

# FULL QUALITY ASSURANCE CERTIFICATE

Certificate No.:  
14427-2019-CE-RGC-ACCREDIA

Initial date:  
19 December, 2019

Valid:  
19 December, 2019 – 18 December, 2022

This certificate consists of 4 pages

This is to certify that the quality system of

## GWC Valve Manufacturing (Shanghai) Co.,Ltd.

No. 3300 Tianchen Rd, Qingpu District, Shanghai, China

has been assessed and found to comply with respect to the conformity assessment procedure described in:

### ANNEX III MODULE H OF DIRECTIVE 2014/68/EU ON PRESSURE EQUIPMENT

This certificate is valid for the following scope:

Type of Pressure Equipment

**Pressure accessories**

Product Name

**Gate valves, ball valves, check valves,  
globe valves, plug valves**

Place and date:  
Vimercate 03 January, 2020



SGQ N° 033 A  
SGA N° 003 D  
SGE N° 007 M  
SCM N° 004 F

EMAS N° 009 P  
PRD N° 003 B  
PRS N° 098 C  
SSI N° 007 G

Member of MSA FA per gli schemi di accreditamento  
SGQ, SGA, PRD, PRS, SGE, GHS, LAB e LAT, di MSA IAF  
per gli schemi di accreditamento SGE, SGA, SSI, ISM  
e PRD e di MSA ILAC per gli schemi di accreditamento  
LAB, MEQ, LAT e ISQ

For the notified body 0496:  
DNV GL Business Assurance Italia  
S.r.l.

**Nicola Privato**  
Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.

DNV GL Business Assurance Italia S.r.l. Via Energy Park, 14, 20871 Vimercate (MB), Italy. Tel: 039 68 99 905. [www.dnvgl.it/businessassurance](http://www.dnvgl.it/businessassurance)

Certificate No.: 14427-2019-CE-RGC-ACCREDIA  
Place and date: Vimercate 03 January, 2020  
Revision No: 00

### Jurisdiction

Application of Directive 2014/68/EU and Decreto Legislativo n. 26 of 15 February 2016

### Certificate history

Revision	Description	Issue date
00	Original certificate	03 January, 2020

### Products covered by this certificate

Product name	Product description	Type of material	Applied product standard
Valves	Ball valve	Ferritic steels Austenitic steels	API 6D
	Gate valve		API 6D API 600
	Globe valve		BS1873
	Check valve		API 6D API594
	Plug valve		API 6D

### Sites covered by this certificate

Site name	Site Address	Audited by	Date	Report ref
GWC Valve Manufacturing(Shanghai) Co.,Ltd.	No. 3300 Tianchen Rd, Qingpu District, Shanghai, China	DNV GL Shanghai Mavis ma	2019-11-25	AUDIT REPORT - PED - Module H

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Place and date: Vimercate 03 January, 2020  
Revision No: 00

### Design data

Product name	maximum allowable pressure (PS)	Minimum/maximum allowable temperature(TS)	Fluid group
Gate valve Globe valve Check valve Pluge valve	Class 150 /Class 300 Class 600 /Class 900 Class 1500/Class 2500	ASTM A216 WCB -29~425°C ASTM A351 CF8M -46~538°C ASTM A352 LCC -46~345°C ASTM A352 LCB -46~345°C	Group1 and 2
Ball valves	Class 150 /Class 300 Class 600 /Class 900 Class 1500/Class 2500	ASTM A216 WCB -29~205°C ASTM A352 LCB -46~205°C ASTM A352 LCC -46~205°C ASTM A351 CF8M -46~205°C ASTM A350 LF2 -46~205°C ASTM A182 F316 -46~205°C ASTM A105 -29~205°C ASTM A182 F316L -46~205°C ASTM A182 F51 -29~205°C ASTM A182 F53 -29~205°C	Group1 and 2
Dual plate check valve	Class 150 /Class 300 Class 600 /Class 900 Class 1500/Class 2500	ASTM A216 WCB -29~425°C ASTM A352 LCB -46~345°C ASTM A352 LCC -46~345°C ASTM A351 CF8M -46~538°C ASTM A350 LF2 -46~425°C ASTM A182 F316 -46~538°C ASTM A105 -29~425°C	Group1 and 2

### Range of product covered by this certificate

Group No.	Type of valve	Rating						Design Standard
		Class 150	Class 300	Class 600	Class 900	Class 1500	Class 2500	
01	Slab Gate valve	DN50 ~1200	DN50 ~1000	DN50 ~900	DN50 ~600	DN50 ~600	DN50 ~300	API 6D
02	Wedge Gate valve	DN50 ~600	DN50 ~600	DN50 ~600	DN50 ~600	DN50 ~350	DN50 ~300	API 600
03	Swing Check valve	DN50 ~900	DN50 ~900	DN50 ~900	DN50 ~600	DN50 ~600	DN50 ~300	API 6D
04	Dual Plate check valve	DN50 ~1200	DN50 ~1200	DN50 ~1050	DN50 ~600	DN50 ~300	DN50 ~300	API 594
05	Globe Valve	DN50 ~400	DN50 ~300	DN50 ~300	DN50 ~300	DN50 ~300	DN50 ~200	BS1873
06	Floating Ball valve	DN32 ~250	DN32 ~200	DN32 ~100	NA	NA	NA	API 6D

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07	Trunnion Ball valve	DN50 ~900	DN50 ~900	DN50 ~900	DN50 ~600	DN50 ~600	DN50 ~300	API 6D
08	Plug valve	DN50 ~600	DN50 ~500	DN50 ~400	DN50 ~300	DN50 ~150	DN50 ~100	API 6D

### Materials

The materials listed below have been subject to Particular Material Appraisal as required by PED Annex I Sec. 4.2b. The documents describe, in a complete and concise manner, the characteristics of the materials and their conformity to the directive No. 2014/68/EU.

The materials subject to the Particular Material Appraisal may be used in pressure equipment in accordance with directive 2014/68/EU and to the conditions as stated in the documents for the respective grades of material qualities.

Item	Title	Rev.	Date
1	ASTM A216 Grade WCB	1	2019-04-02
2	ASTM A352 Grade LCB	1	2019-04-02
3	ASTM A352 Grade LCC	1	2019-04-02
4	ASTMA351 Grade CF8M	1	2019-04-02
5	ASTMA350 Grade LF2	1	2019-04-02
6	ASTMA182 Grade F316	1	2019-08-14
7	ASTM A105/A105M	1	2019-04-02
8	ASTMA182 Grade F316L	1	2019-08-14
9	ASTM A182 Grade F51	1	2019-08-14
10	ASTM A182 Grade F53	1	2019-08-14
11	ASTM A193/A193M Grade B7M	1	2019-08-14
12	ASTM A193/A193M Grade B8M	1	2019-04-02
13	ASTM A320/A320M Grade L7M	1	2019-08-14

### Applications/limitations

- Material of non-harmonized standards must comply with the relevant PMA documents (Particular Material Appraisal) appraised by DNV GL Business Assurance Italia S.r.l.;
- The valves classified according to Directive 2014/68/EU, Article 4.3, must not bear CE marking;
- Pressure-temperature rating shall be lesser than body rating and seat rating.

### Terms and conditions for the certificate

Valid terms and conditions are found in the DNV GL 's PED Certification Rules  
END OF CERTIFICATE