

Sheet 1 of 3

Project: FIRE SAFE TEST FOR VALVES Certificate No.: 370/09 - 9587

Office: Sant Joan Despí (BCN) Client: J.C FABRICA DE VALVULAS, S.A.

Client's Order No.:: Date: 22.04.09

Order Status: Complete

Inspection dates

First: 22.04.09 Final: 22.04.09

This certificate is issued to

Messrs. J.C FABRICA DE VALVULAS, 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 ISO 10497:2004, on the following type of valve:

A manually operate Gate Valve of 8" bore 8", as per fig. VC150BB, 150# Body and Bonnet material A216 Gr.WCB Trim: SEE DRAWING GGC-060409

Marks:

- BODY : Col. Z5507 : Col. Z5485 - BONNET

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 C370/09



Miembro del Grupo SGS (Société Générale de Surveillance)



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Date: 22.04.09 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 C370/09 and drawing GGC-60409 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 TOCHOS, S.A.

C.Las Planas nº 1, Nave B

Poligona Industrial Scattzania

08076 Shar Juan Desprit Barcelona)
Tet.: (bd. 56 677 0 771 - 93 477 01 69

Fax.: (34) 93 373 15 00

Surveyor Jav

Javier Aranda García

DOCUMENTS ATTACHED:

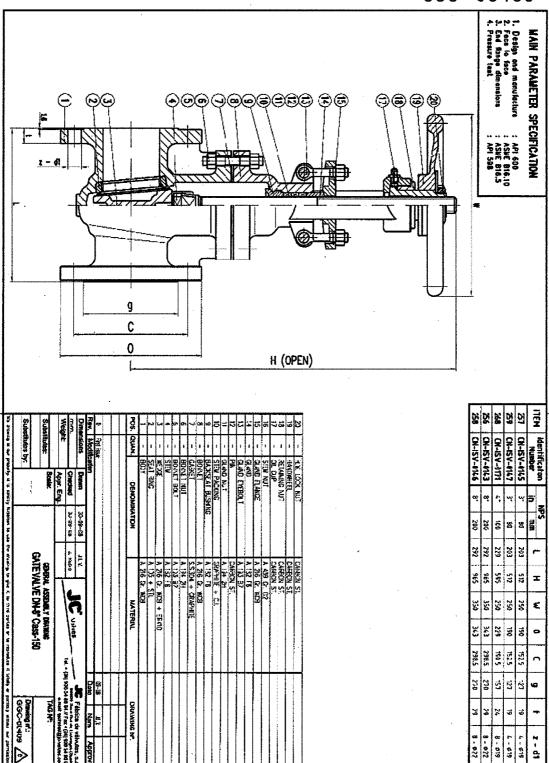
Sheets reviewed and stamped
Accordingly.



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Date: **22.04.09**Sheet 3 of 3

GGC-60409





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Project: FIRE SAFE TEST FOR VALVES Certificate No.: 359/09 - 9587

Client: J.C FABRICA DE VALVULAS, S.A. Office: Sant Joan Despí (BCN)

Client's Order No.:: Date: 17.04.09

Order Status: Complete

Inspection dates

First: 17.04.09 Final: 17.04.09

This certificate is issued to

Messrs. J.C FABRICA DE VALVULAS, 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 ISO 10497:2004, on the following type of valve:

A manually operate Gate Valve of 3" bore 3", as per fig. VC150BB, 150# Body and Bonnet material A216 Gr.WCB Trim: SEE DRAWING GGC-01151

Marks:

- BODY : Col. Z5482 - BONNET : Col. Z5488

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 C359/09

SGS Tecnos S.A. | Pol. Ind. Fontsanta C/ Las Planas, 1 nave B 08970 Sant Joan Despí (Barcelona) t (34) 934 77 01 71 f (34) 933 73 15 00 www.sgs.es



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Date: 17.04.09 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 C359/09 and drawing GGC-01151 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
80, 100, 125, 150	150#, 300#	10, 16, 25, 40

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

Poligonia inclusivial Footeanta .08970 Stant Jean Dospt (Barcelona) Tel.: (34) \$3 \$27.0 \(\text{1}\) 93 477.01.69

Fax.: (34) 93 573 15 00

Surveyor

Javier Aranda García

DOCUMENTS ATTACHED:

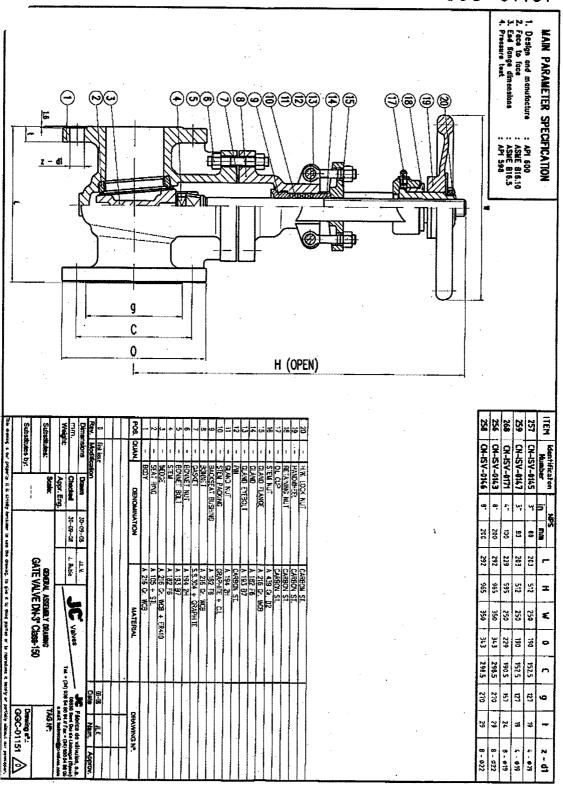
Sheets reviewed and stamped Accordingly.



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GGC-01151



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