 2334/2515HAIT200RA herewith attached were satisfactory checked and signed.

The above is considered in accordance with the mentioned specifications requirements, therefore the subject valve has satisfactorily passed the prescribed fire test and can be also qualified as follows:

NPS	CLASS RATING	MATERIALS
6" and larger	150# and 300#	Carbon steel, (see drawing)

LLOYD'S REGISTER OF SHIPPING
BARCELONA

J.Gil for P. Picazo
Surveyors to Lloyd's Register

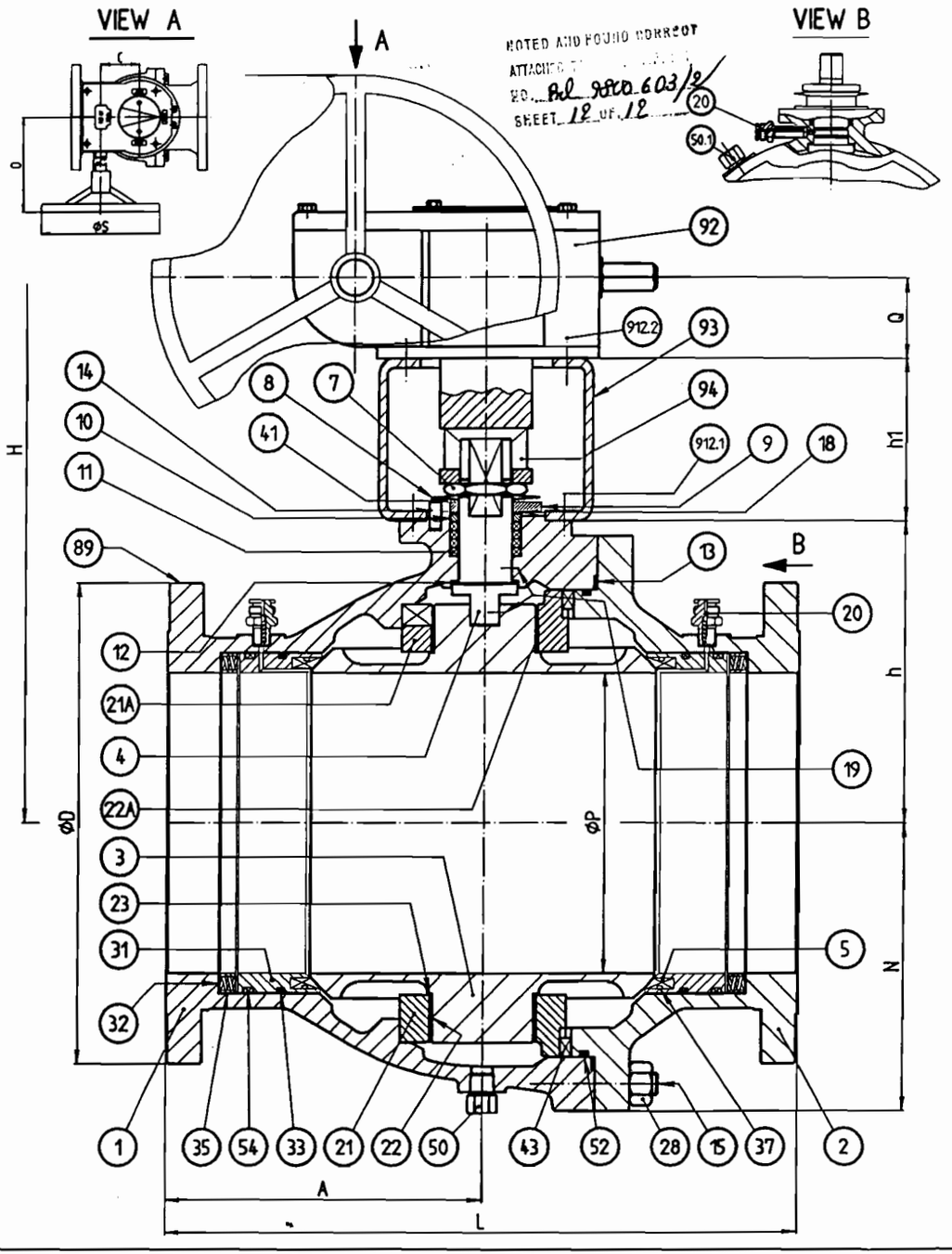
DOCUMENTS ATTACHED:
12 sheets reviewed and stamped accordingly

NOTICE: This certificate is subject to the terms and conditions overleaf, which form part of this certificate.

2334

DN	L	ØD	ØP	A	h	h1	H	N	Q	ØS	C	O
8"	457.2	343	203	230	233	100	573.5	208	40.5	400	71	209

DN	REDUCTOR WORM GEAR	PESO (Kg.) WEIGHT	IDAD QUANTITY	POS.ª ITEM
8"	AB 550N	184		



912.1/2	4 / 4	BOLT	DIN 912 8.8	M16 x 25	
94	1	COUPLING	ZINC PLATED CARBON ST	AC200AB550N	3 / 3 / 95
93	1	MOUNTING BRACKET	ZINC PLATED CARBON ST.	ESF14F14100	30 / 6 / 94
92	1	WORM GEAR	ALECTO		
	2	PLASTIC CAP	PLASTIC		
89	1	IDENTIFICATION PLATE	STAINLESS ST.	140 mm x 13 mm x 0.4 ~ 0.5 mm	
54	2	SEAT SEAL	GRAPHITE	JA200G2515SI	
52	1	"O" RING	VITON	Ø297.8 x Ø6.99	
50.1	1	DRAIN PLUG 3/8" NPT	A 105	HEXAGONAL HEAD	
50	1	DRAIN 1/2" NPT	A 105	HEXAGONAL HEAD	
43	2	KEY	AISI 316	5384 / 43	23 / 7 / 85
41	1	SPACER	CARBON ST.	5184 / 41 - M1	5 / 91
37	2	"O" RING	VITON	Ø210 x Ø3	
35	2	SPRING CARRIER	A 351 Gr. CF8M	SAPR2002515	16 / 2 / 98
33	2	SEAT SEAL	VITON	Ø228.19 x Ø3.53	
32	48	SPRING	INCONEL - 750	MRA150563	15 / 7 / 93
31	2	SEAT CARRIER	A 351 Gr. CF8M	SAPR2002515	16 / 2 / 98
28	12	NUT	A 194 Gr. 2HM	5184 / 28	31 / 9 / 84
23	2	BEARING	PTFE	Ø75 x Ø65 x 1	
22 / 22A	1 / 1	SELF - LUBRICATING BEARING	AISI 316 WITH INSIDE IN PTFE	Ø70 x Ø65 x 25 / Ø70 x Ø65 x 14.5	
21 / 21A	1 / 1	BALL TRUNNION	A 351 Gr. CF8M	(5384/21-2) - (GBS200)	(23/7/85) - (9/11/94)
20	3	FITTING INJECTION	A 105	ENNPT38	25/3/94
19	2	ANTISTATIC DEVICE	STAINLESS ST.		
18	1	THRUST WASHER	25% G.F PTFE	Ø60 x Ø45 x 2	
15	12	STUD	A 193 Gr. B7	5183 / 15 - 2	11 / 91
14	1	STOP PIN	CARBON ST.	10 x 24 DIN - 6325	
13	1	BODY CONNECTOR SEAL	AISI 316L + GRAPHITE	(Ø338.5xØ317x3.2) 15001300	5 / 10 / 92
12	1	STEM THRUST SEAL	25% G.F. PTFE	Ø55.7 x Ø45 x 3	
11	4	GLAND PACKING	GRAPHITE	Ø60 x Ø45 x 7.2	
10	1	GLAND	AISI 304	00841000-M1	18 / 7 / 90
9	1	STOP PLATE	CARBON ST.	00840920	30 / 4 / 92
8	2	DISK SPRING	CARBON ST.	5184 / 08	3 / 5 / 83
7	1	GLAND NUT	CARBON ST.	5184 / 07	12 / 12 / 78
5	2	SEAT RING	PTFE	A560200F-M3	2 / 98
4	1	STEM	A 276 / 479 Tp.316	EP1200	20 / 12 / 93
3	1	BALL	A 351 Gr. CF8M	BCC203ST-M1	9 / 97
2	1	BODY CONNECTOR	A 216 Gr. WCB (C ≤ 0.25%)	L2515A200-M1	4 / 97
1	1	BODY	A 216 Gr. WCB (C ≤ 0.25%)	C2515A200	6 / 97
Marca	Cant.	DENOMINACION	MATERIAL	Nº DE PLANO	FECHA

mm	Dibujado	05-06-98	Víctor F.
Dimensiones	Comprobado	17.6.98	
	Vº Bº Ing.		
Peso (Kg)			
Sustituido por	Escala.		
Sustituye a			

JC Fábrica de válvulas, s.a.
Hospitalet de Ll. (Barcelona)

JC® BALL VALVE
FIG.2515; A.I.T; DN 8"; ANSI150 RF FB
WORM GEAR ALECTO

Ref.

Plano n.º
2334 / 2515HAIT200RA

Lloyd's Register

Project: FIRE TEST FOR SOFT-SEATED FLANGED BALL VALVE *Certificate Number:* BCL 9800603/4

Client: J.C. FABRICA DE VALVULAS, S.A. *Office:* BARCELONA

Client's Order Number: *Date:* 30.06.98

Order Status: complete

Inspection Dates *First:* 09.06.98 *Final:* 09.06.98

This certificate is issued to Messrs. J.C. FABRICA DE VALVULAS, S.A. upon their request that the undersigned Surveyor to this Society did attend their works at Rubi - Barcelona (Spain) for the purpose of witnessing the FIRE TEST in accordance with the requirements specified in API 607 - 1993 on the following type of valve:

A manually operated soft seated flanged ball valve of 2" full bore, bi-directional as per Fig. 2560 A.I.T. DN 2", ANSI 600# RF,FB

Body material : A-216- WCB

Seats: PTFE

Ball material: A-351 CF8M

Manufacturers identifying numbers: BODY: 2560501

Body connector: 2560502

Mass: 20,5 Kgs

Marks:

BODY	:	ABV
BODY CONNECTOR	:	ABO

The test conducted on the valve previously subject to hydraulic pressure was as follows:

The valve, filled with water under test pressure, was put in a box and exposed to flames with and environmental temperature between 760 - 980°C. All measure temperatures shall be above 705°C. The body temperature shall be at 593° C minimun and bonnet temperature of 650°C minimum for a period of during 30 minutes and established the leakage through the seat and external to atmosphere during this period.The temperature was checked and recorded every each thirty seconds, while leakages were determined using containers collecting the water leaked during burn period. Afterwards water spray so that it is rapidly cooled to below 100°C within ten minutes. Internal leakage measure during cooling time. Following operational test. Subsequently manual opened up and closed to under test pressure differential and finally the valve was hidrotested during five minutes and during this period internal and external leakage were measured.

../..

All the following values were determined and recorded together with temperatures, times and pressures as shown on manufacturers Fire Safe Test Report no. API 607-2560/2"

1.-Internal leakage during burning test - Satisfactory
2.-External leakage during burning and cooling test - Satisfactory
3.-Operatibility to full open position test - Satisfactory
4.-Internal and External leakage during after operational test - Satisfactory

The valve was subject to a visual examination with satisfactory results and subsequently dismantled in order to verify that valves components comply with the drawing and parts list supplied by the manufacturer, while seat rings were found partially destroyed.

The manufacturers Fire Safe Test Report no. API 607-2560/2" and drawing 1302/2560NAIT50-M1 herewith attached were satisfactory checked and signed.

The above is considered in accordance with the mentioned specifications requirements, therefore the subject valve has satisfactorily passed the prescribed fire test and can be also qualified as follows:

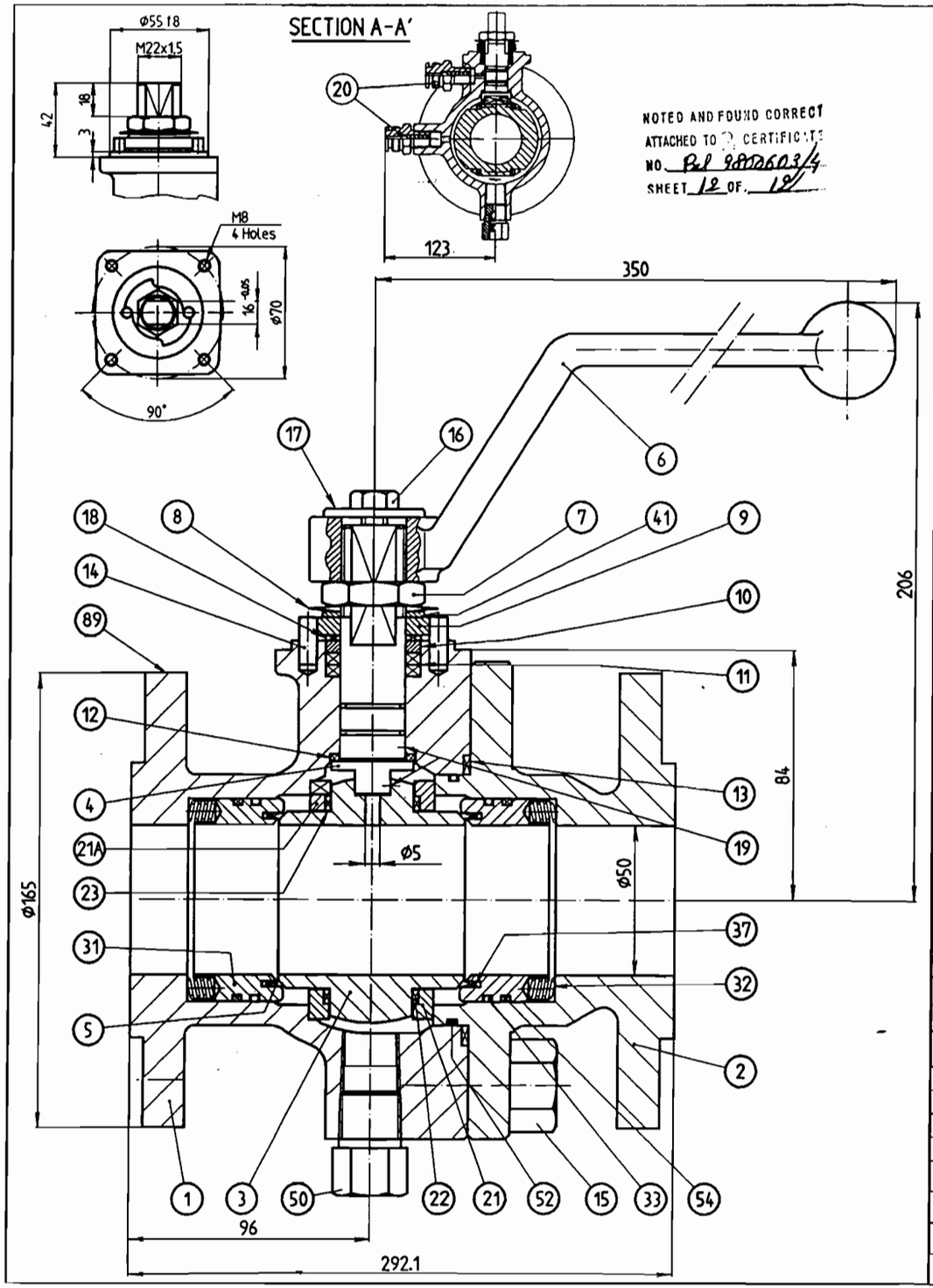
NPS	CLASS RATING	MATERIALS
1½" , 2", 3", 2½"	600# , 800 and 900#	Carbon steel, (see drawing)

LLOYD'S REGISTER OF SHIPPING
Lloyd's Register
BARCELONA
LLOYD'S REGISTER OF SHIPPING

J.Gil for P. Picazo
Surveyors to Lloyd's Register

DOCUMENTS ATTACHED:
12 sheets reviewed and stamped accordingly

1302



NOTED AND FOUND CORRECT
ATTACHED TO CERTIFICATE
NO. Bel 980603/4
SHEET 12 OF 18

	2	PLASTIC CAP	PLASTIC		
89	1	IDENTIFICATION PLATE	STAINLESS ST.	PL2560A	03-05-94
54	2	SEAT SEAL	GRAPHITE	67.9 x 63.6 x 3	
52	1	"O" RING	VITON	75.87 x 2.62	
50	1	DRAIN PLUG	CARBON ST.	1/2" NPT	
41	1	SPACER	CARBON ST.	200065/41	24-07-87
37	2	"O" RING	VITON	52 x 1.25	
33	2	SEAT SEAL	VITON	61.6 x 2.62	
32	16	SEAT SPRING	INCONEL-750	MR1002515	20-05-94
31	2	SEAT CARRIER	E.N.P CARBON ST.	SA502515-M1	16-11-94
23	2	BEARING	PTFE	38 x 28 x 0.3	
22	2	TRUNNION BEARING	GLACIER DU	MB2805DU	
21A	1	BALL TRUNNION	E.N.P CARBON ST.	GBS502515	08-12-95
21	1	BALL TRUNNION	E.N.P CARBON ST.	GBI502515	16-11-94
20	2	INJECTION FITTING	ZINC PLATED CARBON ST.	ENNPT38	25-03-94
19	2	ANTISTATIC DEVICE	STAINLESS ST.		
18	1	THRUST WASHER	25% G.F. PTFE	32 x 22 x 2	
17	1	WASHER	ZINC PLATED CARBON ST.	5165/17	24-07-87
16	1	BOLT	DIN 933 5.6	DIN 933 M8 x 15	
15	8	BOLT	A 193 Gr .B7	UNC 9/16 - 12 x 1	
14	2	STOP PIN	CARBON ST.	6 x 18 DIN 6325	
13	1	BODY CONNECTOR SEAL	AISI-316L + GRAPHITE	JCL50SP560	01-03-94
12	1	STEM THRUST SEAL	25% G.F. PTFE	28.7 x 23 x 2.5	
11	2	GLAND PACKING	GRAPHITE	32 x 22 x 5	
10	1	GLAND	AISI-303	5165/10-1	24-07-87
9	1	STOP PLATE	CARBON ST.	00650930	23-07-92
8	2	DISK SPRING	CARBON ST.	DN65 B45 DIN2093	
7	1	GLAND NUT	CARBON ST.	5165/07	24-07-87
6	1	WRENCH	NODULAR IRON	M65ND	31-01-94
5	2	SEAT RING	PTFE	A251550	15-03-94
4	1	STEM	A 276/479 Tp.316	E251550	15-03-94
3	1	BALL	A 351 Gr. CF8M	B251550-M1	24-08-94
2	1	BODY CONNECTOR	A 216 Gr. WCB (C ≤ 0.25%)	L2560A50-M2	08-94
1	1	BODY	A 216 Gr. WCB (C ≤ 0.25%)	C2560A50SI	14-11-94
Marca	Cant.	DENOMINACION	MATERIAL	N°.DE PLANO	FECHA

mm	Dibujado	17-06-98	Víctor F.
Dimensiones	Comprobado	12.06.98	
	V°.B°.Ing.		
Peso (Kg) 20.5	Escala.	———	
Sustituido por			
Sustituye a 1302 / 2560NAIT50			

JC Fábrica de válvulas, s.a.
Hospitalet de Ll. (Barcelona)

JC ® BALL VALVE
FIG.2560; A.I.T; DN 2"; ANSI600 FB

Ref.

Plano n.° 1302 / 2560NAIT50-M1

Lloyd's Register

Project:	FIRE TEST FOR SOFT-SEATED FLANGED BALL VALVE	*Certificate Number:*	BCL 9800547/2
Client:	J.C. FABRICA DE VALVULAS, S.A.	*Office:*	BARCELONA
Client's Order Number:	------	*Date:*	11.05.98
		Order Status:	complete
Inspection Dates First:	14.04.98	*Final:*	14.04.98

This certificate is issued to Messrs. J.C. FABRICA DE VALVULAS, S.A. upon their request that the undersigned Surveyor to this Society did attend their works at Rubi - Barcelona (Spain) for the purpose of witnessing the FIRE TEST in accordance with the requirements specified in API 607-1993 on the following type of valve:

A manually operated soft seated flanged ball valve of 4" full bore, bi-directional as per
Fig. 2560 A.I.T. 4" ANSI 600# RF; FB SERIE STF
Body material : A-216- WCB
Seats: Ring: PTFE (Trunnion bearing: AISI 316)
Ball material: A-351 CF8M
Manufacturers identifying numbers: BODY: C2560100.1
Body connector: 2560100.2
Mass: 77 Kgs
Marks:

BODY	:	BCC3
BODY CONNECTOR	:	FM

The test conducted on the valve previously subject to hydraulic pressure was as follows:

The valve, filled with water under test pressure, was put in a box and exposed to flames with and environmental temperature between 760 - 980ºC. All measure temperatures shall be above 705ºC. The body temperature shall be at 593º C minimun and bonnet temperature of 650ºC minimum for a period of during 30 minutes and established the leakage through the seat and external to atmosphere during this period.The temperature was checked and recorded every each thirty seconds, while leakages were determined using containers collecting the water leaked during burn period. Afterwards water spray so that it is rapidly cooled to below 100ºC within ten minutes. Internal leakage measure during cooling time. Following operational test. Subsequently manual opened up and closed to under test pressure differential and finally the valve was hidrotested during five minutes and during this period internal and external leakage were measured.

../..

All the following values were determined and recorded together with temperatures, times and pressures as shown on manufacturers Fire Safe Test Report no. API 607-2560/4"

1.-Internal leakage during burning test - Satisfactory
2.-External leakage during burning and cooling test - Satisfactory
3.-Operatibility to full open position test - Satisfactory
4.-Internal and External leakage during after operational test - Satisfactory

The valve was subject to a visual examination with satisfactory results and subsequently dismantled in order to verify that valves components comply with the drawing and parts list supplied by the manufacturer, while seat rings were found partially destroyed.

The manufacturers Fire Safe Test Report no. API 607-2560/4" and drawing 2210/2560AIT100L herewith attached were satisfactory checked and signed.

The above is considered in accordance with the mentioned specifications requirements, therefore the subject valve has satisfactorily passed the prescribed fire test and can be also qualified as follows:

NPS	CLASS RATING	MATERIALS
3, 4, 5, 6	600,800,900#	Carbon steel (See drawing)

LLOYD'S REGISTER OF SHIPPING
BARCELONA

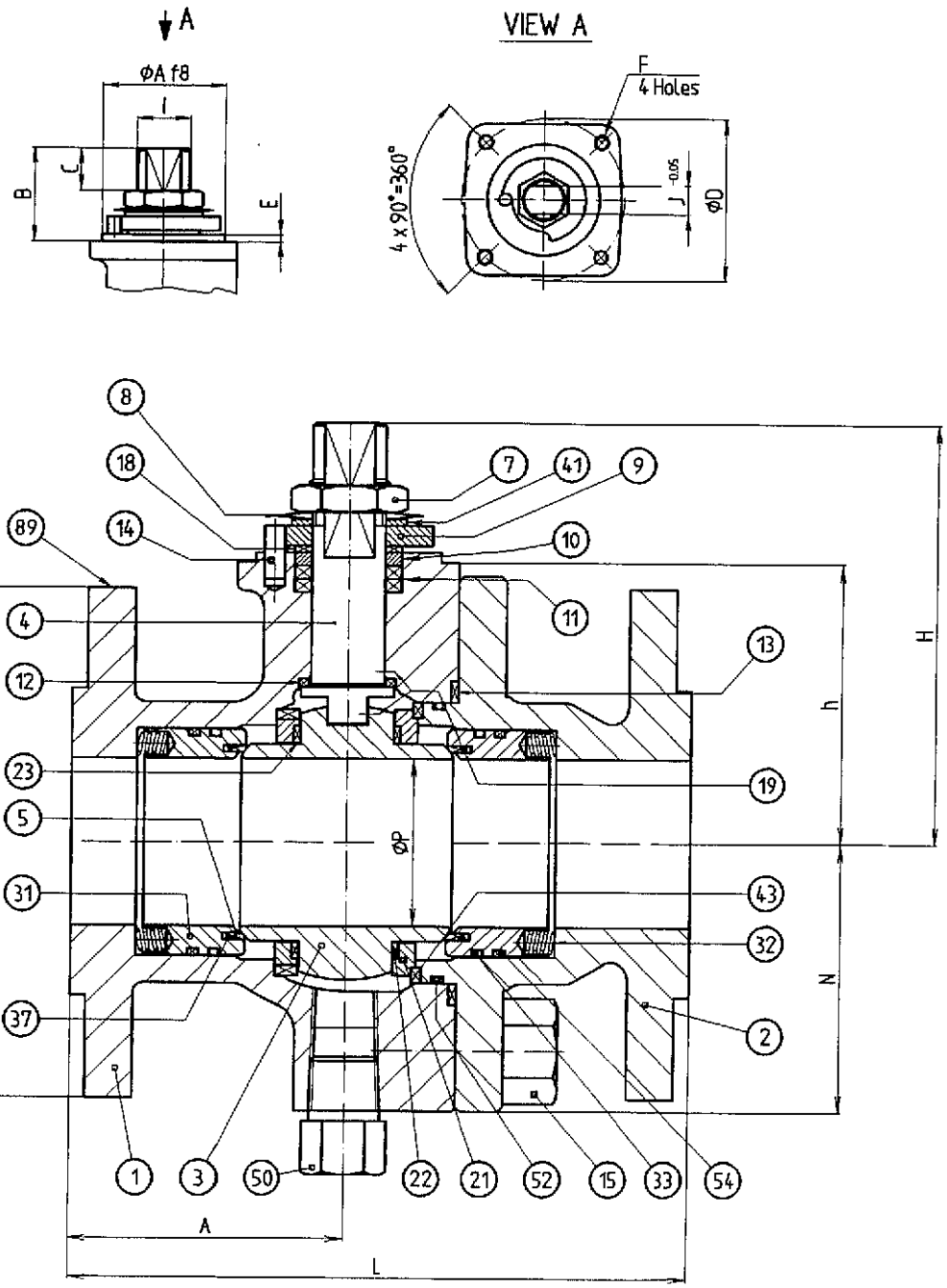
J.Gil for P. Picazo
Surveyors to Lloyd's Register

DOCUMENTS ATTACHED:
12 sheets reviewed and stamped accordingly

2210

DN	L	ØD	ØP	A	H	h	N
4"	431.8	273	100	160	208	152	135

BALL VALVES.FREE STEM DIMENSIONS									WEIGHT (Kg.)	QUANTITY	ITEM
DN	ØA	B	C	ØD	E	F	I	J			
4"	85	56	28	125	3	M12	M35x2	25	77		



	2	PLASTIC CAP	PLASTIC	DN = 100
89	1	IDENTIFICATION PLATE	STAINLESS ST.	140 mm x 13 mm x 0.4 ~ 0.5 mm
54	2	SEAT SEAL	GRAPHITE	JA100G2515SI / 24 / 4 / 962
52	1	"O" RING	VITON	Ø152.07 x Ø2.62
50	1	DRAIN PLUG	CARBON ST.	1/2" NPT EXAGONAL HEAD
43	2	KEY	AISI 316	DIN-6885 A 4 x 4 x 10
41	1	SPACER	CARBON ST.	200125 / 41 / 18 / 5 / 82
37	2	"O" RING	VITON	Ø105 x Ø1.5
33	2	SEAT SEAL	VITON	Ø113.97 x Ø2.62
32	20	SEAT SPRING	INCONEL	MR1002515 / 20 / 5 / 94
31	2	SEAT CARRIER	A 351 Gr. CF8M	SA1002515-M1 / 23 / 3 / 94
23	2	BEARING	PTFE	Ø70 x Ø55 x 0.3
22	2	TRUNNION BEARING	AISI 316 INSIDE IN PTFE	Ø60 x Ø55 x 10
21	2	BALL TRUNNION	A 351 Gr. CF8M	GBM1002515 / 19 / 6 / 97
19	2	ANTISTATIC DEVICE	STAINLESS ST.	
18	1	THRUST WASHER	25% G.F. PTFE	Ø45 x Ø 35 x 2
15	8	BOLT	A 193 Gr. B7	UNC 7 / 8-9 x 2 1/2"
14	1	STOP PIN	CARBON ST.	8 x 20 DIN-6325
13	1	BODY CONNECTOR SEAL	AISI 316L + GRAPHITE	JCL100SP560 / 1 / 3 / 94
12	1	STEM THRUST SEAL	25% G.F. PTFE	Ø45.7 x Ø35 x 3
11	3	GLAND PACKING	GRAPHITE	Ø45 x Ø35 x 6.4
10	1	GLAND	AISI 303	5182 / 10-1 / 31 / 1 / 86
9	1	STOP PLATE	CARBON ST. NOTED AND FOUND CORRECT	00820920 / 16 / 12 / 91
8	2	DISK SPRING	CARBON ST. ATTACH TO CERTIFICATE	5182 / 08 / 25 / 5 / 83
7	1	GLAND NUT	CARBON ST. NO. Bal 8.00 SHEET 12 OF 12	5182 / 07 / 4 / 7 / 78
5	2	SEAT RING	PTFE	A2515100 / 22 / 3 / 94
4	1	STEM	A 276/479 Tp.316	E2515100 / 24 / 3 / 94
3	1	BALL	A 351 Gr. CF8M	B2515100ST / 4 / 98
2	1	BODY CONNECTOR	A 216 Gr. WCB (C ≤ 0.25%)	L2560A100-M4 / 11 / 96
1	1	BODY	A 216 Gr. WCB (C ≤ 0.25%)	C2560A100-M3 / 1 / 97
Marca	Cant.	DENOMINACION	MATERIAL	Nº DE PLANO / FECHA

mm	Dibujado	20-04-98	Víctor F.
Dimensiones	Comprobado	23.4.98	
	V°B° Ing.		
Peso (Kg)			
Sustituida por	Escala	------	
Sustituye a			

JC Fábrica de válvulas, s.a.
Hospitalet de Ll. (Barcelona)

JC® BALL VALVE
FIG.2560; A.I.T; DN 4"; ANSI600 RF FB
FREE STEM

Ref.

Plano n.°
2210 / 2560AIT100L

Lloyd's Register

Project:	FIRE TEST FOR SOFT-SEATED FLANGED BALL VALVE	*Certificate Number:*	BCL 9800786/1
Client:	J.C. FABRICA DE VALVULAS, S.A.	*Office:*	BARCELONA
Client's Order Number:	------	*Date:*	25.01.99
		Order Status:	Complete
Inspection Dates First:	29.12.98	*Final:*	22.01.99

This certificate is issued to Messrs. J.C. FABRICA DE VALVULAS, S.A. upon their request that the undersigned Surveyor to this Society did attend their works at Rubi - Barcelona (Spain) for the purpose of witnessing the FIRE TEST in accordance with the requirements specified in API 607-1993 on the following type of valve:

A manually operated soft seated flanged ball valve of 8" reduced bore, bi-directional as per Fig. 2560 A.I.T. DN 8", ANSI 600# RF,FB
Body material : A-216- WCB
Seats: PTFE
Ball material: A-351 CF8M
Manufacturers identifying numbers: BODY: 715841
Body connector: A-216- WCB
Drawing: 2697/2560HAIT200RA
Marks:

BODY	:	Y05
BODY CONNECTOR	:	Y34

The test conducted on the valve previously subject to hydraulic pressure was as follows:

The valve, filled with water under test pressure, was put in a box and exposed to flames with and environmental temperature between 760 - 980ºC. All measure temperatures shall be above 705ºC. The body temperature shall be at 593º C minimun and bonnet temperature of 650ºC minimum for a period of during 30 minutes and established the leakage through the seat and external to atmosphere during this period.The temperature was checked and recorded every each thirty seconds, while leakages were determined using containers collecting the water leaked during burn period. Afterwards water spray so that it is rapidly cooled to below 100ºC within ten minutes. Internal leakage measure during cooling time. Following operational test. Subsequently manual opened up and closed to under test pressure differential and finally the valve was hidrotested during five minutes and during this period internal and external leakage were measured.

../..

All the following values were determined and recorded together with temperatures, times and pressures as shown on manufacturers Fire Safe Test Report no. API 607-2560/8".

1.-Internal leakage during burning test - Satisfactory
2.-External leakage during burning and cooling test - Satisfactory
3.-Operatibility to full open position test - Satisfactory
4.-Internal and External leakage during after operational test - Satisfactory

The valve was subject to a visual examination with satisfactory results and subsequently dismantled in order to verify that valves components comply with the drawing and parts list supplied by the manufacturer, while seat rings were found partially destroyed.

The manufacturers Fire Safe Test Report no. API 607-2560/8" and drawing no. 2697/2560HAIT200 RA herewith attached were satisfactory checked and signed.

The above is considered in accordance with the mentioned specifications requirements, therefore the subject valve has satisfactorily passed the prescribed fire test and can be also qualified as follows:

NPS	CLASS RATING	MATERIALS
6" and larger	600# - 800# - and 900#	Carbon steel, (see drawing)

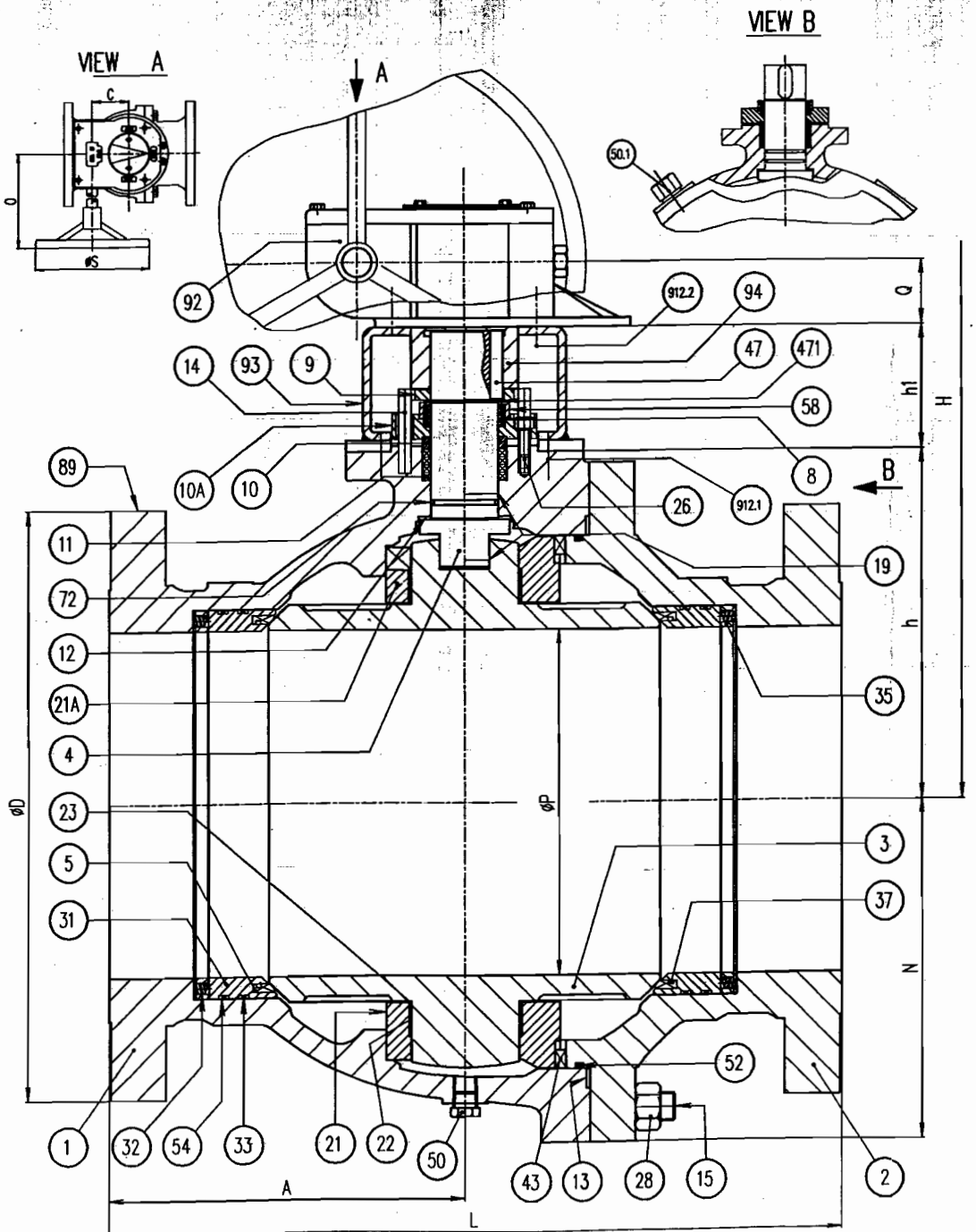
J.Gil
Surveyor to Lloyd's Register

DOCUMENTS ATTACHED:
14 sheets reviewed and stamped accordingly

DN	L	øD	øP	A	h	h1	H	N	Q	øS	C	O
8"	660.4	419	203	316.6	237	120	655	235	48	500	104.5	330

DN	REDUCTOR WORM GEAR	PESO (Kg.) WEIGHT	CANTIDAD QUANTITY	POS. ITEM
8"	AB 1250N			

NOTED AND FOUND CORRECT
ATTACHED TO Q CERTIFICATE
NO. Bcl 9800786/1
SHEET 1 OF 14



912.2	4	BOLT	DIN 912 8.8	M16X25	
912.1	4	BOLT	DIN 912 8.8	M16X25	
471	1	RETAINER	STAINLESS ST.	DIN 471 (50X2)	
94	1	COUPLING	ZINC PLATED CARBON ST.	AC300AB1250N1-M1	11/97
93	1	MOUNTING BRACKET	ZINC PLATED CARBON ST.	ESF14F14120	21/11/97
92	1	WORM GEAR	ALECTO	AB1250N	
	2	WOOD DISK	WOOD		
89	1	IDENTIFICATION PLATE	STAINLESS ST.	140mmx13mmx0.4-0.5mm	
72	1	"O" RING	VITON	ø44.04X3.53	
58	1	SPRING PROTECTION	CARBON ST.	FMRE3001	29/11/94
54	2	SEAT SEAL	GRAPHITE	JA200G2515SI	31/07/96
52	1	"O" RING	VITON	ø297.8X6.99	
50.1	1	DRAIN PLUG	A 105	3/8 NPT	
50	1	DRAIN	A 105	1/2 NPT	
47	2	KEY	AISI 316	DIN 6885 B14X9X70	
43	2	KEY	AISI 316	5384/43	23/07/85
37	2	"O" RING	VITON	ø210X3	
35	2	SEAT SPRING	AISI351 GR. CF8M	SAPR2002515	16/02/98
33	2	SEAT SEAL	VITON	ø228.19X3.53	
32	48	SEAT SPRING	INCONEL - 750	MRA150563	15/07/93
31	2	SEAT CARRIER	AISI351 GR. CF8M	SAPR2002515	16/02/98
28	16	NUT	A 194 Gr. 2HM	N2630450	29/09/94
26	4	BOLT	DIN 912 8.8	M8X25	
23	2	BEARING	PTFE	ø115Xø95X1	
22	2	TRUNNION BEARING	AISI316 WITH INSIDE PTFE	ø100Xø95X19	
21/21A	1 / 1	BALL TRUNNION	AISI351 GR. CF8M	GBM2002560	25/03/97
19	2	ANTISTATIC DEVICE	STAINLESS ST.		
15	16	STUD	A 193 Gr. B7M	S2630450	03/01/96
14	2	STOP PIN	CARBON ST.	10X70 DIN 6325	
13	1	BODY CONNECTOR SEAL	AISI 316L + GRAPHITE	JCL200SP560	01/03/94
12	1	STEM THRUST SEAL	25% G.F PTFE	ø65Xø50X3	
11	5	GLAND PACKING	GRAPHITE	ø60Xø50X5,4	
10A	1	GLAND	CARBON ST.	WPP3001516	29/11/94
10	1	GLAND	AISI 303	PP3001-M1	05/97
9	1	STOP PLATE	CARBON ST.	STOP3002515-M1	01/98
8	2	SPRING	CARBON ST.	MR3001	29/11/94
5	2	SEAT RING	PTFE	AD2560200	18/02/98
4	1	STEM	A 276 / 479 Tp.316	E2560200-M1	02/98
3	1	BALL	A 351 Gr. CF8M	B2560203ST	18/05/98
2	1	BODY CONNECTOR	A 216 Gr. WCB (C ≤ 0.25%)	L2560A200	20/11/97
1	1	BODY	A 216 Gr. WCB (C ≤ 0.25%)	C2560A200-M1	02/98
Marca	Cant.	DENOMINACION	MATERIAL	N°.DE PLANO	FECHA

mm	Dibujado	28/01/99	E.FERNANDEZ
Dimensiones	Comprobado	28-1-99	
Peso (Kg) 360	V°B°Ing.		
Sustituido por	Escala.	----	
Sustituye a			

JC Fabrica de valvulas, s.a.
Hospitalet de Ll. (Barcelona)

JC® BALL VALVE
FIG.2560; A.I.T; DN 8"; ANSI600 RF; FB
WORM GEAR ALECTO

Ref. LLOYD'S

Plano n.° 2697 / 2560HAIT200RA

This Certificate cancels and superseded the previous one BCL 9700816/1 issued on 20.01.98

Project:	FIRE TEST FOR SOFT-SEATED FLANGED BALL VALVE	*Certificate Number:*	BCL 9700816/1A1
Client:	J.C.FABRICA DE VALVULAS, S.A.	*Office:*	BARCELONA
Client's Order Number:	-----	*Date:*	05.03.98
		Order Status:	complete
Inspection Dates First:	29.12.97	*Final:*	08.01.98

This certificate is issued to *M*essrs. J.C.FABRICA DE VALVULAS, S.A, upon their request that the undersigned Surveyor to this Society did attend their works at Rubi - Barcelona (Spain) for the purpose of witnessing the FIRE TEST in accordance with the requirements specified in BS-6755 : Part 2, 1897, API 6FA: 1994, and ISO-10497/92 on the following type of valve :

A manually operated soft seated flanged ball valve of 14" full bore, bi-directional as per fig. 2515AIT 14", class 150#.
Body material : A-216-WCB.
Seats : ENP Carbon St. + PTFE
Ball material : A-351-CF8M
Manufacturers identifying numbers : BODY : C2515A3501
Body connector : L2515A3501 and Ball : B615337
Mass : 604 Kg.
Marks :

BODY	:	918
BODY CONNECTOR :		959

The test conducted on the valve previously subject to hydraulic pressure was as follows:

The valve in the closed position, filled with water under test pressure, was put in a box and exposed to flames with an environmental temperature in the region 750° C for a period of 30 minutes and established the leakage through the seat and external to atmosphere during this period. The temperature was checked and recorded every two minutes, while leakages were determined using containers collecting the water leaked during burn period. Afterwards cool-down to 100° C. The valve leakage hydrostatically tested to the appropiate test pressure and external leakages recorded accordingly. Subsequently manually opened up under test pressure differential and finally the valve was fully hydrotested and external leakages recorded.

../..

All the following values were determined and recorded together with temperatures, times and pressures as shown on manufacturers Fire Safe Test Report nº 2515-14A and 2515-14B.

1. External leakage during burn and cool-down period - satisfactory.

2. External leakage during operational test - satisfactory.

3. Operatibility to full open position and external leakage - satisfactory.

The valve was subject to a visual examination with satisfactory results and subsequently dismantled in order to verify that valves components comply with the drawing and parts list supplied by the manufacturer, while seat rings were found completely destroyed.

The manufacturers Fire Safe Test Report nº 2515.14A and 2515-14B and drawing 2039/2515AIT350RA herewith attached were satisfactory checked and signed.

The above is considered in accordance with the mentioned specifications requirements, therefore the subject valve has satisfactorily passed the prescribed fire test and can be also qualified as follows :

NPS	CLASS RATING	PN RATING
14", 16", 18", 20", 24" & 28"	150 and 300	16, 25 and 40

LLOYD'S REGISTER OF SHIPPING
BARCELONA

J.Gil for P.Picazo
Surveyors to Lloyd's Register

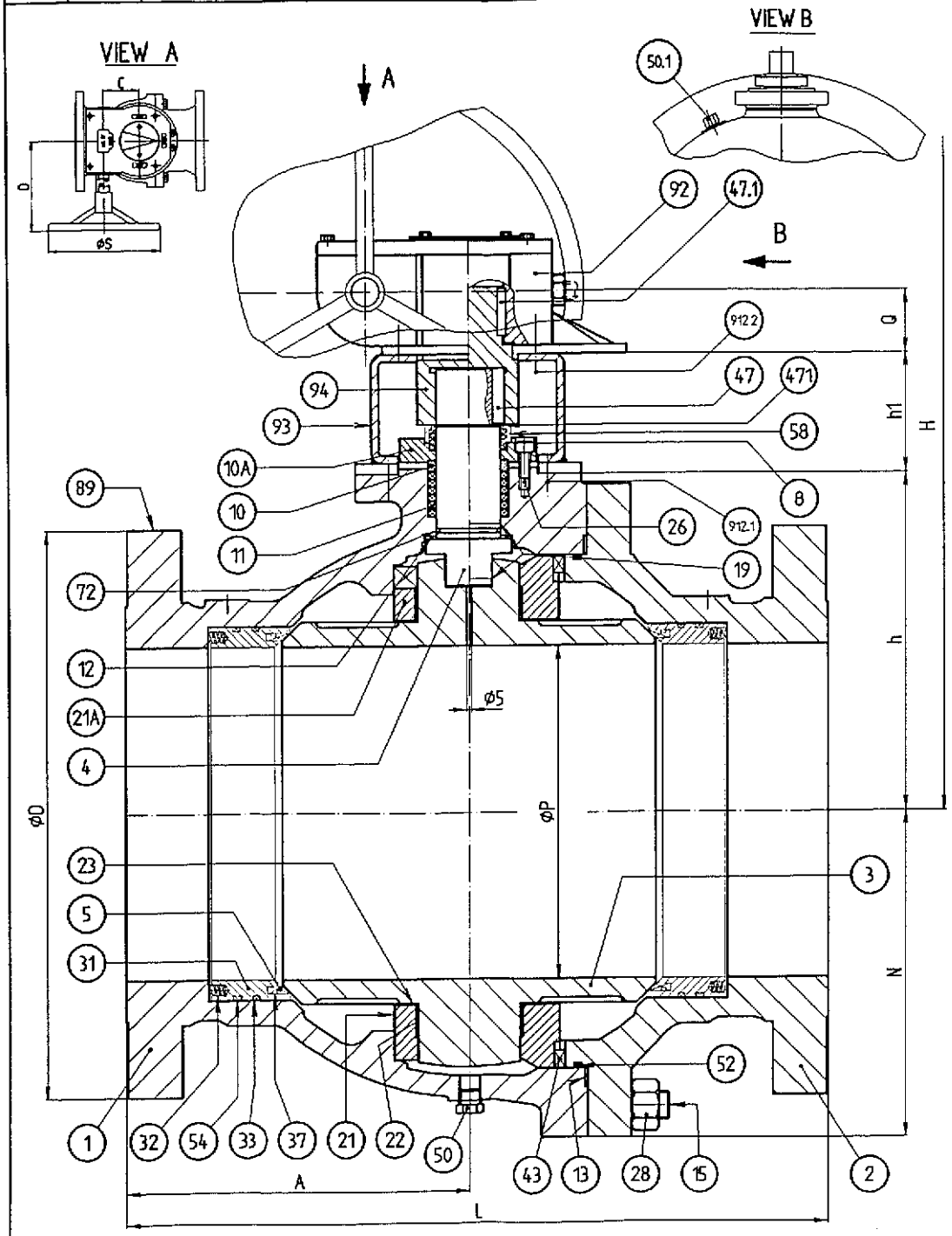
DOCUMENTS ATTACHED :
21 sheets reviewed and stamped accordingly

2039

DN	L	øD	øP	A	h	h1	H	N	Q	øS	C	O
14"	685.8	533.4	337	342.8	333	110	741	323	48	500	104.5	330

DN	REDUCTOR WORM GEAR	PESO (Kg.) WEIGHT	CANTIDAD QUANTITY	POS. ITEM
14"	AB 1250N/FS	~ 604 Kg.	[illegible]	[illegible]

DEL LLOYD'S REGISTER
N.° BCL 97008/16/1
HOJA N.° 21 DE 21



912.2	4	BOLT	DIN 912 8.8	M16 x 25	
912.1	4	BOLT	DIN 912 8.8	M20 x 35	
471	1	RETAINER	STAINLESS ST.	ø60 x 2	
94	1	COUPLING	ZINC PLATED CARBON ST.	AC350AB1250N	10-09-96
93	1	MOUNTING BRACKET	ZINC PLATED CARBON ST	ESF16F14110	30-07-96
92	1	WORM GEAR	ALECTO	AB1250N/FS	
	2	WOOD DISK	WOOD	ø550 x 10	
89	1	IDENTIFICATION PLATE	STAINLESS ST.	140mm x 13mm x 0.4 ~ 0.5mm	
72	1	"O" RING	VITON	ø53,98 x ø3,53	
58	1	SPRING PROTECTION	CARBON ST.	FMRE400615	11-11-93
54	2	SEAT SEAL	GRAPHITE	ø381 x ø371 x 7	
52	1	"O" RING	VITON	ø494,16 x ø6,99	
50.1	1	DRAIN	A 105	3/8" NPT	
50	1	DRAIN	A 105	1/2" NPT	
47.1	1	KEY	CARBON ST.	18 x 11 x 60	
47	1	KEY	CARBON ST.	18 x 11 x 50	
43	2	KEY	AISI 316	5384 / 43	23-07-85
37	2	"O" RING	VITON	ø355,19 x ø3,53	
33	2	SEAT SEAL	VITON	ø354,97 x ø5,33	
32	40	SEAT SPRING	INCONEL - 750	MRA150563	12-07-93
31	2	SEAT CARRIER	ST-52 + E.N.P CARBON ST.	SA3502515	30-07-96
28	24	NUT	A 194 Gr. 2HM	5186 / 28	11-06-85
26	4	BOLT	A 193 Gr. B7M	UNC.3/8" x 1"	
23	2	BEARING	PTFE	ø115 x ø95 x 1	
22	2	SELF - LUBRICATING BEARING	AISI 316 WITH INSIDE PTFE	ø100 x ø95 x 30	
21/21A	1 / 1	BALL TRUNNION	A 351 Gr. CF8M	GBM4002615	24-04-97
19	2	ANTISTATIC DEVICE	STAINLESS ST.		
15	24	STUD	A 193 Gr. B7M	30851500-B	27-02-90
13	1	BODY CONNECTOR SEAL	AISI 316L + GRAPHITE	ø550 x ø520 x 4.4	
12	1	STEM THRUST SEAL	25% G.F PTFE	ø80 x ø60 x 3	
11	7	GLAND PACKING	GRAPHITE	P615400	28-10-93
10A	1	GLAND	CARBON ST.	PP400615	11-11-93
10	1	GLAND	AISI 303	WPP400615	11-11-93
8	2	SPRING	CARBON ST.	MR400615	11-11-93
5	2	SEAT RING	PTFE	A615337-M2	5-07-96
4	1	STEM	A 276 / 479 Tp.316	E615400	11-11-93
3	1	BALL	A 351 Gr. CF8M	B615337	5-07-97
2	1	BODY CONNECTOR	A 216 Gr. WCB (C ≤ 0.25%)	L2515A350	10-01-97
1	1	BODY	A 216 Gr. WCB (C ≤ 0.25%)	C2515A350	10-01-97
Marca	Cant.	DENOMINACION	MATERIAL	N°.DE PLANO	FECHA

mm	Dibujado	16-1-98	Víctor F.
Dimensiones	Comprobado	16-1-98	
Peso (Kg)	V°B° Ing.		
Sustituido por	Escala.	-----	
Sustituye a			

JC Fábrica de válvulas, s.a.
Hospitalet de Ll. (Barcelona)

JC® BALL VALVE
FIG.2515; A.I.T; DN 14"; ANSI150 RF; FB
WORM GEAR ALECTO

Ref.

Plano n.°
2039 / 2515AIT350RA

Project:	FIRE TEST FOR SOFT-SEATED FLANGED BALL VALVE	*Certificate No.:*	BCL 500929/7
Client:	J.C.FABRICA DE VALVULAS S.A.	*Office:*	BARCELONA
Client's Order No.:	---	*Date:*	07.06.96
		Order Status:	Complete
Inspection dates First:	03.05.96	*Final:*	03.05.96

This certificate is issued to Messrs. J.C. FABRICA DE VALVULAS S.A., upon their request that the undersigned Surveyor to this Society did attend their premises at their works in Rubi - Barcelona (Spain) for the purpose of witnessing the FIRE TEST in accordance with the requirements specified in BS-6755: Part 2, 1987, API 6FA: 1994, and ISO-10497/92 on the following type of valve:

A manually operated soft seated flanged ball valve of 6" full bore, bi-directional as per fig.2560 AIT, class 600 #.
Body material A-216-WCB.
Seats: PTFE.
Ball material: A-531-CF8M.
Manufacturers identifying numbers: BODY: C2560A150SI.
Bonnet: L2560A150SI and Ball: B2515150.
Mass: 192.5 Kg.
Marks:

BODY	:	685
BONNET	:	685

The test conducted on the valve previously subject to hydraulic pressure was as follows:

The valve in the closed position, filled with water under test pressure, was put in a box and exposed to flames with an environmental temperature in the region 750° C for a period of 30 minutes and established the leakage through the seat and external to atmosphere during this period. The temperature was checked and recorded every two minutes, while leakages were determined using containers collecting the water leaked during burn period. Afterwards cool-down to 100° C. The valve seat and external hydrostatically tested to the appropiate test pressure and leakages recorded accordingly. Subsequently manually opened up under test pressure differential and finally the valve was fully hydrotested and leakages recorded.

All the following values were determined and recorded together with temperatures, times and pressures as shown on manufacturers Fire Safe Test Report nº 2560-6A & 2560-6B.

.../...

Certificate Nº: BCL 500929/7

Office :Barcelona

Date :07.06.96

1. Through-valve leakage during burn period-Satisfactory.
2. External leakage during burn and cool-down period-Satisfactory.
3. Through-valve leakage during operational test-Satisfactory.
4. External leakage during operational test-Satisfactory.
5. Operatibility to full open position and external leakage-Satisfactory.

The valve was subject to a visual examination with satisfactory results and subsequently dismantled in order to verify that valves components comply with the drawing and parts list suplied by the manufacturer, while seat rings were found completely destroyed.

The manufacturers Fire Safe Test Report nº 2560-6A, 2560-6B and drawing nº 1359/2560AIT150 FLSI Rev. 0 herewith attached were satisfactory checked and signed.

The above is considered in accordance with the mentioned specifications requirements, therefore the subject valve has satisfactory passed the prescribed fire test and can be also qualified as follows:

NPS	CLASS RATING	PN RATING
6", 8", 10" & 12"	600, 800 & 900	--

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FOR

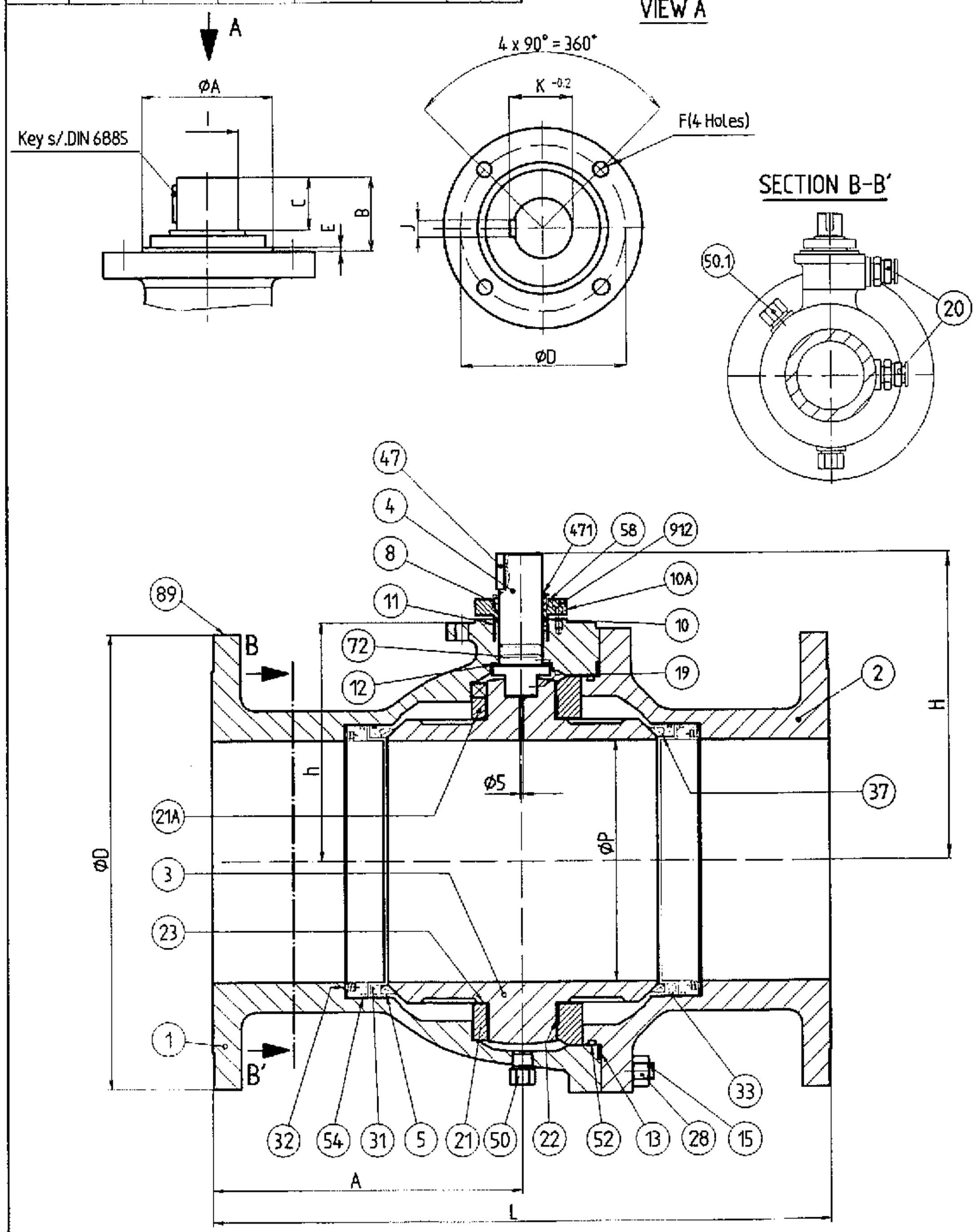
J. Gil for N. Cano
Surveyors to Lloyd´s Register

DOCUMENTS ATTACHED:
17 Sheets reviewed and stamped accordingly.

DN	L	ØD	ØP	A	H	h
6"	558.8	355.6	151	246	309.5	212.5

BALL VALVES.FREE STEM DIMENSIONS

DN	ØA	B	C	ØD	E	F	I	J	K
6"	100	97	56	140	4	M16	Ø45	18	48.6



NOTED AND FOUND CORRECT
ATTACHED T... CERTIFICATE
NO. Bl 500 929/7
SHEET 1 OF 17

Marca	Cant.	DENOMINACION	MATERIAL	Nº.DE PLANO	fecha
912	4	BOLT	CARBON ST.	UNC 3/8" x 1" (B18.3 HEX-SOCKET)	
471	1	RETAINER	CARBON ST.	DIN 471 (45x1.75)	
	2	PLASTIC CAP	PLASTIC		
89	1	IDENTIFICATION PLATE	STAINLESS ST.	PL2560A	03-05-94
72	2	"O" RING	VITON	36.09 x 3.53	
58	1	SPRING PROTECTION	CARBON ST.	FMRE152560	29-08-95
54	2	GASKET	GRAPHITE	JA150G2515SI	
52	1	"O" RING	VITON	228.19 x 3.53	
50.1	1	DRAIN PLUG	A 105	3/8" NPT	
50	1	DRAIN PLUG	CARBON ST.	DT12NPT2515	24-01-96
47	1	KEY	AISI-316	DIN 6885 A 14x9x50	
37	2	"O" RING	VITON	160 x 3	
33	2	SEAT SEAL	VITON	164.69 x 3.53	
32	16	SEAT SPRING	INCONEL	MRA150563	15-07-93
31	2	SEAT CARRIER	E.N.P CARBON ST.	SA1502515SI	30-05-95
28	12	NUT	A 194 Gr. 2HM	N2560150	30-08-95
23	2	BEARING	PTFE	75 x 60 x 1	
22	2	TRUNNION BEARING	GLACIER DU	MB6014DU	
21/21A	2	BALL TRUNNION	E.N.P CARBON ST.	GBI1502515/GBS1502515	25-11-94 / 08-12-95
20	3	INJECTION FITTING	CARBON ST.	ENNPT38	25-03-94
19	2	ANTISTATIC DEVICE	STAINLESS ST.		
15	10 / 2	STUD	A 193 Gr. B7M	S2560150A / S2560150B	03-01-96 / 03-01-96
13	1	BODY CONNECTOR SEAL	AISI-316L + GRAPHITE	268.5 x 246 x 3.2	
12	1	STEM THRUST SEAL	25% G.F. PTFE	55.7 x 46 x 3	
11	4	GLAND PACKING	GRAPHITE	59.7 x 45.2 x 7.2	
10A	1	GLAND	CARBON ST.	PP1502560	29-08-95
10	1	GLAND RING	AISI 303	WPP1502560	29-08-95
8	1	SPRING	CARBON ST.	MR1502560	29-08-95
5	2	SEAT RING	PTFE	A560150F	10-12-93
4	1	STEM	A 276/479 Tp.316	E2560150SI	15-03-96
3	1	BALL	A 351 Gr. CF8M	B2515150	21-11-94
2	1	BODY CONNECTOR	A 216 Gr. WCB (C ≤ 0.25%)	L2560A150SI	08-03-96
1	1	BODY	A 216 Gr. WCB (C ≤ 0.25%)	C2560A150SI	08-03-96

mm Dimensiones	Dibujado	13-05-96	Victor F.	**JC** Fábrica de válvulas, s.a. Hospitalet de Ll. (Barcelona)
	Comprobado	13.05.96	[signature]	
Peso (Kg) 192.5	Vº.Bº.Ing.			
Sustituido por	Escala. -----	JC® BALL VALVE FIG.2560; A.I.T; DN 6"; ANSI600; FB FIRE SAFE AND SEALING INJECTION FREE STEM		Ref.
Sustituye a				Plano n.º 1359/2560AIT150FLSI

WEIGHT	QUANTITY	ITEM

Project:	FIRE TEST FOR SOFT-SEATED FLANGED BALL VALVE	*Certificate No.:*	BCL 500929/6
Client:	J.C.FABRICA DE VALVULAS S.A.	*Office:*	BARCELONA
Client's Order No.:	---	*Date:*	07.06.96
		Order Status:	Complete
Inspection dates First:	19.04.96	*Final:*	19.04.96

This certificate is issued to Messrs. J.C. FABRICA DE VALVULAS S.A., upon their request that the undersigned Surveyor to this Society did attend their premises at their works in Rubi - Barcelona (Spain) for the purpose of witnessing the FIRE TEST in accordance with the requirements specified in BS-6755: Part 2, 1987, API 6FA: 1994, and ISO-10497/92 on the following type of valve:

A manually operated soft seated flanged ball valve of 6" full bore, bi-directional as per fig.2515 AIT, class 150 #.
Body material A-216-WCB.
Seats: PTFE.
Ball material: A-351-CF8M.
Manufacturers identifying numbers: BODY: C2515A150SI.
Bonnet: L2515A150SI and Ball: B2515150.
Mass: 95 Kg.
Marks:

BODY	:	1164.1
BONNET	:	1171.1/ABC

The test conducted on the valve previously subject to hydraulic pressure was as follows:

The valve in the closed position, filled with water under test pressure, was put in a box and exposed to flames with an environmental temperature in the region 750° C for a period of 30 minutes and established the leakage through the seat and external to atmosphere during this period. The temperature was checked and recorded every two minutes, while leakages were determined using containers collecting the water leaked during burn period. Afterwards cool-down to 100° C. The valve seat and external hydrostatically tested to the appropiate test pressure and leakages recorded accordingly. Subsequently manually opened up under test pressure differential and finally the valve was fully hydrotested and leakages recorded.

All the following values were determined and recorded together with temperatures, times and pressures as shown on manufacturers Fire Safe Test Report nº 2515-6A & 2515-6B.

.../...

Lloyd's Register

Certificate Nº: BCL 500929/6

Office :Barcelona

Date :07.06.96

1. Through-valve leakage during burn period-Satisfactory.
2. External leakage during burn and cool-down period-Satisfactory.
3. Through-valve leakage during operational test-Satisfactory.
4. External leakage during operational test-Satisfactory.
5. Operatibility to full open position and external leakage-Satisfactory.

The valve was subject to a visual examination with satisfactory results and subsequently dismantled in order to verify that valves components comply with the drawing and parts list suplied by the manufacturer, while seat rings were found completely destroyed.

The manufacturers Fire Safe Test Report nº 2515-6A, 2515-6B and drawing nº 1360/2515AIT150 FSI Rev. 0 herewith attached were satisfactory checked and signed.

The above is considered in accordance with the mentioned specifications requirements, therefore the subject valve has satisfactory passed the prescribed fire test and can be also qualified as follows:

NPS	CLASS RATING	PN RATING
6", 8", 10" & 12"	150 & 300	--

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FOR

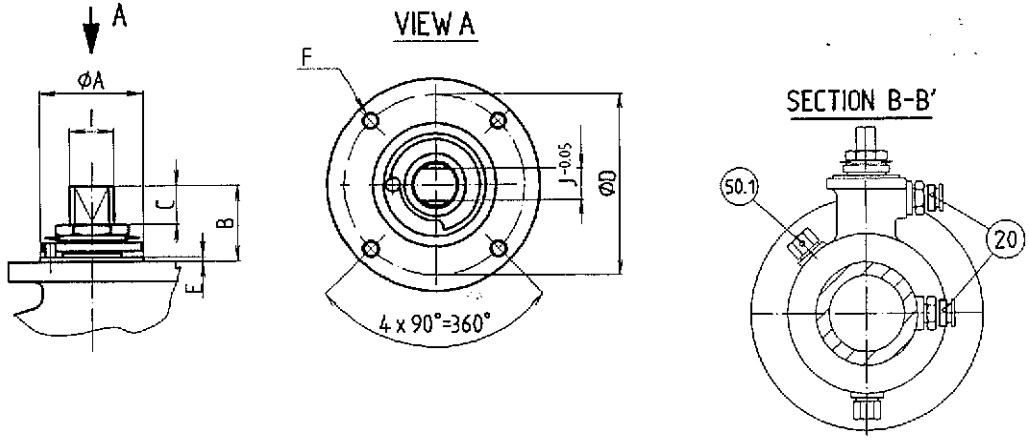
J. Gil for N. Cano
Surveyors to Lloyd´s Register

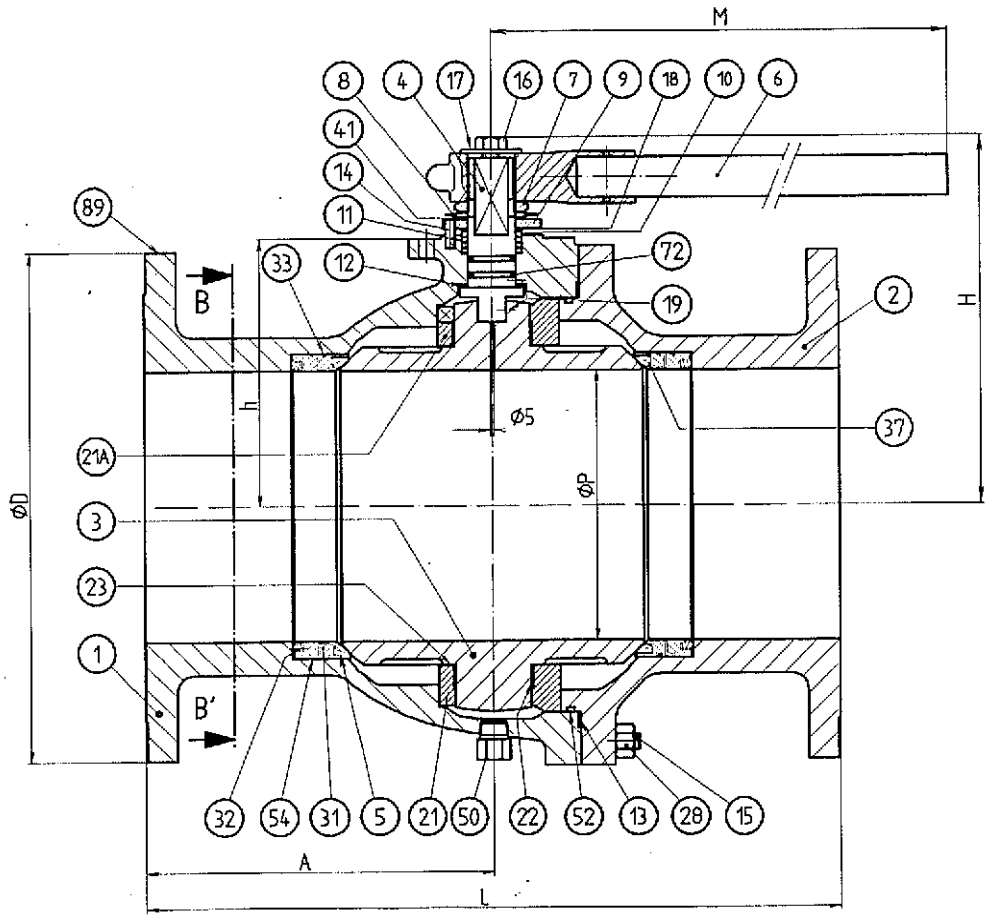
DOCUMENTS ATTACHED:
17 Sheets reviewed and stamped accordingly.

1360

DN	L	ØD	ØP	A	H	h	M	BALL VALVES FREE STEM DIMENSIONS							
								ØA	B	C	ØD	E	F	I	J
6"	393.7	279.5	151	197	297.5	212.5	845	100	70	36	Ø140	4	M16	Ø45	32

NOTED AND FOUND CORRECT
ATTACHED TO CERTIFICATE
NO. BL 500229/6
SHEET 1 OF 17





Marca	Cant.	DENOMINACION	MATERIAL	N°.DE PLANO	FECHA
	2	PLASTIC CAP	PLASTIC		
89	1	IDENTIFICATION PLATE	STAINLESS ST.	PL2515A	03-05-94
72	2	"O" RING	VITON	36.09 x 3.53	
54	2	SEAT SEAL	GRAPHITE	JA150G2515SI	24-01-96
52	1	"O" RING	VITON	228.19 x 3.53	
50.1	1	DRAIN PLUG	A 105	3/8" NPT	
50	1	DRAIN PLUG	CARBON ST.	DT12NPT2515	24-01-96
41	1	WASHER	CARBON ST.	5184/41-M1	23-07-85
37	2	"O" RING	VITON	160 x 3	31-09-84
33	2	"O" RING	VITON	164.69 x 3.53	
32	16	SEAT SPRING	INCONEL	MRA150563	15-07-93
31	2	SEAT CARRIER	E.N.P CARBON ST.	SA1502515SI	05-12-94
28	12	NUT	A 194 Gr. 2HM	5184/28	31-09-84
23	2	BEARING	PTFE	75 x 60 x 1	
22	2	TRUNNION BEARING	GLACIER DU	MB6014DU	
21/21A	2	BALL TRUNNION	E.N.P CARBON ST.	GB1502515/GBS1502515	25-11-94 / 08-12-95
20	3	INJECTION FITTING	CARBON ST.	ENNPT38	25-03-94
19	2	ANTISTATIC DEVICE	STAINLESS ST.		
18	1	THRUST WASHER	25 % G.F PTFE	60 x 45 x 2	
17	1	WASHER	ZINC PLATED CARBON ST.	5184/17	30-04-82
16	1	BOLT	DIN 933 5.6 ZINC	M12 x 20	
15	12	STUD	A 193 Gr. B7M	5183/15-2	04-06-85
14	1	STOP PIN	CARBON ST.	DIN 6325 10 x 24	
13	1	BODY CONNECTOR SEAL	AISI-316L + GRAPHITE	268.5 x 246 x 3.2	
12	1	STEM THRUST SEAL	25% G.F. PTFE	55.7 x 46 x 3	
11	4	GLAND PACKING	GRAPHITE	59.7 x 45.2 x 7.2	
10	1	GLAND	AISI 316	00841000-M1	04-12-89
9	1	STOP PLATE	CARBON ST.	00840920	30-04-92
8	2	DISK SPRING	CARBON ST.	5184/08	30-05-83
7	1	GLAND NUT	CARBON ST.	5184/07	12-12-78
6	1	WRENCH	NODULAR IRON	CARBON ST.	26-06-92
5	2	SEAT RING	PTFE	A560150F-M1	10-12-93
4	1	STEM	A 276/479 Tp. 316	E2515150SI	25-11-94
3	1	BALL	A 351 Gr. CF8M	B2515150	21-11-94
2	1	BODY CONNECTOR	A 216 Gr. WCB (C ≤ 0.25%)	L2515A150SI	25-11-95
1	1	BODY	A 216 Gr. WCB (C ≤ 0.25%)	C2515A150SI	14-11-95

mm	Dibujado	14-05-96	Victor F.
Dimensiones	Comprobado	14.05.96	
Peso (Kg) 95	V°B° Ing.		
Sustituido por	Escala.		
Sustituye a			

JC Fábrica de válvulas, s.a.
Hospitalet de Ll. (Barcelona)

JC® BALL VALVE
FIG.2515; A.I.T; DN 6"; ANSI150 RF; FB
FIRE-SAFE
SEALING INJECTION

Ref.

Plano n.° 1360/2515AIT150FSI

Lloyd's Register

Project: FIRE TEST FOR SOFT-SEATED FLANGED BALL VALVE

Certificate No.: BCL 500929/5

Client: J.C.FABRICA DE VALVULAS S.A.

Office: BARCELONA

Client's Order No.: ---

Date: 21.03.96

Order Status: Complete

Inspection dates First: 07.03.96

Final: 07.03.96

This certificate is issued to Messrs. J.C. FABRICA DE VALVULAS S.A., upon their request that the undersigned Surveyor to this Society did attend their premises at their works in Rubi - Barcelona (Spain) for the purpose of witnessing the FIRE TEST in accordance with the requirements specified in BS-6755: Part 2, 1987, API 6FA: 1994, and ISO-10497/92 on the following type of valve:

A manually operated soft seated flanged ball valve of 2" full bore, bi-directional as per fig.2560 AIT, class 600#.
Body material A-216-WCB (cast steel).
Seats: PTFE.
Ball material: A-351CF8M.
Manufacturers identifying numbers: BODY: C2560A50SI.
Bonnet: L2560A50-M2 and Ball: B251550-M1.
Mass: 20,5 Kg.
Marks:

BODY	:	ABV
BONNET	:	ABO

The test conducted on the valve previously subject to hydraulic pressure was as follows:

The valve in the closed position, filled with water under test pressure, was put in a box and exposed to flames with an environmental temperature in the region 750° C for a period of 30 minutes and established the leakage through the seat and external to atmosphere during this period. The temperature was checked and recorded every two minutes, while leakages were determined using containers collecting the water leaked during burn period. Afterwards cool-down to 100° C. The valve seat and external hydrostatically tested to the appropiate test pressure and leakages recorded accordingly. Subsequently manually opened up under test pressure differential and finally the valve was fully hydrotested and leakages recorded.

All the following values were determined and recorded together with temperatures, times and pressures as shown on manufacturers Fire Safe Test Report nº 2560-2A & 2560-2B.

.../...

Certificate Nº: BCL 500929/5

Office :Barcelona

Date :21.03.96

1. Through-valve leakage during burn period-Satisfactory.
2. External leakage during burn and cool-down period-Satisfactory.
3. Through-valve leakage during operational test-Satisfactory.
4. External leakage during operational test-Satisfactory.
5. Operatibility to full open position and external leakage-Satisfactory.

The valve was subject to a visual examination with satisfactory results and subsequently dismantled in order to verify that valves components comply with the drawing and parts list suplied by the manufacturer, while seat rings were found completely destroyed.

The manufacturers Fire Safe Test Report nº 2560-2A, 2560-2B and drawing nº 1302/2560NAIT50 Rev. 0 herewith attached were satisfactory checked and signed.

The above is considered in accordance with the mentioned specifications requirements, therefore the subject valve has satisfactory passed the prescribed fire test and can be also qualified as follows:

NPS	CLASS RATING	PN RATING
2", 2½", 3" & 4"	600, 800 & 900	--

LLOYD'S REGISTER OF SHIPPING
BARCELONA
LLOYD'S REGISTER OF SHIPPING

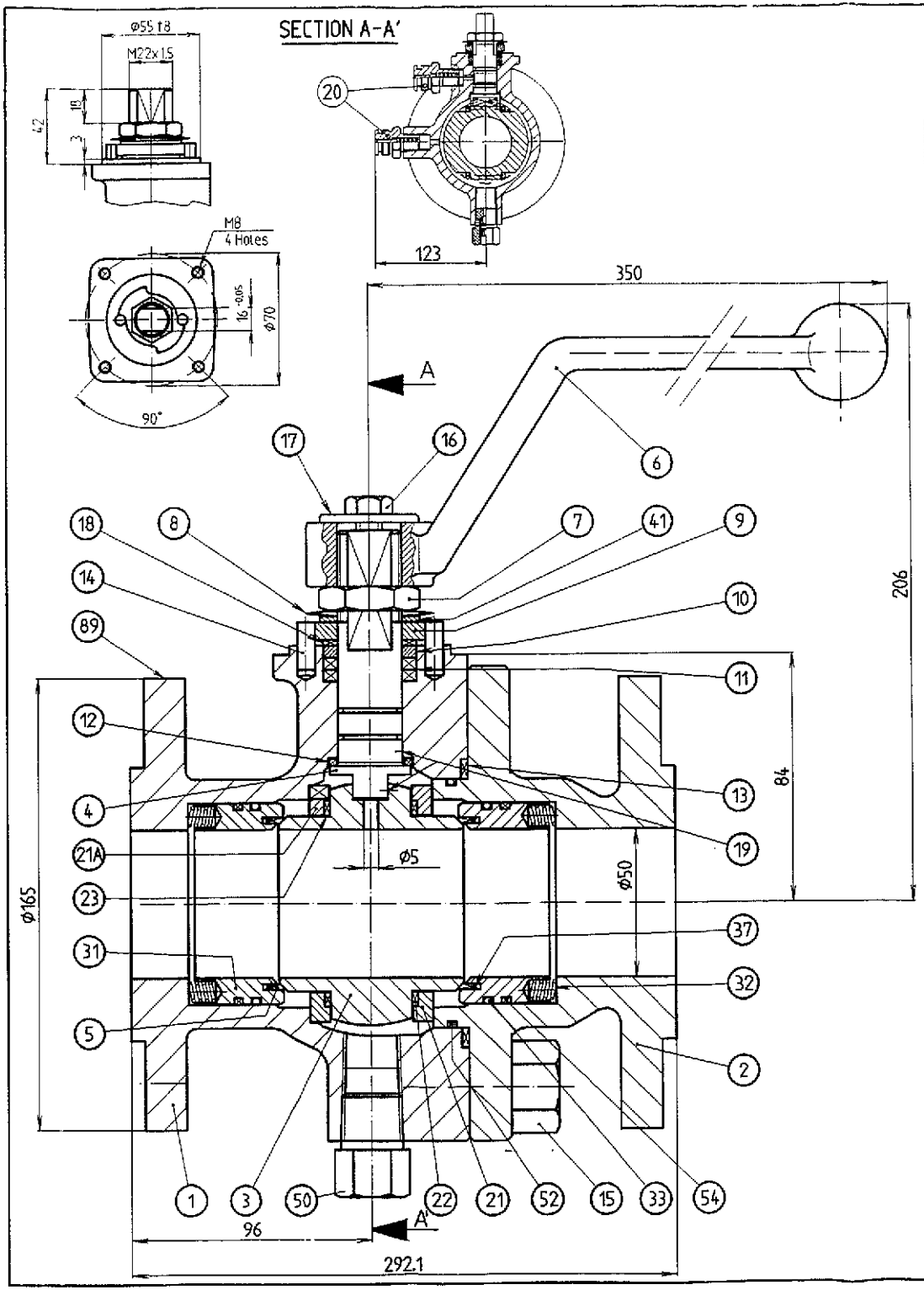
FOR

J. Gil for N. Cano
Surveyors to Lloyd´s Register

DOCUMENTS ATTACHED:
17 Sheets reviewed and stamped accordingly.

1302

NOTED AND FOUND CORRECT
ATTACHED TO IDENTIFICATE
NO. BCC 5009291/5
SHEET 1 OF 17



	2	PLASTIC CAP	PLASTIC		
89	1	IDENTIFICATION PLATE	STAINLESS ST.	PL2560A	03-05-94
54	2	SEAT SEAL	GRAPHITE	67.9 x 63.6 x 3	
52	1	"O" RING	VITON	75.87 x 2.62	
50	1	DRAIN PLUG	CARBON ST.	1/2" NPT	
41	1	SPACER	CARBON ST.	200065/41	24-07-87
37	2	"O" RING	VITON	52 x 1.25	
33	2	SEAT SEAL	VITON	61.6 x 2.62	
32	20	SEAT SPRING	INCONEL-750	MR1002515	20-05-94
31	2	SEAT CARRIER	E.N.P CARBON ST.	SA502515-M1	16-11-94
23	2	BEARING	PTFE	38 x 28 x 0.3	
22	2	TRUNNION BEARING	GLACIER DU	MB2805DU	
21A	1	BALL TRUNNION	E.N.P CARBON ST.	GBS502515	08-12-95
21	1	BALL TRUNNION	E.N.P CARBON ST.	GBI502515	16-11-94
20	2	INJECTION FITTING	ZINC PLATED CARBON ST.	ENNPT38	25-03-94
19	2	ANTISTATIC DEVICE	STAINLESS ST.		
18	1	THRUST WASHER	25% G.F. PTFE	32 x 22 x 2	
17	1	WASHER	ZINC PLATED CARBON ST.	5165/17	24-07-87
16	1	BOLT	DIN 933 5.6	DIN 933 M8 x 15	
15	8	BOLT	A 193 Gr.B7M	UNC 9/16 - 12 x 1	
14	2	STOP PIN	CARBON ST.	6 x 18 DIN 6325	
13	1	BODY CONNECTOR SEAL	AISI-316L + GRAPHITE	JCL50SP560	01-03-94
12	1	STEM THRUST SEAL	25% G.F. PTFE	28.7 x 23 x 2.5	
11	2	GLAND PACKING	GRAPHITE	32 x 22 x 5	
10	1	GLAND	AISI-303	5165/10-1	24-07-87
9	1	STOP PLATE	CARBON ST.	00650930	23-07-92
8	2	DISK SPRING	CARBON ST.	DN65 B45 DIN2093	
7	1	GLAND NUT	CARBON ST.	5165/07	24-07-87
6	1	WRENCH	NODULAR IRON	M65ND	31-01-94
5	2	SEAT RING	PTFE	A251550	15-03-94
4	1	STEM	A 276/479 Tp.316	E251550	15-03-94
3	1	BALL	A 351 Gr. CF8M	B251550-M1	24-08-94
2	1	BODY CONNECTOR	A 216 Gr. WCB (C ≤ 0.25%)	L2560A50-M2	08-94
1	1	BODY	A 216 Gr. WCB (C ≤ 0.25%)	C2560A50SI	14-11-94
Marca	Cant.	DENOMINACION	MATERIAL	N°.DE PLANO	FECHA

mm	Dibujado	08-03-96	Victor F.
Dimensiones	Comprobado	12-3-96	
	V°B°.Ing.		
Peso (Kg) 20.5			
Sustituido por	Escala.		
Sustituye a			

JC Fábrica de válvulas, s.a.
Hospitalet de Ll. (Barcelona)

JC ® BALL VALVE
FIG.2560; A.I.T; DN 2"; ANSI600 FB

Ref.

Plano n.°
1302/2560NAIT50

Lloyd's Register

Project:	FIRE TEST FOR SOFT-SEATED FLANGED BALL VALVE	*Certificate No.:*	BCL 500929/4
Client:	J.C.FABRICA DE VALVULAS S.A.	*Office:*	BARCELONA
Client's Order No.:	---	*Date:*	21.03.96
		Order Status:	Complete
Inspection dates First:	02.02.96	*Final:*	02.02.96

This certificate is issued to Messrs. J.C. FABRICA DE VALVULAS S.A., upon their request that the undersigned Surveyor to this Society did attend their premises at their works in Rubi - Barcelona (Spain) for the purpose of witnessing the FIRE TEST in accordance with the requirements specified in BS-6755: Part 2, 1987, API 6FA: 1994, and ISO-10497/92 on the following type of valve:

A manually operated soft seated flanged ball valve of 2" full bore, bi-directional as per fig.2515AIT, class 150#.
Body material A-216-WCB (cast steel).
Seats: PTFE.
Ball material: A-351CF8M.
Manufacturers identifying numbers: BODY: C2515A50SI.
Bonnet: L2515A50-M2 and Ball: B251550-M1.
Mass: 13 Kg.
Marks:

BODY	:	994HI
BONNET	:	994HI

The test conducted on the valve previously subject to hydraulic pressure was as follows:

The valve in the closed position, filled with water under test pressure, was put in a box and exposed to flames with an environmental temperature in the region 750° C for a period of 30 minutes and established the leakage through the seat and external to atmosphere during this period. The temperature was checked and recorded every two minutes, while leakages were determined using containers collecting the water leaked during burn period. Afterwards cool-down to 100° C. The valve seat and external hydrostatically tested to the appropiate test pressure and leakages recorded accordingly. Subsequently manually opened up under test pressure differential and finally the valve was fully hydrotested and leakages recorded.

All the following values were determined and recorded together with temperatures, times and pressures as shown on manufacturers Fire Safe Test Report nº 2515-2A & 2515-2B.

.../...

Certificate Nº: BCL 500929/4

Office :Barcelona

Date :21.03.96

1. Through-valve leakage during burn period-Satisfactory.
2. External leakage during burn and cool-down period-Satisfactory.
3. Through-valve leakage during operational test-Satisfactory.
4. External leakage during operational test-Satisfactory.
5. Operatibility to full open position and external leakage-Satisfactory.

The valve was subject to a visual examination with satisfactory results and subsequently dismantled in order to verify that valves components comply with the drawing and parts list suplied by the manufacturer, while seat rings were found completely destroyed.

The manufacturers Fire Safe Test Report nº 2515-2A, 2515-2B and drawing nº 1303/2515NAIT50 Rev. 0 herewith attached were satisfactory checked and signed.

The above is considered in accordance with the mentioned specifications requirements, therefore the subject valve has satisfactory passed the prescribed fire test and can be also qualified as follows:

NPS	CLASS RATING	PN RATING
2", 2½", 3" & 4"	150 & 300	16, 25 & 40

LLOYD'S REGISTER OF SHIPPING · BARCELONA · LLOYD'S REGISTER OF SHIPPING

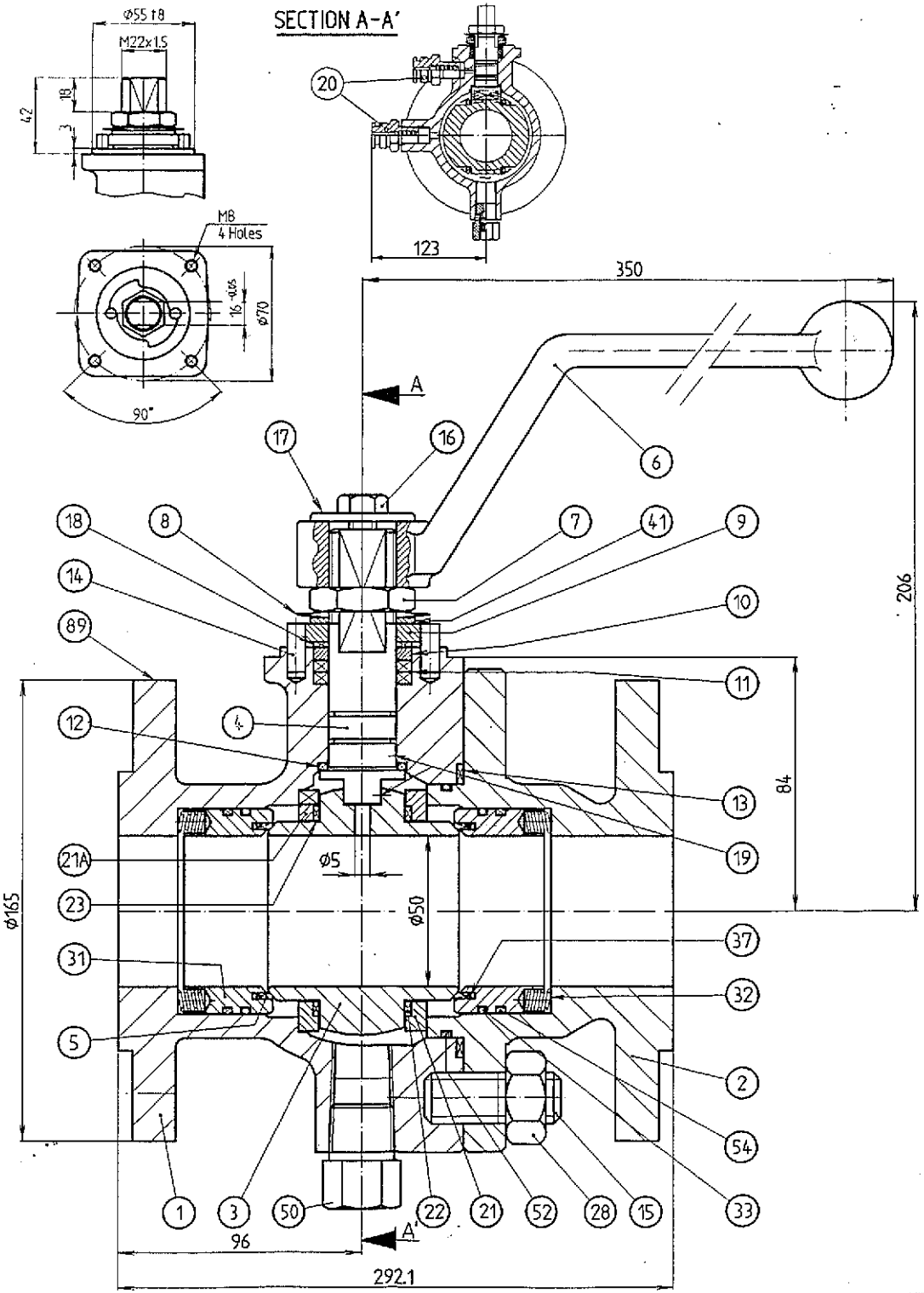
FOR

J. Gil for N. Cano
Surveyors to Lloyd´s Register

DOCUMENTS ATTACHED:
17 Sheets reviewed and stamped accordingly.

1303

NOTED AND FOUND CORRECT
ATTACHED TO R. CERTIFICATE
NO. BCC 500 9291/4
SHEET 1 OF 17



	2	PLASTIC CAP	PLASTIC		
89	1	IDENTIFICATION PLATE	STAINLESS ST.	PL2515A	03-05-94
54	2	SEAT SEAL	GRAPHITE	67.9 x 63.6 x 3	
52	1	"O" RING	VITON	75.87 x 2.62	
50	1	DRAIN PLUG	CARBON ST.	1/2" NPT	
41	1	SPACER	CARBON ST.	200065/41	24-07-87
37	2	"O" RING	VITON	52 x 1.25	
33	2	SEAT SEAL	VITON	61.6 x 2.62	
32	20	SEAT SPRING	INCONEL-750	MR1002515	20-05-94
31	2	SEAT CARRIER	E.N.P CARBON ST.	SA502515-M1	16-11-94
28	4	NUT	A 194 Gr. 2HM	N251550	16-03-94
23	2	BEARING	PTFE	38 x 28 x 0.3	
22	2	TRUNNION BEARING	GLACIER DU	MB2805DU	
21A	1	BALL TRUNNION	E.N.P CARBON ST.	GBS502515	08-12-95
21	1	BALL TRUNNION	E.N.P CARBON ST.	GBI502515	16-11-94
20	2	INJECTION FITTING	ZINC PLATED CARBON ST.	ENNPT38	25-03-94
19	2	ANTISTATIC DEVICE	STAINLESS ST.		
18	1	THRUST WASHER	25% G.F. PTFE	32 x 22 x 2	
17	1	WASHER	ZINC PLATED CARBON ST.	5165/17	24-07-87
16	1	BOLT	DIN 933 5.6	DIN 933 M8 x 15	
15	8	STUD	A 193 Gr.B7M	S251550	16-03-94
14	2	STOP PIN	CARBON ST.	6 x 18 DIN 6325	
13	1	BODY CONNECTOR SEAL	AISI-316L + GRAPHITE	15001300	11-11-92
12	1	STEM THRUST SEAL	25% G.F. PTFE	28.7 x 23 x 2.5	
11	2	GLAND PACKING	GRAPHITE	32 x 22 x 5	
10	1	GLAND	AISI-303	5165/10-1	24-07-87
9	1	STOP PLATE	CARBON ST.	00650930	23-07-92
8	2	DISK SPRING	CARBON ST.	DN65 B45 DIN2093	
7	1	GLAND NUT	CARBON ST.	5165/07	24-07-87
6	1	WRENCH	NODULAR IRON	M65ND	31-01-94
5	2	SEAT RING	PTFE	A251550	15-03-94
4	1	STEM	A 276/479 Tp.316	E251550	15-03-94
3	1	BALL	A 351 Gr. CF8M	B251550-M1	24-08-94
2	1	BODY CONNECTOR	A 216 Gr. WCB (C ≤ 0.25%)	L2515A50-M2	08-94
1	1	BODY	A 216 Gr. WCB (C ≤ 0.25%)	C2515A50SI	14-11-94
Marca	Cant.	DENOMINACION	MATERIAL	N°.DE PLANO	FECHA

mm	Dibujado	08-03-9	Victor F.
Dimensiones	Comprobado	12 - 3 - 9	
Peso (Kg) 13	V°.B°.Ing.		
Sustituido por	Escala.		
Sustituye a			

JC Fábrica de válvulas, s.a.
Hospitalet de Ll. (Barcelona)

JC ® BALL VALVE
FI.2515; A.I.T; DN 2"; ANSI150 FB

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