

07/11/2024

Milan, Italy

Subject: DM174/2004 certification for ductile iron soft seated gate valves for potable water

ECI European Casting Industry Srl declares that **ECI model G511 – Ductile Iron Resilient Seated Gate Valve with EPDM Wedge PN16 F4** has undergone a 3rd party migration test in accordance to DM174/2004 of the Italian decree of the Italian Ministry of Health for drinking/potable water. Model G511 is then applicable for potable water applications. As part of ECI Srl's commitment to ISO 9001:2015, quality policy and quality control, the test will be repeated every 3 years from the date of certificate issuance.


Please refer within this declaration to the attached report number RP087524 dated 07/11/2024 issued by Tecnolab del Lago Maggiore Srl.




Kind Regards



ECI EUROPEAN
CASTING
INDUSTRY
Via Lazzaretto, 11 - 20124 Milano MI, Italy

ECI EUROPEAN CASTING INDUSTRY SRL

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CUSTOMER Cliente	ECI European Casting Industry Srl Via Lazzaretto 11 20124 Milano (MI) Italy		
CONTRACT Commessa	CO028824- 09/09/2024		
TEST REPORT Rapporto di Prova	RP087524 Global migration and specific migration on gate valve G511		
APPLICABLE STANDARDS Norme di riferimento	➤ D.M. 174/2004		
Emission Date Data di Emissione	Prepared by Redazione	Verified by Verifica Tecnica	Approved by Autorizzazione
07/11/2024	 Laboratory Technician Lorenzo Edoardo Colombo	 Manager Arianna Pella	 Laboratory Manager Michèle Setaro



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1. GENERAL REMARKS

1.1 Customer data

Customer:	ECI European Casting Industry Srl
Address:	Via Lazzaretto 11 20124 Milano (MI) Italy

1.2 Identification of Sample and/or equipment under test (EUT)

Sample nr	Acceptance code	Description As provided by the Customer	Receiving date
1	AC075024/1	Valvola a saracinesca a cuneo gommato in ghisa sferoidale corpo piatto FL PN10/16 conforme DIN3352 G511	03/10/2024



Figure 1 - Sample

1.3 Sampling

All test results in this report refer exclusively to the tested samples, and apply to the samples tested by the test laboratory as received. Customer is responsible for sampling. It is the responsibility of the manufacturer to ensure that all production meet the intent of the requirements detailed within this report. The extension of test results to the entire production is responsibility of manufacturer/importer.

2. SCOPE

Test and measurements scope is to provide to the Customer useful indications in order to evaluate EUT compliance with reference standards; the test plan has been requested by Customer.


3. APPLICABLE DOCUMENTS

3.1 Reference Standards and Documents

D.M. n°174 del 06/04/2004 GU N°166 del 17/07/2004	Regolamento concernente i materiali e gli oggetti che possono essere utilizzati negli impianti fissi di captazione, trattamento, adduzione e distribuzione delle acque destinate al consumo umano.
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3.2 Applicability

Test Plan is shown in paragraph 6.1.2 of this test report.

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3.3 Definitions and glossary of terms

PASS: In compliance with reference Standard

FAIL: Not in compliance with reference Standard

4. TECHNICAL COMPETENCE

Technicians, assigned to execute the tests described in this Test Report, have been qualified as required by Quality System of Tecnolab del Lago Maggiore s.r.l.

5. TEST PERFORMED

5.1 General

5.1.1 Test site

Tests were performed at laboratory partner Tecnologie d'Impresa S.r.l. a socio unico Via Don Minzoni, 15, 22060 Cabiato (CO) Italy.

5.1.2 Measurement uncertainty


The measurement uncertainties stated in this document are expressed as expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor $k = 2$ corresponds to a confidence level of about 95%.

5.1.3 Decision Rule for the attribution of Conformity

For tests performed in accordance with methods and specifications that identifies the conditions of acceptability and any related tolerances for the result, the Laboratory reports the compliance in accordance with the test result without considering the associated uncertainty values.

5.1.4 List and description of tests

Test	Applicable Standard	Paragraph of this Test Report	Sample	Test result
Global migration and specific migration	D.M. n°174 del 06/04/2004 GU N°166 del 17/07/2004	6.2	1	PASS

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5.2 Test

Condition of test:	solution: distilled water time of contact: 24 hours temperature of contact: 40°C date of test: 04/10/2024 – 30/10/2024
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5.2.1 EPDM Rubberized wedge

Parameter:	Measurement unit	Result	Limit
Global migration	mg/dm ²	1	60
Specific migration of dyes	Optical transmission %	> 95%	optical transmission not lower than 95% compared to the baseline
PASS			

5.2.2 Ductile iron EN-GJS-500-10

Parameter:	Measurement unit	Result	Limit
Global migration	mg/dm ²	1,5	60
Specific migration of dyes	Optical transmission %	> 95%	optical transmission not lower than 95% compared to the baseline
PASS			

5.2.3 Screw in AISI SS420 steel

Parameter:	Measurement unit	Result	Limit
Global migration	mg/dm ²	0,50	8
Specific migration of Chromium	ppm	<0,01	0,1
Specific migration of Nickel	ppm	<0,01	0,1
Specific migration of Manganese	ppm	<0,01	0,1
PASS			

----- END OF TEST REPORT NR.RP087524 -----