

DOCUMENT RISK ASSESSMENT

REV00_08/02/22



MINIMUM CONTENTS OF THE RISK ASSESSMENT PLAN FOR THE WORK PERFORMED ON SITE

The subject of work orders	Partial disassembly of the low voltage alternator M/V MSC LUCY		

Company name:	R.E.M. S.r.l.		
Address	Via Ferruccia 16/A		
City	Patrica	Province	FR

INTRODUCTION

This "Document Risk Assessment for activities which takes account of the "Interference Risk Assessment Document" (Law 123/07) is the document that this company complies with the requirements of risk assessment, identification of measures for prevention and protection, information and coordination relating to the contract or works contract, as defined in art. 26 of Legislative Decree no. 81/08, relating to work performed on the vessel MSC LUCY within the Gioia Tauro harbor

Within the plan are contained all the information about itself, its internal organization in the field of security and how to manage the work on board ships.

This plan contains the information about activities that the company will perform on this contract. In particular, stating:

- the types of activities carried out by the company: for each activity indicates the duration of the work and premises where the ship takes place;
- the name of all workers to be employed by the company: each employee is given the date of recruitment, the status inside the company and the training received;
- the list of equipment that the company will use during processing;
- the list of chemicals used during processing and the location of safety data sheets;
- the list of (P.P.E) used by workers of the company;
- the list of tables for the identification of risks by activity: complete tables are set out in 'Annex 3;
- activity sheets: the company has taken steps to fill out a card for each work, each card are shown in summary form, the work performed, the duration of the work, the equipment used and the workers employed.

This "Document Risk Assessment for activities in the pipeline" refers to the rev. 00 Of, the "Risk Assessment Document" prepared by the same company.

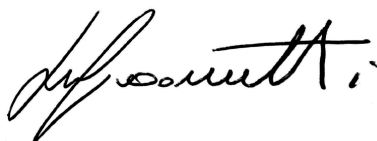
This company claims to be aware of regulations concerning safety and health at work and the internal regulations of Gioia Tauro harbor

The direction of the company ensures that its employees are adequately trained and informed, and using appropriate equipment to the task and comply with local regulations.

The document has 20 pages,

The RSPP Luca Giovannetti and Legal Representative approve, under her responsibility, the following document

Signature



Signature



R.E.M. S.r.l.
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C.F.P. Iva 02240470605 SDI MSUXCR1
CCIAA N. 138995 del 03.05.2002

IDENTIFICATION OF ROLES FOR THE PREVENTION AND PROTECTION OF WORKERS

The following table shows the names of workers required by the employer to perform the main roles defined by Legislative Decree no. 81/08, and the name of the employer's and the doctor instructed competent.

For each role is also given the training received by the worker.

Training Role Name	Name	(Type and location of training)
Head of Prevention and Protection	Mr. Luca Giovannetti	
Competent physician	Dr. Giancarlo Ciprietti	
Workers' Safety Representative	Mr. Angelo Lisi	
Emergency Management Coordinator	Mr. Ettore Roma	
Site Manager	Mr. Ettore Roma	

PRESENTATION OF THE COMPANY

PERSONAL DATA	
NAME:	R.E.M. S.r.l.
ADDRESS:	Via Ferruccio 16/A – 03010 Patrica (FR)
CITY: PROVINCE:	FROSINONE
Telephone No.: Fax N °:	+390775830116
E. MAIL:	Carlo.spaziani@rem-motori.it
LEGAL REPRESENTATIVE:	Adele Pace

PERSONAL PROTECTIVE EQUIPMENT (PPE)

This company claims that its staff, depending on the activity, has the appropriate personal protective equipment (PPE), and has been trained and informed about their use and maintenance of their efficiency over time.

The PPE are prescribed according to each job are identified and listed in the various technical assessment contained in Part II of this security plan.

Whenever significant additional risks related to the single order, the staff will be provided, prior to commencing operation of any additional PPE.

SUBCONTRACTOR

☒ We declare that the company has no intention of subcontracting.

☐ The contractor has included in this plan, all information relating to work performed by subcontractors, and that I treat the relationship with subcontractors such as reported .26 Art of Legislative Decree no. 81/08 and subsequent amendments. The company reserves the right to add, during processing, further sub-contractors, in which case, is committed to prepare a new revision of this plan, enter all the information about the new companies, and submit themselves to the assessment of the client, before carry out the work subcontracted.

☐ The company reserves the right to use subcontractors as a result, in which case, is committed to prepare a new revision of this plan, enter all the information about the new sub-contractors, and submit themselves to the assessment of the client, before running subcontracted work.

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LIST OF WORKERS

The following list refers to all workers who are engaged in work performed by the company.

The assignment of an employee to each specific activity is carried out in the tabs in Annex I.

WORKERS LIST			
WORKER NAME	DATE TITLE COMPANY	EMPLOYMENT	TRAINING RECEIVED
ETTORE ROMA		specialized electric motor technician	Cfr. risk assessment company form
AMEDELO LISI		specialized electric motor technician	Cfr. risk assessment company form
NAME OF SITE MANAGER ETTORE ROMA		TELEPHONE +39	

FIRST AID

During the work on board for contracts, the company is able to handle the initial first aid related to their staff, then will have the support of the crew. Therefore, the employer of the company in question has designated the workers in charge of emergency services on board COSTA DIADEMA (Customer); least one of these workers is always present in the workplace. The names of these workers is shown in the table below.

The employer in every workplace provides a first aid kit or a package of medication, as reported in DM July 15, 2003, No 388.

NAME	TYPE OF TRAINING RECEIVED
ETTORE ROMA	Cfr. risk assessment company form

EQUIPMENT LIST

The following list shall include the electrical and pneumatic work equipment (including systems for intake / extraction), except for equipment for lifting loads, listed in a separate sheet.

TYPE	CONSTRUCTION EQUIPMENT YEAR	CODE	Marked EC
MANUAL TOOLS		L1	XSI NO
ELECTRICAL CABLE TESTER		L2	XSI NO
NETWORK CABLE TESTER		L3	XSI NO
PERSONAL COMPUTER		L4	XSI NO
PORTABLE ELECTRICAL TOOLS		L5	XSI NO
ELECTRIC DRILL		L6	XSI NO
GRINDER		L7	XSI NO
WELDING MACHINE		L8	SI NO
Hoists, oxyacetylene torches with cylinders with torches and regulators and safety valves will be used In addition, manual hydraulic pistons, perhaps battery-powered whisks, ceramic felt can be used to protect the alternator winding if we will use torches for desoldering.			

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In addition, manual hydraulic pistons, perhaps battery-powered whisks, ceramic felt can be used to protect the
alternator winding if we will use torches for desoldering.









The following list included all equipment and accessories used for the handling of loads such as, for example, hand hoists, chains, slings of fabric etc. ...

TYPE	CONSTRUCTION EQUIPMENT YEAR	CODE	Marked EC
HOIST		S1	SI NO
CART		S2	SI NO
			SI NO

LIST OF CHEMICALS

Within the following table are included all chemicals used by the company during the work.

A copy of the MSDS for each chemical product (prepared in accordance with Art. 25 of Legislative Decree 52/97 and art. 13 of Legislative Decree no. 65/03) is available, before using the product at the edge ' Office of Plant Protection and Prevention.

TYPE OF PRODUCT	P.P.E TO BE USED	SAFETY DATA SHEETS
	   	YES
	   	YES / NO

P.P.E LIST USED

The following list included all Personal Protective Equipment used by the workers of the company.

P.P.E		
TYPE	CODE	MODEL
HELMET	D1	
GLOVES FOR MECHANICAL RISKS	D2	
DUST MASK	D3	
GOGGLES	D4	
SAFETY SHOES	D5	
OVERALL	D6	
MULTIGAS DETECTOR	D7	
SAFETY HANRESS	D8	
HEADPHONE	D9	

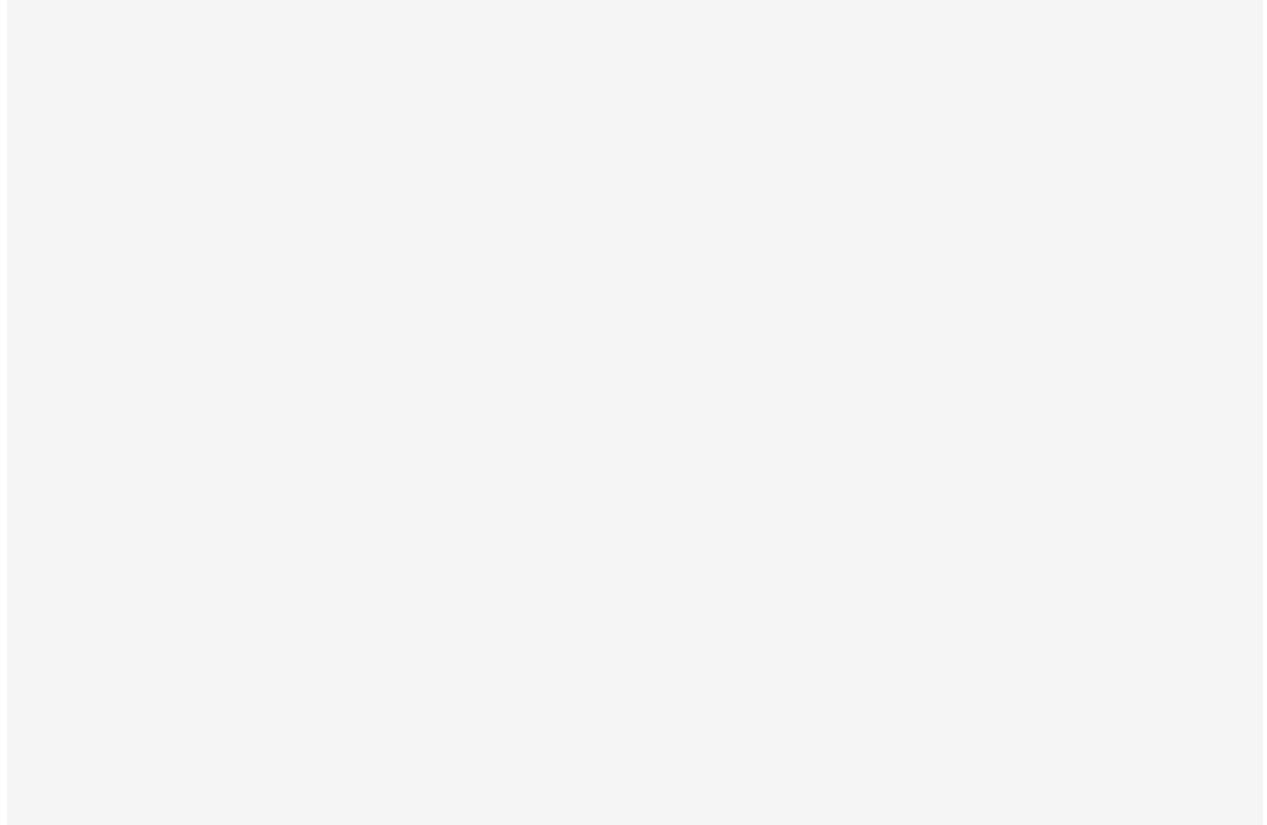
TABLES FOR RISK IDENTIFICATION OF ACTIVITIES

The following tables list the identification of risks to activity, reported as a copy of the inside of the 'Annex 3, (SAMPLE) is the list of activities that the company will carry on board.

Tables identify the risks for activities		
Number	Activity	Applicability
01	Carpentry and joinery	<input type="checkbox"/> SI <input type="checkbox"/> NO
02	Nailing	<input type="checkbox"/> SI <input type="checkbox"/> NO
03	cleaning tank, lockers and bilges	<input type="checkbox"/> SI <input type="checkbox"/> NO
04	thermal insulation	<input type="checkbox"/> SI <input type="checkbox"/> NO
05	upholstery, curtains, sails, furniture	<input type="checkbox"/> SI <input type="checkbox"/> NO
06	Manufacturing of piping	<input type="checkbox"/> SI <input type="checkbox"/> NO
07	Masts, radio antennas, radar	<input type="checkbox"/> SI <input type="checkbox"/> NO
08	Manufacturing of electrical	<input checked="" type="checkbox"/> SI <input type="checkbox"/> NO
09	Grinding, sanding, drilling	<input type="checkbox"/> SI <input type="checkbox"/> NO
10	Handling of loads	<input type="checkbox"/> SI <input type="checkbox"/> NO
11	Sand	<input type="checkbox"/> SI <input type="checkbox"/> NO
12	workers with welding machine	<input type="checkbox"/> SI <input type="checkbox"/> NO
13	Soldering	<input checked="" type="checkbox"/> SI <input type="checkbox"/> NO
14	disassembly, mechanical assembly	<input checked="" type="checkbox"/> SI <input type="checkbox"/> NO
15	Stripping, plastering, painting, cementing	<input type="checkbox"/> SI <input type="checkbox"/> NO

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Tables identify the risks for activities		
Number	Activity	Applicability
16	marking out, scraping, brushing, dismantling mantles	<input type="checkbox"/> SI <input type="checkbox"/> NO
17	Working with fiberglass	<input type="checkbox"/> SI <input type="checkbox"/> NO
18	Use of chemicals	<input type="checkbox"/> SI <input type="checkbox"/> NO
19	Using pneumatic equipment	<input type="checkbox"/> SI <input type="checkbox"/> NO
20	Work at height	<input type="checkbox"/> SI <input type="checkbox"/> NO
21	Working with electrical equipment in hazardous voltage (50V) <input type="checkbox"/>	<input type="checkbox"/> SI <input type="checkbox"/> NO
22	Noise	<input checked="" type="checkbox"/> SI <input type="checkbox"/> NO



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ANNEX I

JOB SCHEDULE

JOB SCHEDULE N° 1 OF THE COMPANY R.E.M. S.R.L.

Activity: Partial disassembly of the low voltage alternator

VISUAL INSPECTION

- insulation check

DISASSEMBLY

- bushing disassembly
- disassembly of the shield on the opposite drive side
- disconnection and disassembly of the connection ring
- Execution of cuts or desoldering of some winding terminals
- transport of the disassembled ring for reconstruction

Place of work: ER

Duration of activity: 10-11/02/2022

LIST OF WORKERS EMPLOYED:

CONSTRUCTION MANAGER:

ETTORE ROMA

NAME	L _{EX}	NAME	L _{EX}
ETTORE ROMA			
AMEDEO LISI			

MAXIMUM NUMBER OF WORKERS EMPLOYED AT THE
SAME TIME

1

SIGNS USED BY COMPANY

TABLES FOR RISK IDENTIFICATION OF ACTIVITIES

<input type="checkbox"/> 01 - - Carpentry and joinery Soldering	<input type="checkbox"/> 07 - Masts, radio antennas, radar	<input type="checkbox"/> 13 - Soldering
<input type="checkbox"/> 02 - Nailing assembly	<input type="checkbox"/> 08 - Working on electrical systems	<input type="checkbox"/> 14 - disassembly, mechanical
<input type="checkbox"/> 03 - cleaning tanks, lockers and bilges	<input type="checkbox"/> 09 - Grinding	<input type="checkbox"/> 15 - Stripping, plastering, painting
<input type="checkbox"/> 04 - Thermal insulation brushing, dismantling mantles	<input type="checkbox"/> 10 - Handling of loads	<input type="checkbox"/> 16 - marking out, scraping
<input type="checkbox"/> 05 - - upholstery, curtains, sails, furniture Fiberglass	<input type="checkbox"/> 11 - Blasting	<input type="checkbox"/> 17 - Working with fiberglass
<input type="checkbox"/> 06 - - Processing of piping	<input type="checkbox"/> 12 - Noise	<input type="checkbox"/> 18 - Working at height

RISK IDENTIFICATION TABLES - TABLE N ° 08

DESCRIPTION OF WORK	WORKING ON ELECTRICAL DATA PROCESSING	DATE
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The work on electrical systems include all activities related to machinery, components of the electrical system and, in general, electromechanical works including:

- assembly / disassembly, overhaul of electrical components (panels and distribution boards, switchboards, etc.).
- assembly / disassembly, overhaul of electrical equipment (alternators, generators, converters, transformers, etc.).
- assembly / disassembly, battery connection;
- assembly / disassembly, component overhaul of electronic equipment (automation panels, electronic devices, etc..)
- assembly / disassembly, overhaul equipment and cabling (electricity, communications, signal strength, etc..).

Machines and electrical and electronic equipment are reviewed in the special workshop of land where all operations are performed, so the work done on board are generally related to the disconnection, dismantling, unloading, and, upon completion of revisions, re-embark on , mounting, connection and testing of same.

For some electrical equipment (alternators, dynamos, transformers, motors of large size) the audits can be carried on board are summarized in on-site dismantling, cleaning solvents with dielectric and maintenance or replacement of terminal blocks, terminal blocks and internal connections between the windings , brushes and brush holders, etc. ..

Work on electrical installations are carried out on board and consist of the removal, preparation, replacement of cables and accessories, with ancillary operations of the stirrups, walkways and ponds bridge bulkhead, etc..

In working on electrical systems can be distinguished more specifically the following:

- handling and preparation of equipment, materials and products;
- examination of the technical documentation, diagrams, etc..

- dismantling, unloading, embarkation and replacement of equipment associated with mechanical handling equipment;
- wiring construction operations, including welding of brackets and bayonets and cut sheets for which please refer to the respective boards of processing;
- assembly / disassembly of electrical and electronic components (panels and distribution boards, switchboards, etc.).
 - powered ship operations and equipment / plants live;
 - operation of electronic devices, electromechanical, etc..;
 - ancillary operations such marking, insulation tests, etc..
 - clean and tidy workspace.

MAIN TYPES OF THESE RISK DURING THE PROCESS



PROTECTION AND SECURITY PREPARATIONS FOR USE



BASIC RESTRICTIONS



SIGNS OF HAZARDS IDENTIFICATION

The signs listed below may be exposed in specific situations described below



TABLE NO. 08 - WORKING ON ELECTRICAL SYSTEMS


N°	Most cases	Case secondary	Danger	prevention measures and instructions	P.P.E.
1.	<p>1. Working on electrical systems.</p> <p>NOTE: This line indicates the problems are common for all manner of performance and specifications for all operations that characterize the workings of electrical systems regardless of the particular conditions (such conditions are below referred to as secondary causes).</p>	All those associated with processing of electrical systems	All those listed above and / or as a result of work	<p>undertaken sure in the immediate vicinity and to evaluate their compatibility (see compatibility matrix)</p> <p>Do not touch any plant (pictures, cables ... etc.) or electrical equipment without the authorization of the crew.</p> <p>NOTE: These instructions will not be repeated in later</p>	 <p>NOTE: These instructions will not be repeated in later</p>

TABLE NO. 08 - WORKING ON ELECTRICAL SYSTEMS





N°	Most cases	Case secondary	Danger	prevention measures and instructions	P.P.E.
2.	Working on live elements (not ship).	Direct or indirect contact with live elements.		<p>Forbidden to enter the segregated zones, identified by appropriate signage and tape white / red, inside of which are currently working on live elements.</p>  <p>Pay attention to warning devices or cables or voltage with a voltage higher than security (50 V).</p>  	-

TABLE NO. 08 - WORKING ON ELECTRICAL SYSTEMS






N°	Most cases	Case secondary	Danger	prevention measures and instructions	P.P.E.
3.	Working on live elements (powered ship).	Direct or indirect contact with live elements.		<p>In the case of a ship powered, all cadres and all plants must be considered in tension; any paintings or installations not in tension will be marked with appropriate signage. Forbidden to enter the segregated zones, identified by appropriate signage and tape white / red, inside of which are works in progress or evidence of live elements or panels open.</p> 	-
4.	Working or evidence of plant or equipment in tension.	Overheating of equipment. Presence of combustible material.	 	<p>No smoking inside the naval units.</p> 	-

TABLE NO. 08 - WORKING ON ELECTRICAL SYSTEMS








N°	Most cases	Case secondary	Danger	prevention measures and instructions	P.P.E.
5.	Working or evidence of plant or equipment in tension.	Overheating of equipment.		<p>Forbidden to enter the segregated zones, identified by appropriate signage and tape white / red, inside of which are works in progress or evidence of live elements in tension or open square.</p>  <p>Be careful of hot surfaces marked by appropriate signage.</p> 	-
6.	Using hand tools such as screwdrivers, wrenches, etc. ... The risks are mainly on the hands.	Presence of sharp edges.		Do not touch the equipment owned by other companies. -	-

TABLE NO. 08 - WORKING ON ELECTRICAL SYSTEMS

N°	Most cases	Case secondary	Danger	prevention measures and instructions	P.P.E.
7.	The use of certain work equipment could result in the achievement of a high noise level, greater than 90 dB (A). -	-		No access, transit and / or park areas or near the premises where the noise level exceeds 90 dB (A) (indicated by appropriate signage). 	
8.	Use of chemicals (adhesives, solvents, catalysts, primers etc. ...).				
9.	Use of pneumatic tools				
10.	Work at height				