



RECOGNITION OF A TEST LABORATORY CERTIFICATE

No. 02-001584/023242

THIS IS TO CERTIFY:

That CROATIAN REGISTER OF SHIPPING did undertake, at the Laboratory's request, and pursuant of the Work instruction QW104 - "Recognition of test laboratory", on assessment of the organisational structure, responsibilities, facilities and associated quality assurance procedures of the referenced Laboratory with respect to test and testing standards, subject to any conditions in the Schedule of recognition attached hereto.

1. LABORATORY:

Name of laboratory:	BRODOSPLIT BRODOGRADILIŠTE d.o.o. SLUŽBA KVALITETE
Address:	Put Supavla 21, 21000 SPLIT, HRVATSKA - CROATIA

2. SCOPE OF RECOGNITION

As listed in Annex I of the Schedule of recognition providing that test witnessing shall be as stated hereto.

3. CONDITIONS FOR THE VALIDITY OF THE RECOGNITION

- Tests are to be carried out and reported in compliance with the relevant Regulation(s).
- Surveillance audits are to be carried out annually by the CRS's surveyors and recorded in the Annex II of the Schedule of the recognition.
- CRS is to be informed immediately of any modification in the organisational structure, responsibilities, facilities and associated quality assurance procedures.

Recognition is valid until: **2015-12-16**

Place and date: Split, 2012-08-09

Seal

Signature

Goran Begović, dipl.ing.

SCHEDULE OF RECOGNITION

Annex I to Certificate No:

No. 02-001584/023242

Item No.	Test method	Regulation	Test standards (latest edition)	Test witnessing mode (see note)	Comments
1.	<p>Ispitivanje metala i zavarenih spojeva metodama bez razaranja <i>Testing of metals and welded joints by non-destructive methods</i></p> <p>Radiografsko ispitivanje RT <i>Radiographic testing</i></p> <p>Ultrazvučno ispitivanje UT <i>Ultrasonic testing</i></p> <p>Ispitivanje magnetskim česticama MT <i>Magnetic particle testing</i></p> <p>Ispitivanje penetrirajućim tekućinama PT <i>Dye penetrant testing</i></p>	CRS Rules Part 25. CRS Rules Part 26.	EN 444 EN 1435+A1+A2 EN 1257-1 EN 17640 EN 583-1+A1 EN 11666 EN 10160 EN 10308 EN 17638 EN ISO 23278 EN 571-1 ISO 23277	(2)	
2.	<p>Ispitivanje mehaničkih i tehnoloških svojstava materijala <i>Testing of mechanical and technological properties of materials</i></p>	CRS Rules Part 25.	EN 10002-1 EN 10045-1 EN ISO 6506-1 EN ISO 6507-1 EN ISO 6508-1 EN ISO 7438 ISO 8492 ISO 8493 ISO 4136 EN ISO 5173	(1)	
3.	<p>Mjerenje deformacija (naprezanja) pomoću mjernih traka <i>Measurement of strain (stresses) by strain gauge methods</i></p>	CRS Rules Part 1.	ASTM E 251	(2)	
4.	<p>Određivanje zaostalih napreznja metodom bušenja provrta i mjernim rozetama <i>Determining of residual stresses by hole drilling methods and strain gauge rosetts</i></p>	CRS Rules Part 1.	ASTM E 837 – 08 e1	(2)	
5.	<p>Ispitivanje žilavosti Charpy-evim njihalom – instrumentalizirana ispitna metoda <i>Charpy V-notch pendulum impact test – instrumented test method</i></p>	CRS Rules Part 1.	EN ISO 14556	(2)	

Note:

- (1) Except otherwise agreed upon, the CRS witnessing is compulsory for every test.
- (2) First test and one per 4 years.
- (3) CRS witnessing is not compulsory.

6.	Ispitivanje kemijskog sastava metalnih materijala <i>Chemical testing of metallic materials</i>	CRS Rules Part 25.	Priručnik o ispitivanju <i>Testing manual</i> LP 1742.1	(2)	
7.	Određivanje broja krutih čestica u hidrauličkim uljima i drugim tekućinama, definiranje klase čistoće <i>Ascertainment of hard particles in hydraulic oils and other liquids, definition of purity class</i>	CRS Rules Part 24.	ISO 4406 NAS 1638	(3)	
8.	Ispitivanje fizikalnih karakteristika ulja (gustoća, viskozitet, sadržaj vode, pH) <i>Examination of physical properties of oil (density, viscosity, water content, pH)</i>	CRS Rules Part 24.	Priručnik o ispitivanju <i>Testing manual</i> LP 1742.2 ISO 3675 ISO 3733 ISO 3104 ISO 10523	(3)	
9.	Ispitivanje fizikalnih karakteristika vode (tvrdoća, sadržaj klorida i željeza, pH) <i>Examination of physical properties of water (hardness, chloride and iron content, pH)</i>	CRS Rules Part 1.	Priručnik o ispitivanju <i>Testing manual</i> LP 1742.3 ISO 10523 ISO 9963-1 ISO 9963-2 ISO 6332	(3)	
10.	Ispitivanje ljevačkog pijeska, vezivnih sredstava i kaluparskih mješavina <i>Testing of foundry sand, binders and mould mixtures</i>	CRS Rules Part 25.	Priručnik o ispitivanju <i>Testing manual</i> LP 1742.4 HRN B.B5.012	(3)	
11.	Metalografska ispitivanja metala i zavarenih spojeva <i>Metallographic testing of metals and welded joints</i>	CRS Rules Part 25.	EN 1321 EN ISO 945	(2)	
12.	Ispitivanje stručne sposobnosti zavarivača <i>Testing of welders ability</i>	CRS Rules Part 26.	EN 287-1 EN ISO 9606-2 EN ISO 9606-3	(2)	
13.	Ispitivanje postupaka zavarivanja i dodatnih materijala za zavarivanje <i>Testing of welding procedures and welding consumables</i>	CRS Rules Part 26.	EN ISO 15614-1 EN ISO 15614-2	(2)	
14.	Ispitivanje fizikalnih karakteristika boja za antikorozivnu zaštitu i abraziva za čišćenje čeličnih površina (volumni sadržaj suhe tvari, gustoća, vrijeme sušenja, adhezija, raspodjela veličine čestica, sadržaj soli) <i>Testing of physical characteristics of</i>	CRS Rules Part 1.	IMO res. MSC215 PSPC ISO 3233 ISO 2811-1 ASTM D5895 ISO 16862 ISO 2409 ISO 4624	(3)	

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	<i>anticorrosive protection paints and blasting abrasives (volume solids, density, drying time, adhesion, particle size, contaminants)</i>		ISO 11127 ISO 11125		
15.	Provjera pripreme površine i bojenja za antikorozivnu zaštitu čeličnih površina (stupanj čistoće, hrapavost, soli/prašina, mikroklimatski uvjeti, debljina filma, adhezija premaza, poroznost) <i>Quality control of surface preparation and coating application for corrosion protection of steel structures (de-rusting grade, blast profile, salts/dust, environmental conditions, DFT, adhesion, porosity)</i>	CRS Rules Part 1.	IMO res. MSC215 PSPC ISO 8501-1 ISO 8503-4 ISO 8502-6 ISO 8502-9 ISO 8502-3 ISO 8502-4 SSPC-PA2 ISO 16276-1 ISO 16276-2 NACE SP0188	(3)	
16.	Katodna zaštita žrtvenim anodama, mjerenje zaštitnog potencijala <i>Cathodic protection using sacrificial anodes, cathodic potential measurement</i>	CRS Rules Part 1.	SB 7439	(3)	

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SURVEILLANCE AUDITS

Annex II to Certificate no:

No. 02-001584/023242

Mandatory survey due period (+/- 3 months):

	1.	2.	3.
Due date:	2012-12-16	2013-12-16	2014-12-16
Date of survey:			
Name and signature:			
Seal:			

Raščlana

55.00

Zamjenjuje potvrdu

02-001219/022446 02-001220/022446 02-001221/022446 02-001222/022446
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