

**Project:** FIRE SAFE TEST FOR VALVES

**Certificate No.:** M375-1/09 - 9587

**Client:** JC Fábricas de válvulas, S. A.

**Office:** Sant Joan Despí (BCN)

**Client's Order No.:** ---

**Date:** 27.04.09

**Inspection dates**

**First:** 27.04.09

**Order Status:** Complete

**Final:** 27.04.09

*This certificate is issued to*

Messrs. **JC Fábricas 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 SAFE TEST in accordance with the requirements specified in API 607 and ISO 10497, on the following type of valve:

A manually operate J.C Ball Valve TL series of 4" bore 4", as per fig.315 A.I.T, 150#  
Body and Body connector material A216 Gr.WCB  
Trim: SEE DRAWING 090909

Marks:

- BODY : Col. LE8
- BODY CONNECTOR : Col. KKZ8

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 hydrottested 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 C375/09

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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 C375/09 and drawing 090909 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.

<u>DN</u>	<u>CLASS RATING</u>	<u>PN RATING</u>
4", 5", 6", 8"	150#, 300#	10, 16, 25, 40

Surveyor

  
Javier Aranda García

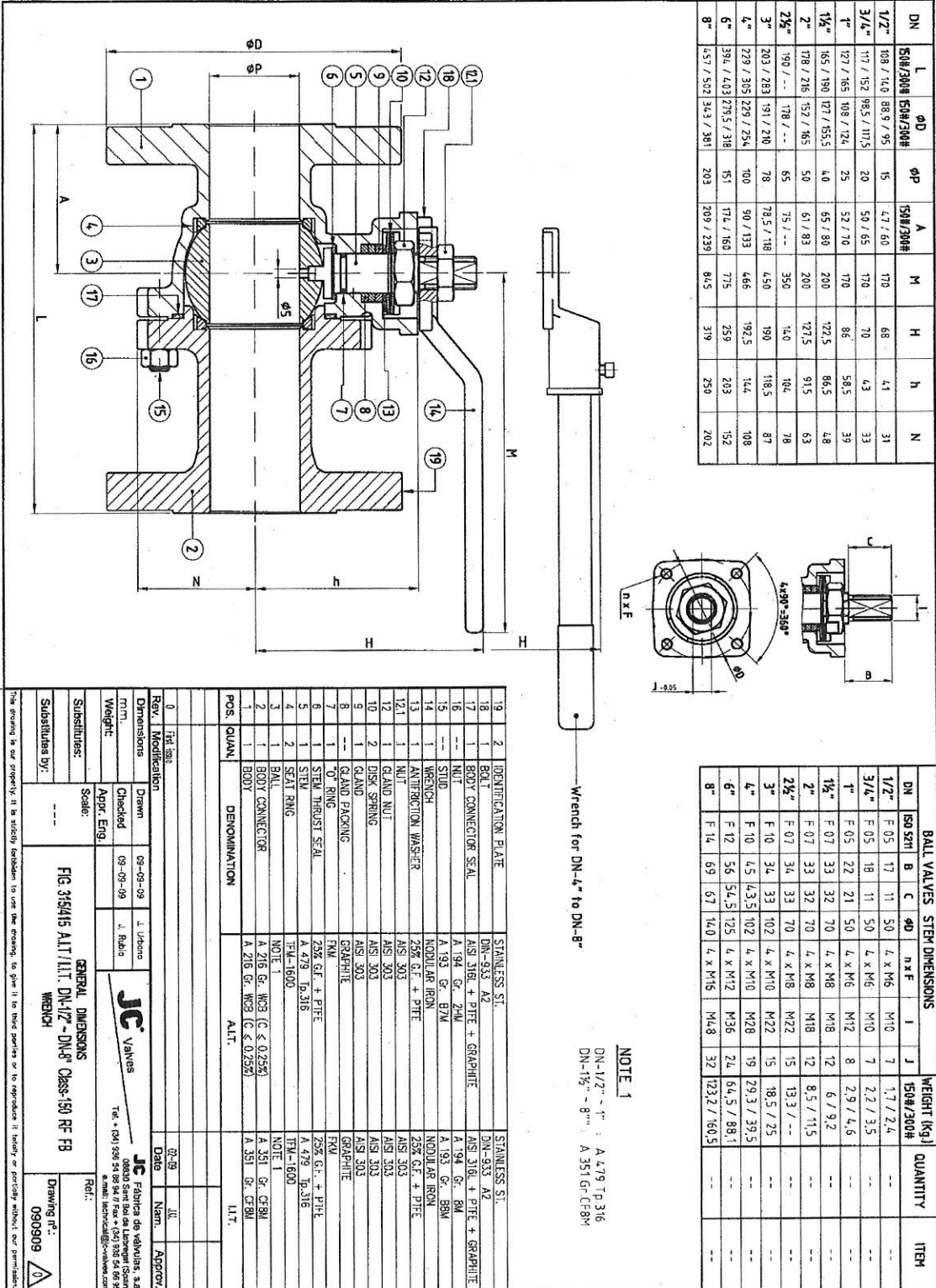
**SGS Tecnos, S.A.**

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Polígono Industrial Font Santa  
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Tel.: (34) 93 477 01 71 - 93 477 01 69  
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**DOCUMENTS ATTACHED:**

Sheets reviewed and stamped  
Accordingly.

090909



DN	L	φD	φP	A	M	H	h	N
1/2"	108 / 140	88.9 / 95	15	4.7 / 6.0	170	68	4.1	31
3/4"	117 / 152	98.5 / 117.5	20	5.0 / 6.5	170	70	4.3	33
1"	127 / 165	108 / 124	25	5.2 / 7.0	170	86	5.8.5	39
1 1/4"	165 / 190	127 / 155.5	4.0	6.5 / 8.0	200	122.5	8.6.5	4.8
2"	178 / 216	152 / 165	5.0	6.1 / 8.3	200	127.5	9.1.5	6.3
2 1/2"	190 / --	178 / --	6.5	7.5 / --	350	140	10.4	7.8
3"	203 / 283	191 / 210	7.8	78.5 / 118	4.50	190	118.5	8.7
4"	229 / 305	229 / 254	10.0	90 / 133	4.66	192.5	14.4	10.8
6"	394 / 403	279.5 / 318	15.1	174 / 160	7.75	259	20.3	15.2
8"	457 / 502	343 / 381	20.3	209 / 239	8.45	319	25.0	20.2

DN	BALL VALVES STEM DIMENSIONS				WEIGHT (Kg)	
	B	C	φD	n x F	QUANTITY	ITEM
1/2"	F 0.5	17	11	5.0	1.7 / 2.4	--
3/4"	F 0.5	18	11	5.0	2.2 / 3.5	--
1"	F 0.5	22	21	5.0	4.2 / 4.6	--
1 1/4"	F 0.7	33	32	7.0	6.7 / 9.2	--
2"	F 0.7	33	32	7.0	8.5 / 11.5	--
2 1/2"	F 0.7	34	33	7.0	13.3 / --	--
3"	F 1.0	34	33	10.2	18.5 / 2.5	--
4"	F 1.0	45	43.5	10.2	29.3 / 39.5	--
6"	F 1.2	56	54.5	12.5	64.5 / 88.1	--
8"	F 1.4	69	67	14.0	123.2 / 160.5	--

NOTE 1  
 DN-1/2" - 1" : A 4.79 TP 316  
 DN-1 1/4" - 8" : A 351 Gr. CF8M

POS.	QUANT.	DENOMINATION	STAINLESS ST.	STAINLESS ST.
19	2	IDENTIFICATION PLATE	DN-433 A2	DN-433 A2
18	1	BOLT	AS1 316L + PTFE + GRAPHITE	AS1 316L + PTFE + GRAPHITE
17	1	BODY CONNECTOR SEAL	A 194 Gr. 2M	A 194 Gr. 2M
16	1	NUT	A 193 Gr. 8M	A 193 Gr. 8M
15	1	STUD	NODULAR IRON	NODULAR IRON
14	1	WRENCH	25% GF. + PTFE	25% GF. + PTFE
13	1	ANTI-FRICTION WASHER	AS1 303	AS1 303
12	1	NUT	AS1 303	AS1 303
11	1	GLAND NUT	AS1 303	AS1 303
10	2	DISK SPRING	AS1 303	AS1 303
9	1	GLAND	AS1 303	AS1 303
8	1	GLAND PACKING	GRAPHITE	GRAPHITE
7	1	O' RING	FMV	FMV
6	1	STEM THRUST SEAL	25% GF. + PTFE	25% GF. + PTFE
5	1	STEM	A 479 TP 316	A 479 TP 316
4	2	SEAL RING	TFM-1600	TFM-1600
3	1	BALL	NOTE 1	NOTE 1
2	1	BODY CONNECTOR	A 216 Gr. WC3 (C & 0.25%)	A 351 Gr. CF8M
1	1	BODY	A 216 Gr. WC3 (C & 0.25%)	A 351 Gr. CF8M

Rev.	Modification	Date	By	Appr.
0	First Issue	03-09-09	L. Urbano	JC

**JC Valves**  
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**FIG 315415 ALLT/ALT. DN-1/2" - DN-8" Class-150 RF FB WRENCH**

Drawing n°: 090909

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