

Project: FIRE TEST FOR SOFT-SEATED **BALL VALVE** 

Certificate No.: 898/08 - 9587

Client: J.C. FÁBRICA DE VÁLVULAS, S.A.

Office: Sant Joan Despí (BCN)

Client's Order No.::

Date: 30.09.08

Order Status: Complete

Inspection dates

First: 30.09.08

Final: 30.09.08

This certificate is issued to

Messrs. J.C. FABRICA DE VÁLVULAS, S.A., upon their request that the undersigned Suveryor to this Society did attend their premises at their works in Sant Boi de Llobregat - Barcelona (Spain) for the purpose of witnessing the FIRE TEST in accordance with the requirements specified in ISO 10497:2004, on the following type of valve:

A manually operate soft seated ball valve of 2" bore 2", L.I.T symetric Valve as per fig. 6015 TB class 150#.

Body and Connector material LF2 Seats: SEE DRAWING 6015TB050 Ball material: SEE DRAWING 6015TB050 Stem: SEE DRAWING 6015TB050

Marks:

- BODY : Col. 783514H - CONNECTOR : Col. 176947

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 trough 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 C898/08

SGS Tecnos. S.A

Las Planas, 1 - Nave B Pol. Ind. Fontsanta 08970 Sant Joan Despi (Barcelona) t (34) 934 77 01 71 f (34) 933 73 15 00 www.sgs.es



Certificate No.: 898/08 - 9587 Office: Sant Joan Despi (BCN)

Date: 30.09.08 Sheet 2 of 3

- 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 supplied by the manufacturer, while seat rings were found completely destroyed.

The manufacturers Fire Safe Test Report no C898/08 and drawing 6015TB050 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.

DN	CLASS RATING	PN RATING		
50 and below, 65, 80, 100	150#, 300#	10, 16, 25, 40		

SGS Tecnos, S.A. O/. Las Planes nº 1, Mevo 3 Polígono indicarial Rootcanio

Poligicia decreame reassent 08970 Cast Feen (Sasselona) Tel: (34) 33 A77 81 71 - 93 477 91 69 Fax.: (34) 93 373 15 00

Surveyor

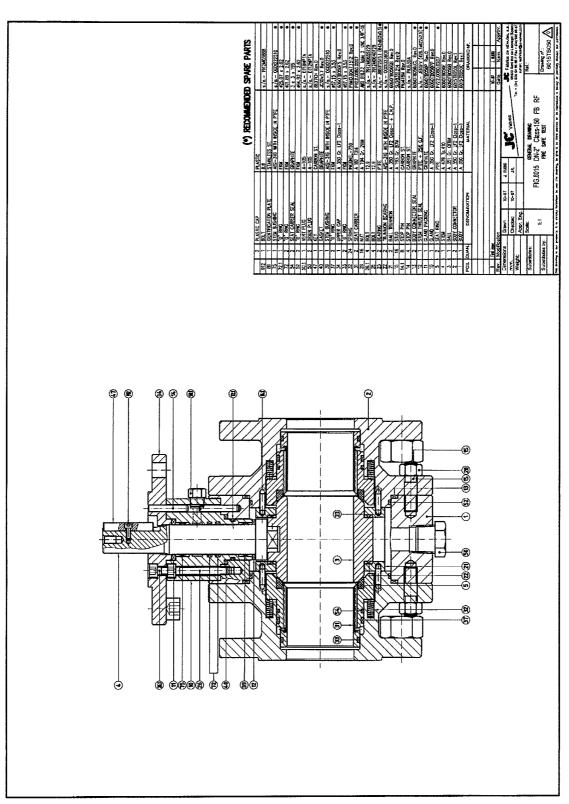
Javier Aranda García

DOCUMENTS ATTACHED: Sheets reviewed and stamped Accordingly.



Certificate No.: 898/08 - 9587 Office: Sant Joan Despí (BCN)
Date: 30.09.08

Sheet 3 of 3





Project: FIRE TEST FOR SOFT-SEATED BALL VALVE

Certificate No.: 897/08 - 9587

Client: J.C. FÁBRICA DE VÁLVULAS, S.A.

Office: Sant Joan Despí (BCN)

Client's Order No.:: ---

Date: 29.09.08

Order Status: Complete

Inspection dates

First: 29.09.08

Final: 29.09.08

This certificate is issued to

Messrs. J.C. FABRICA DE VÁLVULAS, S.A., upon their request that the undersigned Suveryor to this Society did attend their premises at their works in Sant Boi de Llobregat - Barcelona (Spain) for the purpose of witnessing the FIRE TEST in accordance with the requirements specified in ISO 10497:2004, on the following type of valve:

A manually operate soft seated ball valve of 2" bore 2", L.I.D.V symetric Valve as per fig. 6060 TB class 600#.

Body and Connector material LF2 Seats: SEE DRAWING 6060TB050 Ball material: SEE DRAWING 6060TB050 Stem: SEE DRAWING 6060TB050

Marks:

- BODY : Col. 783514H - CONNECTOR : Col. 176947

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 trough 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 appropriate 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 C897/08

SGS Tecnos, S.A.



Certificate No.: 897/08 - 9587 Office: Sant Joan Despi (BCN)

Date: 29.09.08 Sheet 2 of 3

- 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 supplied by the manufacturer, while seat rings were found completely destroyed.

The manufacturers Fire Safe Test Report nº C897/08 and drawing 6060TB050 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.

DN	CLASS RATING	PN RATING		
50 and below, 65, 80, 100	600, 800, 900	100. 150		

Surveyor

Javier Aranda García

SGS Tecnos, S.A.

C/ Las Planes of 1, Nave B Polignos industrial Fontcante 08970 Secution Despi (Sarcelona) Tel: (94) 06 677 01 71 - 98 477 01 69 Fax: (34) 93 378 15 00

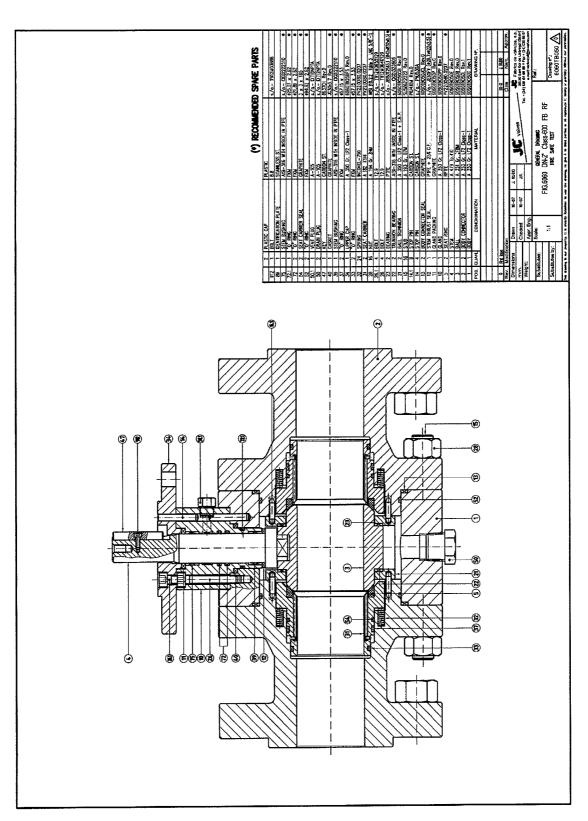
**DOCUMENTS ATTACHED:** 

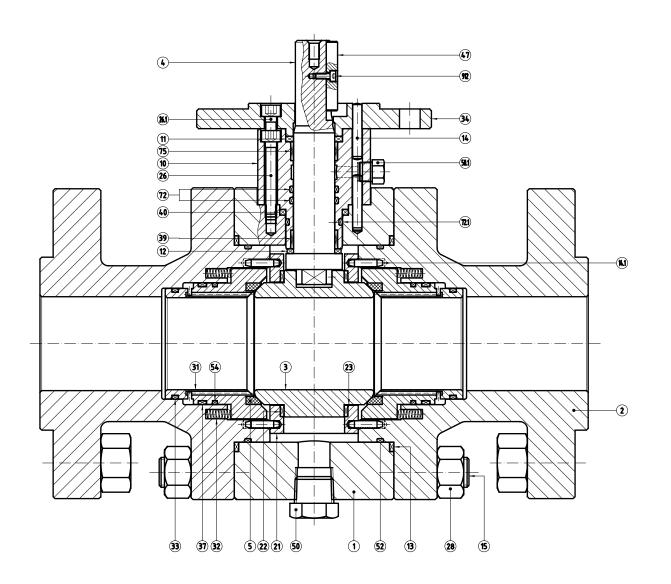
Sheets reviewed and stamped Accordingly.



Certificate No.: 897/08 - 9587 Office: Sant Joan Despí (BCN)

Date: 10.10.08 Sheet 3 of 3





## (\*) RECOMMENDED SPARE PARTS

Drawing n°.: 6060TB050

	2	PLASTIC CAP			PLASTIC						
912	1	BOLT			8.8			s./a T912M03888			
89	1	IDENTIFICATION P				STAINLESS ST.			_		
75	1	STEM BUSHING			AISI-316 WITH INSIDE IN PTFE			s./a QGDI222510			
72.1	1	"O" RING			FKM			Ø25.07 x 2.62			
72	2	"0" RING		FKM			Ø21.89 x 2.62				
54	2	SEAT CARRIER S	EAL		GRAPHI"	ΓE			3 x 3 x	195	*
52	2	"O" RING			FKM				ø94.92 x		*
50.1	1	VENT PLUG			A-105				s./a D	T18NPTA	
50	2	DRAIN PLUG			A-105				s./a D	T12NPTA	
47	1	KEY			CARBON	I ST.			8637CH		
40	1	GASKET			GRAPHI"	ΓE			JG30x3.7	Rev.0	
39	1	STEM BUSHING			AISI-316 WITH INSIDE IN PTFE			s./a QGDI222510 •			
37	2	"0" RING			FKM			Ø57.15 x 3.53 ◆			
34	1	UPPER CAP			A 350 Gr. LF2 Class-1			6060TB0	50FS Rev.0		
33	2	"O" RING			FKM			ø57.15 x	3.53		
32	24	SPRING			INCONEL-750			PV22.0080.0207 •			
31	2	SEAT CARRIER			A 182			$\neg$	PV22.008		
28	16	NUT			A 194 (	Gr. 2HM			ANSI B18.2	INC 5/8"-11	
26.1	4	BOLT			12.9				s./a T912M0655129		
26	4	BOLT			12.9				s./a T912M0640129		
23	2	BEARING			PTFE				s./a JBI50T2515.1 (Ø42xØ32		
22	2	TRUNNION BEARI	ING		AISI-31	6 WITH INSIDE	IN PTFE			GDI323606	
21	2	BALL TRUNNION				Gr. LF2 Class-			6060TB050GB Rev.0		
15	16	STUD			A 193 (	Gr. B7M			SU58622222 Rev.0		
14.1	8	STOP PIN			CARBON ST.			PIU418M Rev.0			
14	4	STOP PIN			CARBON ST.			s./a P	IU530A		
13	2	BODY CONNECTOR SEAL			GRAPHITE			6060TB0	50JCL Rev.0		
12	1	STEM THRUST SE	AL		PTFE + 25% G.F.			s./a JE	65FV (ø28.7x	ø22x2.5) <b>≉</b>	
11	1	GLAND PACKING			GRAPHITE			6060TB0	50P Rev.0		
10	1	GLAND			A 350 Gr. LF2 Class-1			6060TB0	50PP Rev.0		
5	2	SEAT RING			RPTFE			PV22.0080.0207 •			
4	1	STEM			A 479 Tp.410			6060TB050E Rev.0			
3	1	BALL			A 351 Gr. CF8M				6060TB050B Rev.0		
2	2	BODY CONNECTO	TOR		A 350 Gr. LF2 Class-1			6060TB050L Rev.1			
1	1	BODY			A 350 Gr. LF2 Class-1			6060TB050C Rev.1			
POS.			T	MATERIAL				DRAWING №.			
0	First issue								10-07	J. RUBIO	
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FIRE SAFE TEST

This drawing is our property. It is strictly forbbiden to use the drawing, to give it to third parties or to reproduce it totally or partially without our permission

Substitutes by:



Project: FIRE TEST FOR SOFT-SEATED BALL VALVE

Certificate No.: 220/08 - 9587

Client: J.C. FÁBRICA DE VÁLVULAS, S.A.

Office: Sant Joan Despí (BCN)

Client's Order No.:: ---

Date: 01.04.08

Order Status: Complete

Inspection dates

First: 01.04.08

Final: 01.04.08

This certificate is issued to

Messrs. J.C. FABRICA DE VÁLVULAS, S.A., upon their request that the undersigned Suveryor to this Society did attend their premises at their works in Sant Boi de Llobregat - Barcelona (Spain) for the purpose of witnessing the FIRE TEST in accordance with the requirements specified in ISO 10497:2004, on the following type of valve:

A manually operate soft seated ball valve of 6" L.I.T full bore symetric Valve as per fig. 6015 TB class 150#.

Body and Connector material A350 Gr.LF2, CLASS -1

Seats: SEE DRAWING 6015TB150
Ball material: SEE DRAWING 6015TB150
Stem: SEE DRAWING 6015TB150

Marks:

- BODY : Col. 783621H - CONNECTOR : Col. 176947

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 trough 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 appropriate 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 C220/08

SGS Tecnos, S.A.

Las Planas, 1 - Nave B Pol. Ind. Fontsanta 08970 Sant Joan Despi (Barcelona) **t** (34) 934 77 01 71 **f** (34) 933 73 15 00 www.sgs.es



Certificate No.: 220/08 - 9587 Office: Sant Joan Despí (BCN)

Date: 01.04.08 Sheet 2 of 3

- Through-valve leakage during burn period SATISFACTORY. 1.
- 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.
- Operatibility to full open position and external leakage SATISFACTORY. 5.

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 C220/08 and drawing 6015TB150 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.

DN **CLASS RATING** PN RATING 150, 200, 250, 300 150#, 300# 10; 16; 25; 40

> SGS Tecnos, S.A. C/, Las Planas nº 1, Nave B

Poligono Industrial Fontsanta 08970 Sant Joan Despí (Barcelona) Tel.: (34) 93 477 01 71 - 93 477 01 69

Fax.: (34) 93 373 15 00

Surveyor Javier Aranda García

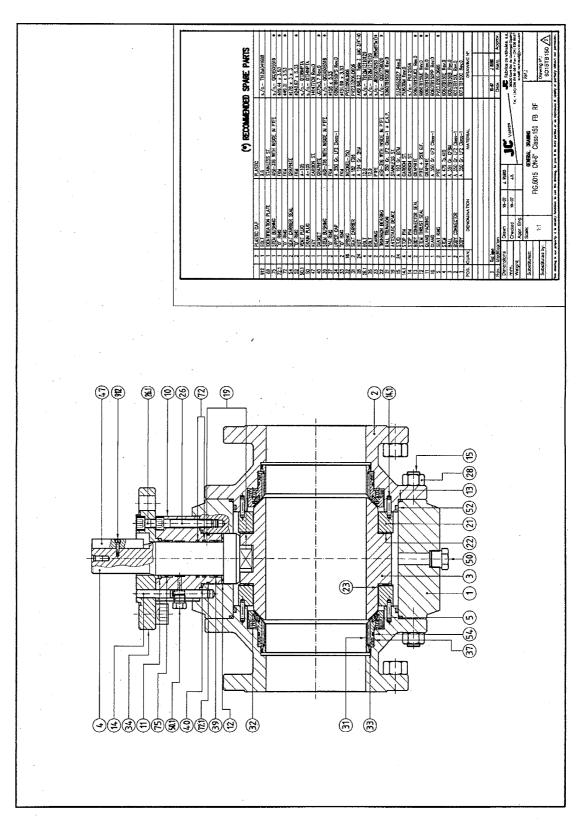
DOCUMENTS ATTACHED:

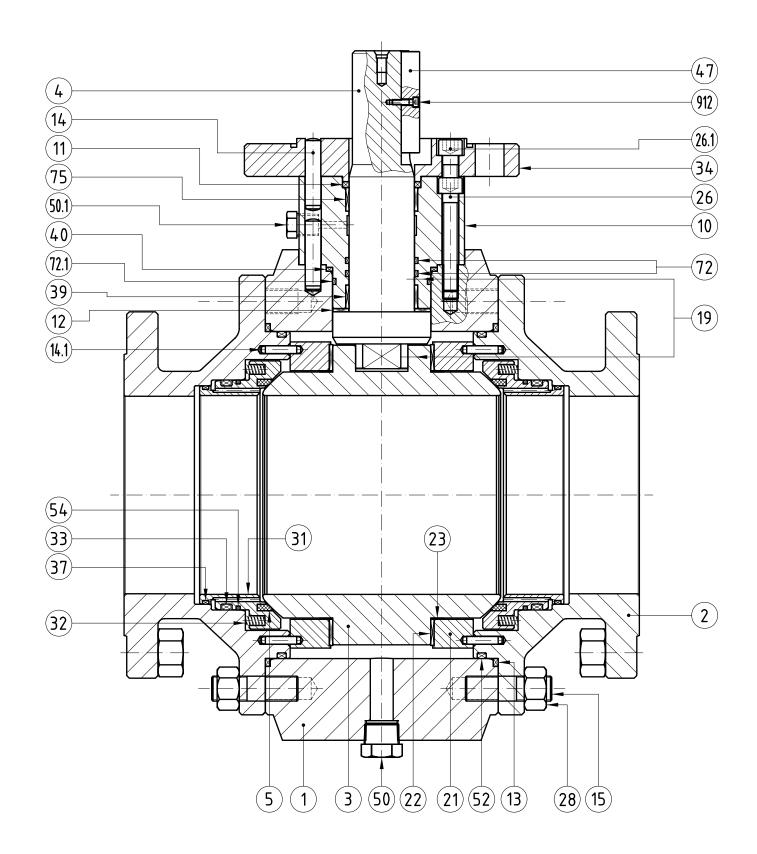
Sheets reviewed and stamped Accordingly.



Certificate No.: 220/08 - 9587 Office: Sant Joan Despí (BCN)

Date: 01.04.08 Sheet 3 of 3





## (\*) RECOMMENDED SPARE PARTS

			. ( )=					
	2	PLASTIC CAP	PLASTIC					
912	1	BOLT	8.8	DIN-912 M4x16				
89	1	IDENTIFICATION PLATE	STAINLESS ST.					
75	1	STEM BUSHING	AISI-316 WITH INSIDE I					
72.1	1	"O" RING	FKM	ø69.44x3.53 *				
72	2	"O" RING	FKM	ø49.21x3.53 <b>★</b>				
54	2	SEAT CARRIER SEAL	GRAPHITE	JG169x3.15SI Rev.0 *				
52	2	"O" RING	FKM	ø240.67x5.33 <b>★</b>				
50.1	1	VENT PLUG	A-105	3/8" NPT				
50	2	DRAIN PLUG	A-105	3/4" NPT				
47	1	KEY	CARBON ST.	141477CH Rev.0				
40	1	GASKET	GRAPHITE	JG75x3.7 Rev.0 *				
39	1	STEM BUSHING	AISI-316 WITH INSIDE I					
37	2	"O" RING	FKM	ø158.34x3.53 *				
34	1	UPPER CAP	A 350 Gr. LF2 Class-1					
33	2	SEAT SEAL	FKM	ø164.47x5.33 *				
32	28	SPRING	INCONEL 750	PV23.0206.0606				
31	2	SEAT CARRIER	A 182 F316	PV23.0206.0606				
28	24	NUT	A 194 Gr. 2HM	UNC 3/4"-10 ANSI B18.2.2 Tabla 3				
26.1	4	BOLT	12.9	s/a - T912M12110129				
26	4	BOLT	12.9	s/a - T912M1275129				
23	2	BEARING	PTFE	s./a JBS200T6260 (ø95xø75x1) *				
22	2	TRUNNION BEARING	AISI-316 WITH INSIDE I	IN PTFE s./g QGDI758020 (Ø80xØ75x20) *				
21	2	BALL TRUNNION	A 350 Gr. LF2 Class—					
19	2	ANTISTATIC DEVICE	STAINLESS ST.					
15	24	STUD	A 193 Gr. B7M	SU34662527 Rev.0				
14.1	4	STOP PIN	CARBON ST.	PIU630M Rev.0				
14	4	STOP PIN	CARBON ST.	s/a - PIU1255A				
13	2	BODY CONNECTOR SEAL	GRAPHITE	6060TB150JCL Rev.0 *				
12	1	STEM THRUST SEAL	PTFE + 25% G.F.	6060TB150JE Rev.0 *				
11	1	GLAND PACKING	GRAPHITE	6060TB150P Rev.0 *				
10	1	GLAND	A 350 Gr. LF2 Class-	-1 6060TB150PP Rev.0				
5	2	SEAT RING	RPTFE	PV23.0206.0606 *				
4	1	STEM	A 479 Tp.410	6060TB150E Rev.0				
3	1	BALL	A 351 Gr. CF8M	6060TB150B Rev.0				
2	2	BODY CONNECTOR	A 350 Gr. LF2 Class-1					
1	1	BODY	A 350 Gr. LF2 Class-	-1 6015TB150C Rev.0				
POS.	QUAN.	DENOMINATION						
	QUAN.		MATERIA	AL DRAWING N°.				
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mm.		Checked 10-07	J.R. JC Va	Fabrica de Valvulas, s.a				
Weigl		Appr. Eng.	J.R.	Tel. + (34) 936 54 86 94 // Fax + (34) 936 54 86 9 e.mail: technical@jc-valves.co				
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GENERAL DRAWING Fig.6015 DN-6" Class-150

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Drawing n°.: 6015TB150

Substitutes:

Substitutes by:



Project: FIRE TEST FOR SOFT-SEATED **BALL VALVE** 

Certificate No.: 259/08 - 9587

Client: J.C. FÁBRICA DE VÁLVULAS, S.A.

Office: Sant Joan Despi (BCN)

Client's Order No.::

Date: 16.04.08

Order Status: Complete

Inspection dates

First: 16.04.08

Final: 16.04.08

This certificate is issued to

Messrs. J.C. FABRICA DE VÁLVULAS, S.A., upon their request that the undersigned Suveryor to this Society did attend their premises at their works in Sant Boi de Llobregat - Barcelona (Spain) for the purpose of witnessing the FIRE TEST in accordance with the requirements specified in ISO 10497:2004, on the following type of valve:

A manually operate soft seated ball valve of 6" bore 6", L.I.DV, symetric Valve as per fig. 6060 TB class 600#.

Body and Connector material A350 Gr.LF2, CLASS -1

Seats: SEE DRAWING 6060TB Ball material: SEE DRAWING 6060TB

Stem: SEE DRAWING 6060TB

Marks:

- BODY : Col. 783621H - CONNECTOR : Col. 176947

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 trough 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 C259/08





Certificate No.: 259/08 - 9587 Office: Sant Joan Despí (BCN)

Date: 16.04.08 Sheet 2 of 3

- 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.
- External leakage during operational test SATISFACTORY. 4.
- 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 supplied by the manufacturer, while seat rings were found completely destroyed.

The manufacturers Fire Safe Test Report no C259/08 and drawing 6060TBherewith 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.

DN **CLASS RATING** PN RATING 150, 200, 250, 300 600#, 800#, 900# 100, 150

> IS Tecnos, S.A. C/, Las Planes nº 1, have B

Policono Industrial Fontsanta 03870 Sant Jean Despi (Barcolona) Tel.: (34) 93 477 01 71 - 93 477 01 69 Fex.: (34) 93 373 15 90

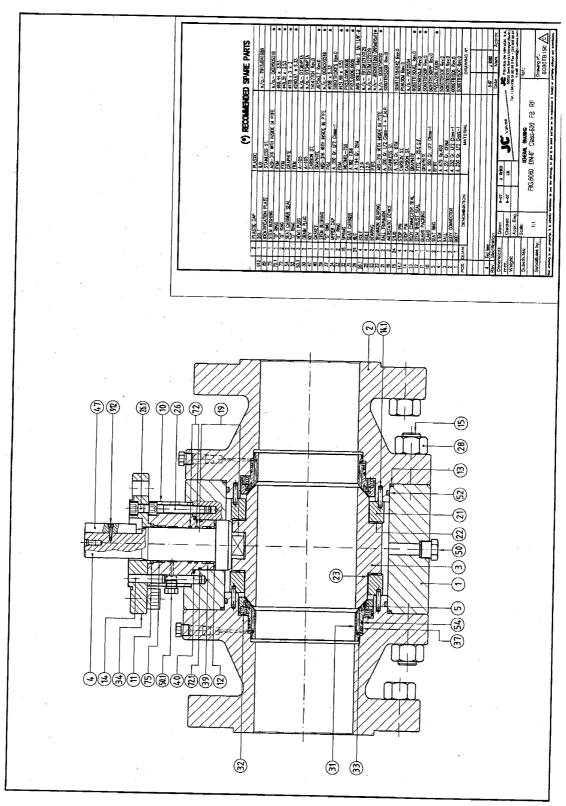
Surveyor Javier Aranda García

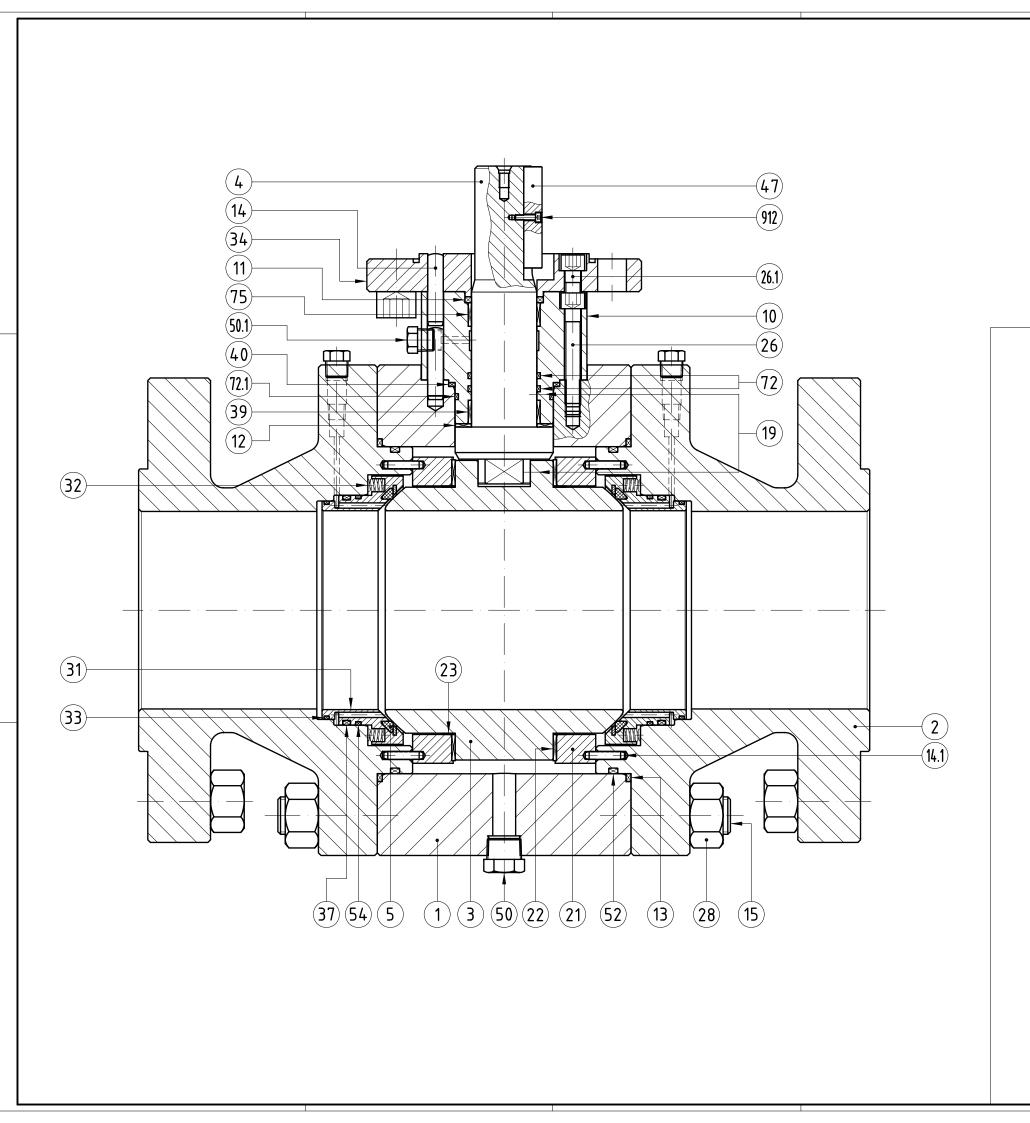
DOCUMENTS ATTACHED: Sheets reviewed and stamped Accordingly.



Certificate No.: 259/08 - 9587 Office: Sant Joan Despí (BCN)

Date: 16.04.08 Sheet 3 of 3





## (\*) RECOMMENDED SPARE PARTS s./a.- T912M041688 IDENTIFICATION PLATE TAINLESS S 1 STEM BUSHING 1 "0" RING 2 "0" RING 2 SEAT CARRIER SEAL 2 "0" RING 3 VENT PLUG s./a.- QGDI505518 Ø69.44 x 3.53 AISI-316 WITH INSIDE IN PTFE FKM ø49.21 x 3.53 #49.21 x 3.33 #178 x 3 x 3 #240.67 x 5.33 s./a.- DT38NPTA s./a.- DT34NPTA 141477CH Rev.0 JG75x3.7 Rev.0 s./a.- QGDI505518 #158 x 5.33 6060TB150FS Rev.0 #151.99 x 3.53 GRAPHITE FKM A-105 2 DRAIN PLUG CARBON ST GASKET GRAPHITE STEM BUSHING "O" RING UPPER CAP "O" RING AISI-316 WITH INSIDE IN PTFE A 350 Gr. LF2 Class-1 2 "0" RING 16 SPRING 2 SEAT CARRIER 24 NUT FKM ø151.99 x 3.53 INCONEL-750 PV23.0206.0606 A 182 F316 A 194 Gr. 2HM 26.1 4 26 4 23 2 22 2 s./a.- T912M1275129 s./a.- JBS200T6260 (Ø95xØ75x1)\* s./a.- QGDI758020 \* 6060TB150GB Rev.0 BEARING AISI-316 WITH INSIDE IN PTFE TRUNNION BEARING 22 2 21 2 19 2 15 24 14.1 4 14 4 13 2 12 1 11 1 BALL TRUNNION A 350 Gr. LF2 Class-1 + E.N.P. ANTISTATIC DEVIC STAINLESS ST SUN1181184242 Rev.0 STUD STOP PIN A 193 Gr. B7M CARBON ST. PIU630M Rev.0 STOP PIN CARBON ST. s./a.- PIU1255A BODY CONNECTOR SEAL STEM THRUST SEAL GRAPHITE 6060TB150JCL Rev.0 6060TB150JE Rev.0 6060TB150P Rev.0 PTFE + 25% G.F GLAND PACKING GRAPHITE 1 2 1 1 6060TB150PP Rev.0 GLAND A 350 Gr. LF2 Class-1 SEAT RING PV23.0206.0606 STEM 4 A 479 Tp.410 6060TB150E Rev.0 6060TB150B Rev.0 A 351 Gr. CF8M A 350 Gr. LF2 Class-1 A 350 Gr. LF2 Class-1 BODY CONNECTOR 6060TB150L Rev.0 POS. QUAN. DENOMINATION MATERIAL DRAWING Nº. 0 First issue Rev. Modification Date Nam. Approv. JE Fábrica de válvulas, s.a. 08830 Sant Boi de Llobregat (Spain) Tel. + (34) 936 54 86 86 // Fax + (34) 936 86 87 e.mail: technical@jc-valves.com Dimensions JC Valves Drawn 9-07 Checked Weight: Appr. Eng Scale: GENERAL DRAWING Substitutes: FIG.6060 DN-6" Class-600 FB RF Drawing no.: Substitutes by: 6060TB150 This drawing is our property. It is strictly forbbiden to use the drawing, to give it to third parties or to reproduce it totally or partially without our pe



Project: FIRE TEST FOR SOFT-SEATED BALL VALVE

Certificate No.: 457/08 - 9587

Client: J.C. FÁBRICA DE VÁLVULAS, S.A.

Office: Sant Joan Despí (BCN)

Client's Order No.:: ---

Date: 06.06.08

Order Status: Complete

Inspection dates

First: 06.06.08

Final: 06.06.08

This certificate is issued to

Messrs. J.C. FABRICA DE VÁLVULAS, S.A., upon their request that the undersigned Suveryor to this Society did attend their premises at their works in Sant Boi de Llobregat - Barcelona (Spain) for the purpose of witnessing the FIRE TEST in accordance with the requirements specified in ISO 10497:2004, on the following type of valve:

A manually operate soft seated ball valve of 8" bore 8", L.I.T. symetric Valve as per fig. 6015 TB class 150#.

Body and Connector material A350 Gr.LF2 Class -1

Seats: SEE DRAWING 6015TB200 Ball material: SEE DRAWING 6015TB200 Stem: SEE DRAWING 6015TB200

Marks:

- BODY : Col. 782160H - CONNECTOR : Col. 176947

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 trough 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 appropriate 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 C457/08

SGS Tecnos, S.A.

Las Planas, 1 - Nave B Pol. Ind. Fontsanta 08970 Sant Joan Despi (Barcelona) **t** (34) 934 77 01 71 **f** (34) 933 73 15 00 www.sgs.es



Certificate No.: 457/08 - 9587 Office: Sant Joan Despí (BCN)

Date: 06.06.08 Sheet 2 of 3

- 1. Through-valve leakage during burn period SATISFACTORY.
- 2. External leakage during burn and cool-down period SATISFACTORY.
- Through-valve leakage during operational test SATISFACTORY.
- 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 supplied by the manufacturer, while seat rings were found completely destroyed.

The manufacturers Fire Safe Test Report nº C457/08 and drawing 6015TB200 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.

\_\_\_\_\_\_DN CLASS RATING PN RATING
200 and larger 150#, 300# 10, 16, 25, 40

SGS Tecnos, S.A. C/. Las Planas nº 1, Nave B

Roligono Industrial Fontsanta 0970 Sant Joan Despí (Barcelona) 761- (34) 93 477 91 71 - 93 477 01 69 Fax. (34) 93 373 15 00

Surveyor

Javier Aranda García

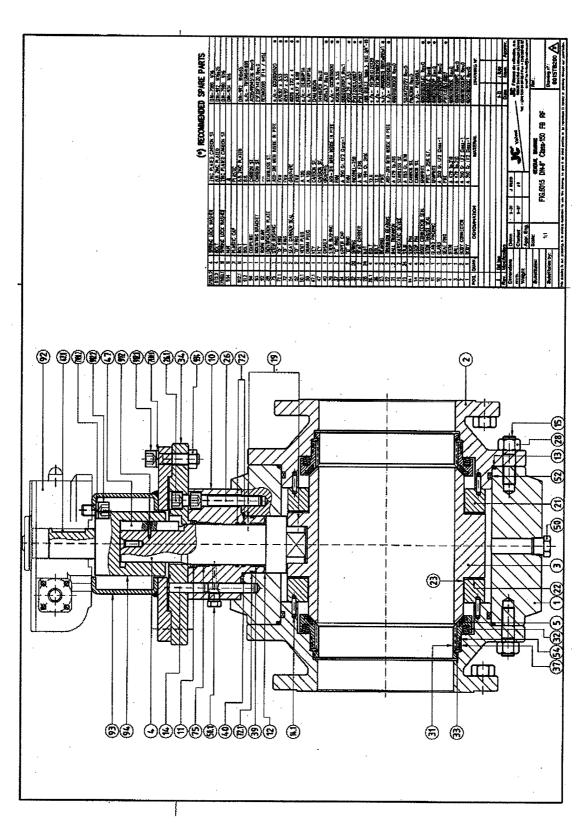
DOCUMENTS ATTACHED:

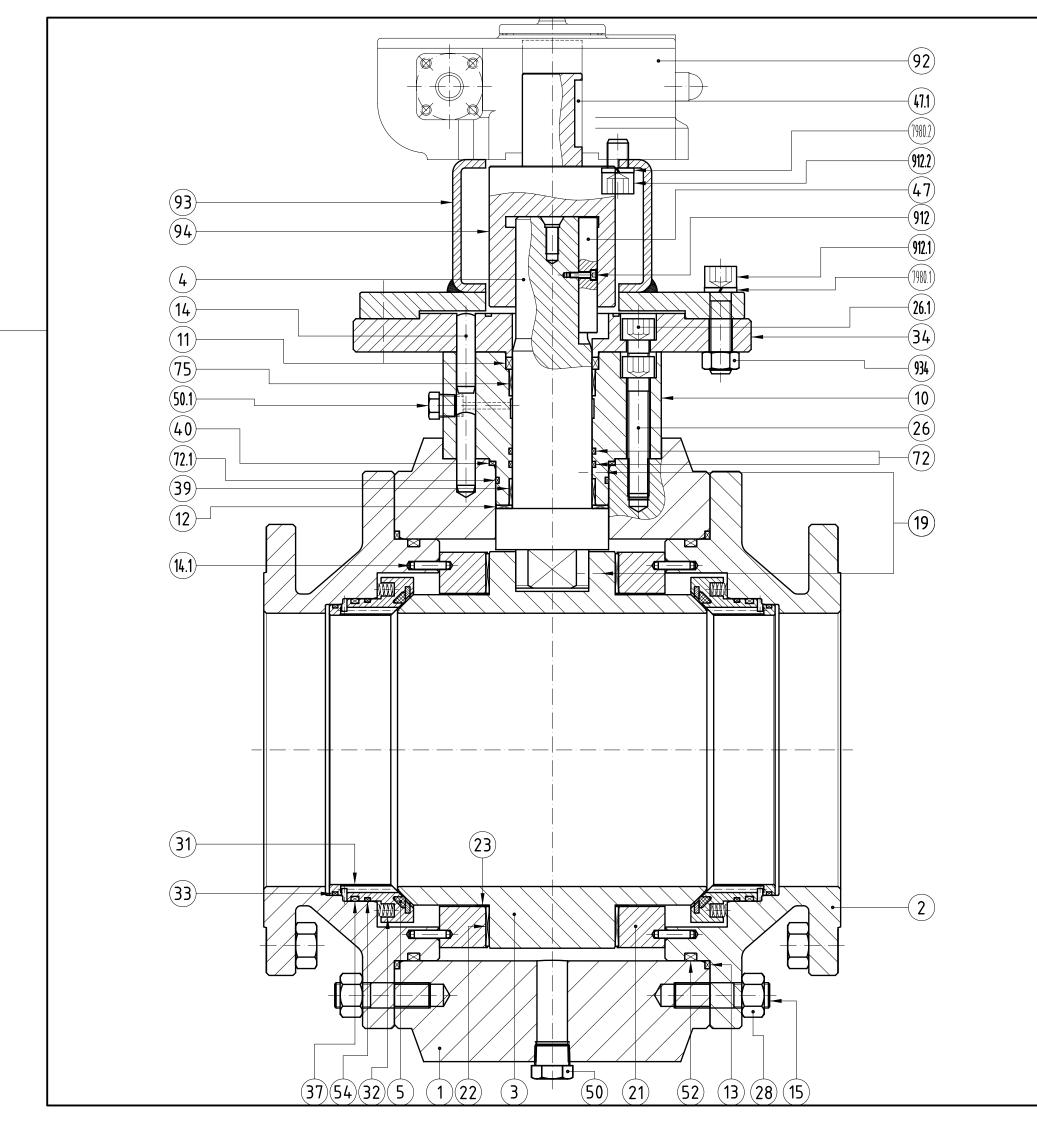
Sheets reviewed and stamped Accordingly.



Certificate No.: 457/08 - 9587 Office: Sant Joan Despí (BCN)

Date: **06.06.08**Sheet 3 of 3





## (\*) RECOMMENDED SPARE PARTS

				1	( )				_		
7980.2		SPRING LOCK WA	ASHER		LATED CARBON ST.		<u>-7980</u>				
912.2	4	BOLT	0.150		C PLATED	DIN-912 M16x25					
7980.1	8	SPRING LOCK WASHER			LATED CARBON ST.		DIN-7980 M16				
934	8	NUT		.8		DIN	-934	M16			
	2	PLASTIC CAP		PLASTI							
912.1	8	BOLT			IC PLATED		DIN-912 M16x65				
912	1	BOLT		8.8				12M041688			
94	1	COUPLING		CARBO				5176 Rev.0			
93	1	MOUNTING BRACK	KET	CARBO	N ST.		ESF25F14120 Rev.0				
92	1	WORM GEAR				RED	)WG008	3 (F14 / ø	45)		
89	1	IDENTIFICATION P	LATE		ESS ST.						
75	1	STEM BUSHING		AISI-31	6 WITH INSIDE IN PTFE	s./	a Q0	DI606520	*		
72.1	1	"0" RING		FKM		ø78	3.97 x	3.53	*		
72	2	"O" RING		FKM		ø59	9.92 x	3.53	*		
54	2	SEAT CARRIER S	EAL	GRAPHI	TE	ø22	28 x 2:	22 x 4	*		
52	2	"O" RING		FKM			)4.17 x		*		
50.1	1	VENT PLUG		A 105				38NPTA			
50	2	DRAIN PLUG		A 105				34NPTA			
47.1	1	KEY			CARBON ST.			A			
47	1	KEY									
40	1	GASKET			CARBON ST. GRAPHITE			141487CH Rev.0 JG85x3.7 Rev.0			
39	1	STEM BUSHING			6 WITH INSIDE IN PTFE		s./a QGDI606520 *				
37	2	"O" RING		FKM	O WITH INSIDE IN THE		0. – QC		*		
34	1	UPPER CAP			Gr. LF2 Class-1						
33	2	"O" RING		FKM	Gr. LFZ Cluss-1		6060TB200FS Rev.1		*		
	20	SPRING		INCONE	1 750		Ø202.79 x 3.53				
32		SEAT CARRIER					PV17.0263.0807		*		
31	2			A 182			PV17.0263.0807				
28	24	NUT			Gr. 2HM		ANSI B18.2.2 Tabla 3 UNC 3/4"				
26.1	4	BOLT		12.9		S./	s./a T912M16120129		9		
26	4	BOLT		12.9			s./a T912M1690129 s./a JBI400T615 (Ø115xØ95x1)				
23	2	BEARING		PTFE							
22	2	TRUNNION BEARI	NG		6 WITH INSIDE IN PTFE			DI9510030	*		
21	2	BALL TRUNNION		A 479		606	60TB20	OGB Rev.0			
19	2	ANTISTATIC DEVI	CE		ESS ST.						
15	24	STUD			Gr. B7M			'27 Rev.0			
14.1	4	STOP PIN		CARBO	N ST.		630M I				
14	4	STOP PIN		CARBO	N ST.	s./	a PII	J1460A			
13	2	BODY CONNECTO	R SEAL	GRAPHI	TE TE			OJCL Rev.0	*		
12	1	STEM THRUST SE	EAL	PTFE +	25% G.F.	606	0TB200	DJE Rev.0	*		
11	1	GLAND PACKING		GRAPHI		606	60TB20	OP Rev.0	*		
10	1	GLAND			A 350 Gr. LF2 Class-1			6060TB200PP Rev.0			
5	2	SEAT RING		PTFE			PV17.0263.0807		*		
4	1	STEM		A 479	Tp.316		6060TB200E Rev.0				
3	1	BALL		A 479		606	6060TB200BPC Rev.0				
2	2	BODY CONNECTO	R		Gr. LF2 Class-1		6016TB200LPC Rev.0				
1	1	BODY	I V		Gr. LF2 Class-1		6015TB200C Rev.0				
-	_		INIATIC::	A 330		1001	DRAWING N°.		10		
POS.	QUAN.	DENOM	INATION		MATERIAL		[	JKAWING N	۲. -		
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mm.		Checked	9-07	J.R.	Valves		08830	Sant Bol de Llol	bredat (Spaln)		
Weig			9-07	J.K.		Tel. + (34	) 936 54	86 86 // Fax + (	34) 936 86 87		
vvely	т.	Appr. Eng.		<u>                                      </u>			e.r	mail: technical@	jc-valves.com		
		01-					To	of			

GENERAL DRAWING

FIG.6015 DN-8" Class-150 FB RF

his drawing is our property. It is strictly forbbiden to use the drawing, to give it to third parties or to reproduce it totally or partially without our perm

Drawing nº.: 6015TB200

Substitutes:

Substitutes by:



Project: FIRE TEST FOR SOFT-SEATED BALL VALVE

Certificate No.: 002/09 - 9587

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

Office: Sant Joan Despí (BCN)

Client's Order No.:: ---

Date: 08.01.09

Order Status: Complete

Inspection dates

First: 08.01.09

Final: 08.01.09

This certificate is issued to

Messrs. J.C. FABRICA DE VÁLVULAS, S.A., upon their request that the undersigned Suveryor to this Society did attend their premises at their works in Sant Boi de Llobregat -Barcelona (Spain) for the purpose of witnessing the FIRE TEST in accordance with the requirements specified in ISO 10497:2004, on the following type of valve:

A manually operate soft seated ball valve of 8" bore 8", L.I. RPTFE symetric Valve as per fig. 6060TB class 600#.

Body and Connector material A350 Gr.LP2 Class -1

Seats: SEE DRAWING 6060TB 200
Ball material: SEE DRAWING 6060TB 200
Stem: SEE DRAWING 6060TB 200

Marks:

- BODY : Col. 784175H - CONNECTOR : Col. 176947

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 trough 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 appropriate 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 C002/09

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Certificate No.: 002/09 - 9587 Office: Sant Joan Despí (BCN)

Date: 08.01.09 Sheet 2 of 3

- 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 supplied by the manufacturer, while seat rings were found completely destroyed.

The manufacturers Fire Safe Test Report no C002/09 and drawing 6060TB 200 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.

DN	CLASS RATING	PN RATING		
200 and larger	600#, 800#, 900#	100, 150		

Surveyor

Javier Aranda García

**DOCUMENTS ATTACHED:** 

Sheets reviewed and stamped Accordingly.

SGS Tecnos, S.A.

C/. Las Planas nº 1, Nave B Poligono Industrial Fontsanta 08970 Sant Joan Despi (Barcelona) Tel.: (34) 93 477 01 71 - 93 477 01 69 Fax.: (34) 93 373 15 00



Certificate No.: 002/09 - 9587 Office: Sant Joan Despí (BCN)

Date: **08.01.09** Sheet 3 of 3

