



DNV BUSINESS ASSURANCE

FULL QUALITY ASSURANCE CERTIFICATE - EC

Certificate No. 112212-2012-CE-ITA-ACCREDIA

This certificate consists of 5 pages.

This is to certify that the quality management system of

B.F.E. S.r.l.

Via Tonale, 70/A - 24061 Albano Sant'Alessandro (BG) - Italy

for design, production, final product inspection and testing of

Valves, spacer spools and strainers

has been assessed with respect to

*the conformity assessment procedure described in annex III (module H)
of Directive 97/23/EC on pressure equipment, as amended, and found to comply.*

Further details are given in the following pages.

Initial certification date

2012-02-29

This certificate is valid until

2018-05-17



SGQ N°003 A PRD N°003 B
SGA N°003 D SSI N°002 G
SCR N°004 F FSM N°001 I

Membro di MLA EA per gli schemi di accreditamento SGQ,
SGA, PRD, PRS, ISP e LAB, di MLA IAF per gli schemi di
accreditamento SGQ, SGA, SSI, FSM e PRD
e di MRA ILAC per gli schemi di accreditamento LAB

Place and date

Vimercate (MB), 2015-05-26

for the Notified Body 0496

DNV GL Business Assurance Italia S.r.l.

Nicola Privato

Management Representative

Giovanni Cortesi
Technical Reviewer

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Jurisdiction

Application of Pressure Equipment Directive 97/23/EC of the European Parliament and of the Council and Decreto Legislativo No. 93 of 25 February 2000.

Certificate history

Revision	Description	Issue Date
03	Renewal	2015-05-26
02	Change of company name, 15 materials added to particular material appraisal table	2014-02-20
01	Renewal	2012-06-22
00	Original certificate	2012-02-29

Products covered by this certificate

Product Name	Product description	Category
Valves, spacer spools and strainers	Gate, globe and check valves and combination valves, double block & bleed and strainers up to 48" Ball valves up to 24" Spacer spools up to 24"	Up to III

Sites covered by this certificate

Product name	Production site name	Address
Valves, spacer spools and strainers	B.F.E. S.r.l.	Via Tonale, 70/A - 24061 Albano Sant'Alessandro (BG) - Italy

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Performed audits

DNV GL Business Assurance Italia S.r.l. has carried out the assessment of the manufacturers quality system to verify that the relevant requirements relating to the above listed products have been implemented.

Assessment has been carried out on the production site by DNV GL Business Assurance Italia S.r.l., as described in assessment report dated 2015-05-06.

Particular material appraisal

The materials listed in Table 1 have been subject to particular material appraisal.

Table 1

Detail	Specification	Grade
Body, bonnet, nipples	ASTM A 105	
	ASTM A182	F1, F5, F5a, F9, F91, F11, F11 cl2, F21, F22 cl.3, F44, F51, F304, F304L, F310MoLN, F304H, F316, F316L, F316H, F317, F317L, F321, F321H, F347, F347H, F55, F53, F60 (S32205)
	ASTM A216	WCB (J03002)
	ASTM A350	LF2, LF3
	ASTM A494	N-12MV(1), N-7M, CW-2M, CW-12MW(1), CW-6MC
	ASTM A694	F42(2)
	ASTM A757	D1Q1(3), D1Q2(3)
	ASTM B148	UNS 95400(4)
	ASTM B366	WP1925, WPHC4
	ASTM B381	F2
	ASTM B462	UNS N08020, N08028(modified)(5)
	ASTM B564	UNS N04400, N06600, N06625, N08800, N08810, N08811, N08825
	ASTM A29/API6A	AISI 4130 (G41300)
	DIN 17103	St E355(6)(1.0566)
	DIN 17243	C22.8(6)(1.0460), 13CrMo44(6)(1.7335), 10CrMo9.10(6)(1.7380)
	DIN 17440	X6CrNiMoTi17.1(6), X6CrNiTi18.1(6), X6CrNiMoNb17.12.2(6)
	DIN 17743	NiCu30Al(2.4375)(7)
	AD-W13 Vd TUV 007/3	12CrMo19.5(1.7362)
	Vd TUV 511/3	X10CrMoVnb9-1(1.4903)
	ASTM A106	B
	ASTM A312	TP304-L, TP304-H, TP316L, TP347-H, TP321-H
	ASTM A333	6
	ASTM A335	P11, P22, P5, P9, P91
EN 10088.3	1.4435	
ASTM A565M	616 condition HT / UNS S42200	
EN 10222-5	1.4301(X5CrNi18-10), 1.4462(X2CrNiMoN22-5-3), 1.4410(X2CrNiMoN25-7-4) (8)	

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Body, bonnet, nipples	EN 10222-2	1.5415(16Mo3), 1.7383(11CrMo9-10) (8)
	WBL 377/3	1.6368(15NiCuMoNb5-6-4)
	WB 552/3	1.4901(X10CrWMoVNb9-2)
	ASTM B148	C95800
	ASTM A217 / API 6A	A217 WC9 (J21890)
	ASTM A217 / API 6A	A217 WC6 (J12072)
	ASTM A352 / API 6A	A352 LCC (J02505)
	ASTM A352 / API 6A	A352 LCB (J03003)
	ASTM A494 / API 6A	A494 CY-40 (N06040)
	ASTM A351 / API 6A	CN7M
	ASTM A351 / API 6A	A351 CK-3MCuN (J93254)
	ASTM A351 / API 6A	A351 CF-8M (J92900)
	ASTM A351 / API 6A	A351 CF-8C (J92710)
	ASTM A351 / API 6A	A351 CF8 (J92600)
	ASTM A351 / API 6A	A351 CF-3M (J92800)
	ASTM A217 / API 6A	A217 CA15 (J91150)
	ASTM A995 / API 6A	A995 GR 6A (J93380)
	ASTM A995 / API 6A	A995 GR 5A (J93404)
ASTM A995 / API 6A	A995 GR 4A (J92205)	
Bolting materials	ASTM A193	B7, B7M, B16, B8, B8 cl.2, B8A, B8C, B8M cl.2, B8MA, B8T
	ASTM A320	L7, L7M, B8 cl.2, B8M cl.2, B8A, B8MA
	ASTM A453	660A

Remarks

- nominal design stress $<R_m/4,5$ (R_m is defined as tensile strength);
- supplementary requirement No. S5 is required. Min. 27 J at min design temperature;
- requirement No. S22 is required. Min. 27 J at min design temperature;
- the nominal design stress should not exceed the lowest of the following values: $ReH/3$ and $R_m/4,5$ (ReH is yield strength and R_m is tensile strength);
- this material is not specified in ASTM B462. The chemical composition and mechanical properties are to be in accordance with material grade X1NiCrMoCu31-27-4 in accordance with EN 10088-1;
- the sampling is to be in accordance with EN 10222-1;
- the sampling is to be in accordance with ASTM B 564;
- harmonized materials which are subject to PMA because used with limitations shown in specific PMA documents dated 2011-10-27 and 2011-12-15.

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The materials are found to be acceptable under the following conditions:

- mechanical and chemical requirements in the product standard must be complied with;
- the maximum stresses shall not exceed those allowed by the product standard;
- all testing specified in the product standard additional to the testing specified in the material standard must be carried out, with test results acceptable also to the product standard;
- documentation of materials is assumed to comply with PED annex 1 section 4.3;
- impact testing to be foreseen for ASTM steels that may have brittle behaviour.

Terms and conditions

The certificate is subject to the following terms and conditions:

- in case of damages caused by defective products, Council Directive 85/374/EEC, as amended, will apply;
- the certificate is only valid for the products and/or manufacturing premises listed above;
- the manufacturer shall fulfil the obligations arising out of the quality system as approved and uphold it so that it remains adequate and efficient;
- the manufacturer shall inform DNV GL Business Assurance Italia S.r.l. of any intended updating of the quality system and DNV GL Business Assurance Italia S.r.l. will assess the changes and decide if the certificate remains valid;
- periodical audits will be held, in order to verify that the manufacturer maintains and applies the quality system. DNV GL Business Assurance Italia S.r.l. reserves the right, on a spot basis or based on suspicion, to pay unannounced visits;
- DNV GL Business Assurance Italia S.r.l. must be informed of any sub-suppliers for main pressure retaining parts.

The following may render this certificate invalid:

- changes in the quality system affecting production;
- periodical audits not held within the allowed time window.

Conformity declaration and marking of product

When meeting with the terms and conditions above, the Manufacturer may draw up an EC declaration of conformity and legally affix the CE mark followed by the Notified Body identification number (0496) of DNV GL Business Assurance Italia S.r.l.

END OF CERTIFICATE

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