RISK ASSESSMENT DOCUMENT

In accordance to Legal notice 36 of 2003 "General provision for health and safety at work places"

Branch: **Industrial Estate**

Hal Far HF 51

Malta

Rev. and Date: **rev. 00 of 11/11/2013**

1. AIM OF THE DOCUMENT

This Document synthesizes the whole system of operations necessary to make an assessment of risks that can compromise safety and health of all workers employed in the area object of the analysis. The improvement actions have been planned and included in this Document.

The aims of the document, which meets the requirements according with art. art. 10 of Legal Notice 36 of 2003 "General provision for health and safety at work place regulations" and following obligation of the employer pursuant to art. 5 of Legal Notice 36 of 2003, are to highlight the risks present on site and / or at work, explain the preventive measures taken in relation to the identified risks, plan to reduce the residual risks and encourage interaction between those in charge of prevention, monitoring and improvement of safety.

The risk assessment was carried out by the employer in collaboration with Prevention and Protection service.

Birzebuggia, 31/07/2013

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Employer – Mr Simone Ferlin

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Protection and Prevention Service Manager – Mr Massimo Danzinelli

2. METHOD OF ISSUE/REVIEW OF THE RISK ASSESSMENT DOCUMENT

The activity hazard analysis and risk assessment is carried out, as prescribed by law and by this procedure, in occurrence of:

- Creation of new production facilities, technical, ancillary facilities or following their substantial changes;
- Development of new products with characteristics different from those for which it was conducted the previous analysis;
- Introduction of new raw materials, semi-finished;
- Organizational changes or introduction of new tasks or the introduction of new types of atypical contracts.

The risk assessment will be immediately revised as prescribed by art. 10 Section 4 of the LR 36 of 2003 on occasion of changes to the production process or to the organization of work relevant for the health and safety of workers after improvement of technique, prevention and protection or following significant accidents or when health surveillance demonstrates that is necessary. At the end of the risks assessment, the Safety Manager prepares the Risk Assessment Document (RAD), which is approved and issued by the Employer.

3. COMPANY ORGANIZATIONAL STRUCTURE

3.1 MASTER OF THE PRODUCTION UNIT

Company Name	**STERLING CHEMICAL MALTA LTD**
Headquarters	**4, Dimech Street - Floriana FRN 1504 - Malta**
Production Plant	**HF51, Hal Far Industrial Estate – BIRZEBUGGIA BBG3000 - Malta**
VAT ID	**MT16941304**
Company Registration Number	**C.35208**
Employer	**FERLIN SIMONE**
Activity Sector	**Production of basic pharmaceuticals**

3.2 DESCRIPTION OF H.E.G.s (Workers Homogeneous Exposure Groups) AND COMPANY ACTIVITIES

H.E.G.s	HOMOGENEOUS ACTIVITY AREA	WORK PHASES	WORKING HOURS
Office clerk	Office	Preparation and revision of documents, purchase and sale of material.	8-13/14-17
Technician employee	Offices and supervision of all areas	Main activity in office and, occasionally, supervision of activities in all departments.	8-13/14-17
Technician-production employee	Offices and supervision of all areas	Main activity in office, supervision of activities in all departments and sampling of products.	8-13/14-17
Production supervisor	Production, warehouse and laboratory	Management of plant equipment, management of production staff, compilation of production documentation, monitoring and control of the production plant.	6-14, 14-22 and 22-6
Production operator	Production and warehouse	Direct use of the equipment and substances in accordance with the plant operating instructions and operating procedure. Management of waste	6-14, 14-22 and 22-6
Warehouse operator	Production and warehouse	Warehouse management, sampling of intermediate products, finished products, raw materials and packaging materials. Management of waste	8-13/14-17 or 6-14 and 14-22
Maintenance operator	All the areas	Assigned to various maintenance operations within the plant, small electrical work, control, operation tests and replacement of plant components.	8-13/14-17 or 6-14 and 14-22
Laboratory technician / analyst / responsible	Laboratory	Qualitative and quantitative analysis of pharmacologically active substances, analysis and approval of inbound, outbound, intermediate products and external samples, documentation laboratory management.	7-13/14-17 or 6-14 and 14-22

Currently Sterling Chemical Malta Ltd. does not have a number of employees enough to cover all the job tasks for this reason it recurs to the use of employees of Sterling S.p.A. For the risk assessment is considered necessary not to assess the risks of interference but assess the risks arising from the work done in the plant overall. For this reason, employees of Sterling Chemical Malta Ltd. and Sterling S.p.A. are evaluated overall regarding the definition of HEGs and assessment of associated risks. In the near future Sterling S.p.A employees will be completely replaced by Sterling Chemical Malta LTD employees.

3.3 SPECIAL TASKS THAT INVOLVE SPECIFIC RISKS

The following special tasks subject workers to specific risks:

Task	Specific risks	Required competences
Assigned work at height	Fall from height, fall of material, bumps, bruises, wounds	Training and information on the risks arising from working at height. Information, education and training on the use of PPE category 3 (belts, harnesses, helmets). Education about the risks of alcohol and drug addiction in the workplace.
Employees that use to drive forklifts	Investment, overturn, overthrow, falling load	The use of forklift is assigned only to qualified, licensed and certified personnel. Education and training on risks derived from driving and about prevention and protection measures. Employees are informed about the prohibition of use of alcohol and drugs. Use appropriate PPE.
Welders	Artificial optical radiation, Non-ionizing radiation, burns	The use of welder is assigned only to qualified, licensed and certified personnel. Training and information on the risks arising from the use of equipment and about prevention and protection measures.
Workers in electrical work	Electric shock, fire, burns	Nomination and authorization to carry out the work after education and specific training
Conductors, steam generators	Fire, burns	Possession of a license for their use.
Workers who may use toxic gases	Handling and exposure to toxic gases	Training and information on the risks arising from handling toxic gases. Information, education and training on the use of PPE 3° category. License for manipulation.
Workers who may use carcinogenic substances	Exposure to inhaled carcinogens and mutagens	Training and information on the risks arising from the manipulation of carcinogenic substances. Information, education and training on the use of PPE 3° category. Registered in the exposure to carcinogens register.

4. DESCRIPTION OF THE STRUCTURE AND OPERATIONAL PROCEDURE

The industrial area is developed in an area with a number of other companies manufacturing active pharmaceuticals ingredients and finished pharmaceuticals already present in close proximity to the site. The figures below show the exact location on the map. The total area is about 3295 sq. meters. The building will be a brand new construction in order to satisfy all the regulatory and company requirements. This is already covered by MEPA Permit reference PA4236/08.

The factory is built in accordance with the KNPD 2006 guidelines with the accessibility for disabled restricted to the offices building. Access to the building will be via a main entrance doorway at road level or internally via the car park. The various levels are accessed by means of a passenger lift satisfying the KNPD criteria.

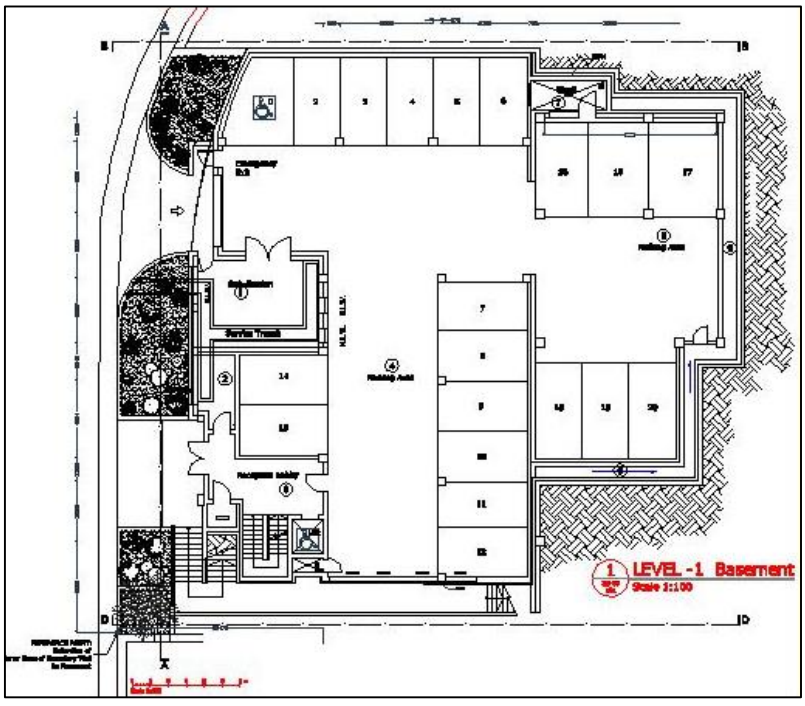
4.1 DESCRIPTION OF THE BUILDING

The premises is constructed as a single building covering a total of 3295 square meters.

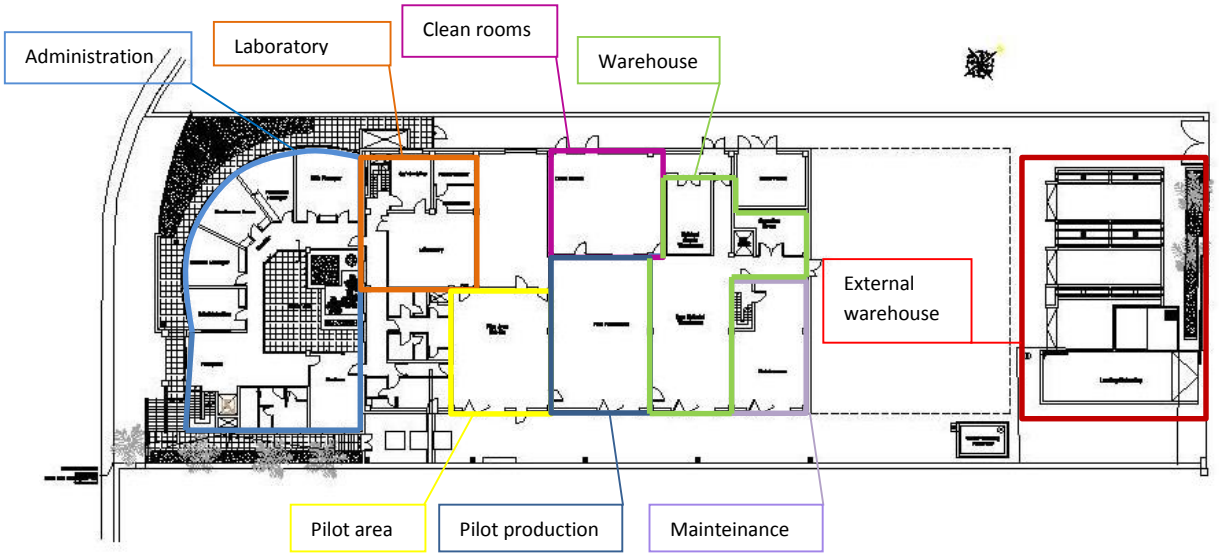
In the building can be identified two areas, administrative and operative.

Administrative area	***Operative area***
Underground floor	
• 20 parks (+ 1 disabled) • 1 substation room • 1switch room	-
Ground floor	
• 4 offices • 1 conference room • 1 canteen • 3 toilets (gents, ladies, disabled) • 1 court yard	• R&D/QC office • R&D/QC lab • Stability chamber room • Weighing room • Lockers for labs (gents and ladies)

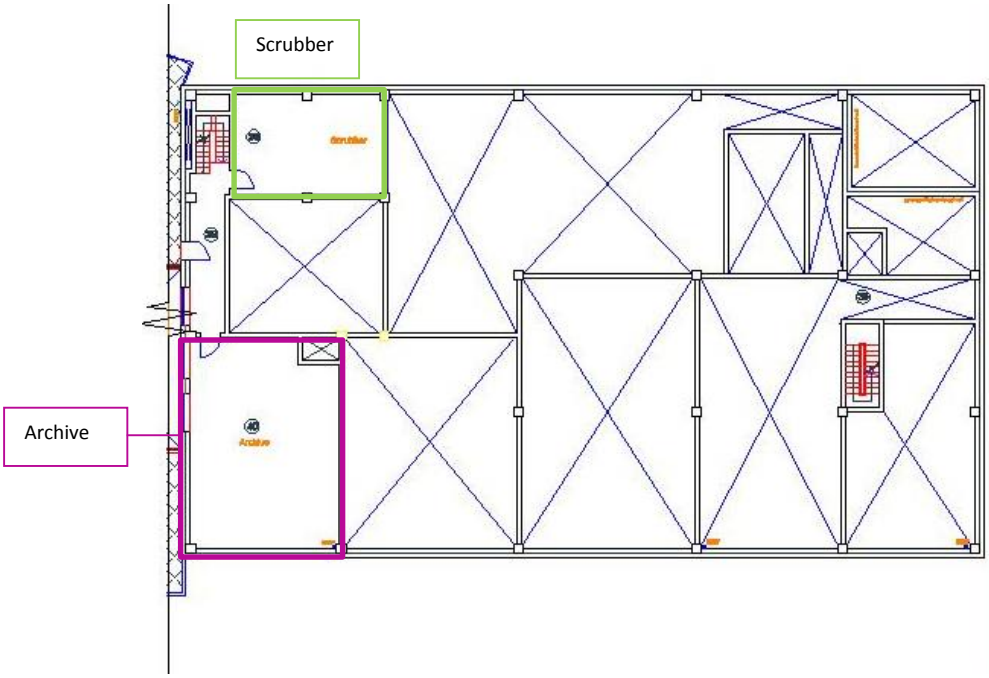
	• Toilets for labs (gents and ladies) • Lockers for production • Toilets for production • Pilot area set up • Pilot production • Clean rooms • Boiler room • Sampling room • Maintenance area • Warehouse area • Finished goods warehouse
First floor	
• 1 office	• Archive (not yet set up) • Scubber room
Second floor	
	• R&D office (not yet set up) • R&D laboratory (not yet set up) • Pilot plant area (not yet set up) • Utility plant area • Mainteinace office (not yet set up)



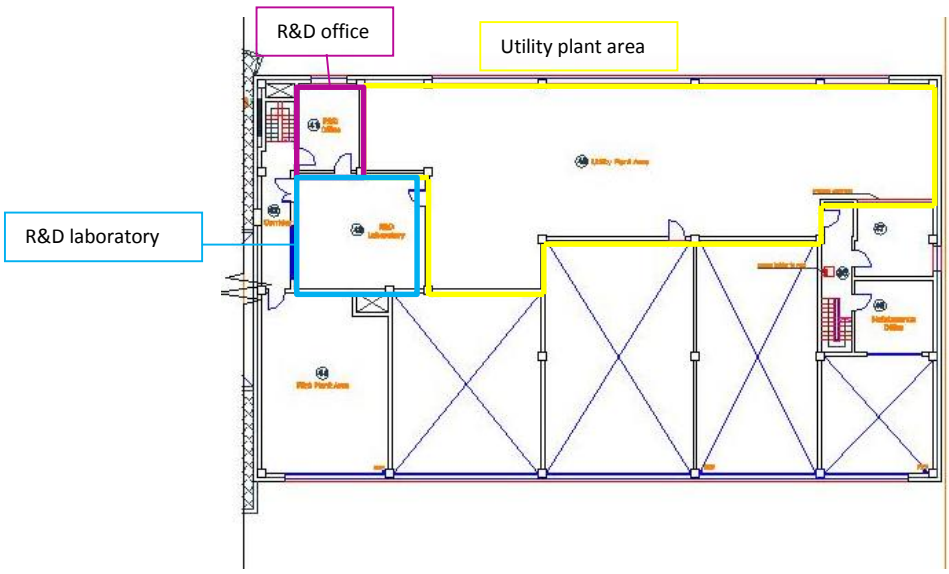
Basement layout



Ground floor layout



Second floor layout



Third floor layout

4.2 DEPARTEMENTS

4.2.1 OFFICES

The office area will include:

Offices
Ground floor
• The necessary administrative space (offices, boardroom, etc. associated with the plant activities) • Toilet, locker and washing facilities for administrative personnel • Canteen • Reception area • Elevator from the underground parking • Stairs from the underground parking
First floor
• Administrative space

Depending on the office, following activities are carried out:

- Document processing,
- Design and planning of equipment, maintenance management,
- Management of orders, customers and shipments,
- Economic - financial and administrative management,
- Accounting and fiscal management.

The used devices are:

- Printer,
- Copier,
- Computer,
- Telephones.

4.2.2 PARKING

A car park at street level is provided catering for 21 parking spaces including one for exclusive use by persons with disability as per KNPD guidelines. Total number of employees envisaged is 20 persons which will be spread out in two shifts such that at any one time the maximum number of employees on the premises will be 15. Two spaces are being reserved for visitors.

4.2.3 LABS

The R&D lab evaluate and define new processes from a synthetic, regulatory, analytical methods and patent situation point of view. The QC lab test and release the raw materials and intermediates for internal use as the finished products.

Labs
Ground floor
At this time lab at the ground floor is dedicated both to R&D and to QC
Second floor
New labs will be activated in second floor and it will be used as R&D only.

The following are pieces of equipment used for the control of intermediates and finished products:

- AGILENT HPLC
- AGILENT GC with headspace
- METTLER TOLEDO Karl Fisher
- METTLER TOLEDO Analytical Balance
- VACUCELL VACUUM OVEN
- METTLER TOLEDO pH Meter
- SONICA Ultrasonic Bath
- HEIDOLPH Rotary Evaporator
- HACH Electrical Conductivity Meter

4.2.4 UTILITIES AREA

The technical areas hold the auxiliary equipment needed for office air conditioning, labs aspirations, scale up plant utilities, production units utilities, finishing area utilities. The following operations are going to be performed in this area:

a. Hose connection (in technical areas)
b. Maintenance operations

Adequate ventilation, air filtration systems have been constructed to minimise risks of contamination and cross-contamination and include equipment for control of air pressure, humidity and temperature.

- HVAC System

The HVAC system for the production line consists of several Air Handling Units. These rooms are defined as unclassified since only intermediates are manipulated in these areas and all the operations are confined within the equipment.
The HVAC system in relation to finishing rooms (ISO 8) consists of several Air Handling Units. No air recycling occurs in any of these rooms. The doors are equipped with traffic signal lights for the verification of pressure differentials and doors lock automatically if the inside pressure is not within the required range. All Air Handling Units are controlled through a single control panel.

- Water

For the purpose of chemical synthesis, potable water is procured directly from the government supply system, through the Water Services Corporation, at the time of use. Periodically, a sample of the water used in chemical synthesis is taken from a reactor and analyzed for compliance with local legislation in terms of chemical and microbiological properties.

Moreover, potable water is employed in a closed system, separate from the chemical reaction. This water is combined with ethylene glycol and cooled to temperatures of 5°C and -25°C in two separate water tanks. It is flushed into reactors' outer sleeves in order to control their temperature.

- Compressed air

The compressed air does not come in contact with the product, but it is only necessary to empty the reactors sleeves or for the pneumatic transmission lines of the control system.

COMPOSITION:

750 l tank

MAIN CHARACTERISTICS:

Max operation pressure = 8 bar

Operation pressure = 6 bar

Fluid = Air

- Liquid Nitrogen Tank

COMPOSITION:

Tank purchased from Multigas Ltd.

Capacity 18000 l

Operation pressure = 25 bar, decreased to 3 bar

Safety valve pressure = 25 bar

4.2.5 PRODUCTION PLANT

Production plant is divided in two areas:

- Production
- Finishing area

Production
The production plant function is to synthesize and purify Active Pharmaceutical Ingredients and intermediates. Following operations will be performed : • Solid loading through vacuum or hatch • Loading from other reactors, hose connection • Addition/dosing of liquids • Distillation/reflux control and unloading • Atmospheres (nitrogen, vent, vacuum) operation • General inspection of the contents of reactors and some local indicators • Reactor unloading, to filters, centrifuges other reactors and drain, hose connection • Liquid-liquid separation • Pumping and filtration/purification operations, hose connection.
Finishing area
The Finishing area function is to isolate and dry Active Pharmaceutical Ingredients and intermediates. Following operations will be performed: • Centrifuges and filter loading control, hose connection • Change of filtrating media in centrifuges • Change of exhaustion sleeve filters in filters • Filtered cake washing • Centrifuge and filter discharge to drums • Loading from drums to driers

- Discharge from driers to drums
- Weighing and sampling of drums

A single production line is currently active, basically divided into two zones. The first area is dedicated to the transformation of raw materials into intermediate or finished products, the second zone is a finishing zone and here there will take place the operations of drying the product or the intermediate as well as packaging.
The production plant of active pharmaceutical ingredients is constituted as a whole of three distinct sections and a fourth type of equipment of mobile type.

1) *Production:* is the section that includes the production units and it is constituted by two reactors
2) *Finishing:* the section is used as drying and packaging of products
3) *Auxiliary equipment*: all equipment are in support of the production, which are not included in the three previous sections.

Production

The department is divided into two levels because of the presence of a metal structure that acts as both the upper floor from which the support frame for units of reaction incurred through special lateral supports welded to the mantle.

R-2201 M
Reactor in carbon steel enameled inside volume of 4390 l with design pressure between -1 and 6 barg and design temperature between -25 ° and 200 ° C.
The plaster bond is connected to the water circuits of heating and cooling fluid.

R-2301 M
Reactor in carbon steel enameled inside volume of 2340 l with design pressure between -1 and 12 barg and design temperature between -25 ° and 200 ° C.
The plaster bond is connected to the water circuits of heating and cooling fluid.
In correspondence of the top, the reactor is connected to a dripper reservoir.

R-2401 M
Reactor in carbon steel enameled inside volume of 335 l with design pressure between -1 and 6 barg and design temperature between -25 ° and 200 ° C.
The plaster bond is connected to the water circuits of heating and cooling fluid.
In correspondence of the top, the reactor is connected to a dripper reservoir.

LR-01M
Borosilicate glass reactor of 10 l volume with a design pressure of between -1 and 0.5 barg and design temperature comprised between -15 ° and 180 ° C.
The plaster bond is connected to the water circuits of heating and cooling fluid.
In correspondence of the top, the reactor is connected to a dripper reservoir.

LR-02M
Borosilicate glass reactor of 5 l volume with a design pressure of between -1 and 0.5 barg and design temperature comprised between -15 ° and 180 ° C.
The plaster bond is connected to the water circuits of heating and cooling fluid.
In correspondence of the top of the reactor is connected to a dripper reservoir.

Finishing

The solid and wet product downloaded from filters is transported in finishing area where is dried and packaged in proper drums to be stored in the finished products warehouse.
The whole area is conditioned through a dedicated air handling unit that is constituted of input, distribution and ejection sections. The drying takes place in a static dryer steel AISI 316 operating vacuum. The wet product is placed on trays resting on the horizontal surface of the stoves.

Auxiliary equipment

These devices consist of all those machines on wheels, or otherwise mobile, necessary to the running of the plant, such as:

- filters,
- reactors,
- pumps,
- balances,

equipment needed for logistics or transportation services, such as

- transpallet,
- forklift.

Operative procedures

All operations are performed in the plant as described in the batch record instructions in accordance with the procedures P.SOP and can be summarized in principal points from which the real activities develops, in particular:

1. Load solid / liquid from hatch and withdrawal samples for process control:

   Before starting this operation workers must wear the personal protective equipment provided, then check that the reactor in which the raw material should be loaded is at atmospheric pressure and then place the mobile aspiration hood, supplied to each reactor, and open it. Therefore the hatch is opened, a light stream of nitrogen flows proceeding to load or take samples, through a special tool consisting of a rod end with a glass. Alternatively, it's possible to take sample by inserting the probe into the specific valve or pipe fitted on a flange of the reactor, then pour the mass drawn in a special bottle to be labeled. These operations should be operated very fast in order to close as soon as possible the hatch;

2. Load the solvent on the reactor by empty stem pump: In this case it is necessary to isolate the reactor from the outside by closing all possible air holes leaving opened only the valves on the load line. Then the equipment is reclaimed from oxygen and is opened the water discharge valve on the tube beam and the reactor is put in circulation, the mobile aspiration hood is put in the vicinity of the cap of the tank to be emptied, grounding is connected, the cap of the stem / tanker is replaced with the one provide with hole for the suction tube, is inserted the suction tube provided with tri-clamp connection and it is fixed to the cap, then the suction tube is connected by a flexible pipe to the load line of the reactor or of the dripper, also connecting through rilsan tube, the side of the suction tube to the low pressure nitrogen valve. At this point the pump is switched on to constantly verify the presence of

flow constantly and it is turned off once the liquid has come into the reactor. The pump and its discharge valve are turned off at the same time proceeding to disconnect the suction equipment at last.

3. Centrifugation: This is done by inserting a filter bag in the drum of the centrifuge and, after closing the hatch of the same by means of hooks, it is possible to connect the bottom pipe of the reactor to the loading of the centrifuge leaving the cargo valve opened. Then the centrifugal pump is connected to the tank waste through a flexible tube, the suction nozzle is placed in proximity of the opening and after inert system, the engine of the centrifuge is started. After the centrifugation, the product is discharged through a valve located on the centrifuge so as to properly form the panel, in this case the wastewater is discharged triggering a pump that leads the liquid in the mobile tanks to be sent the appropriate external deposit.

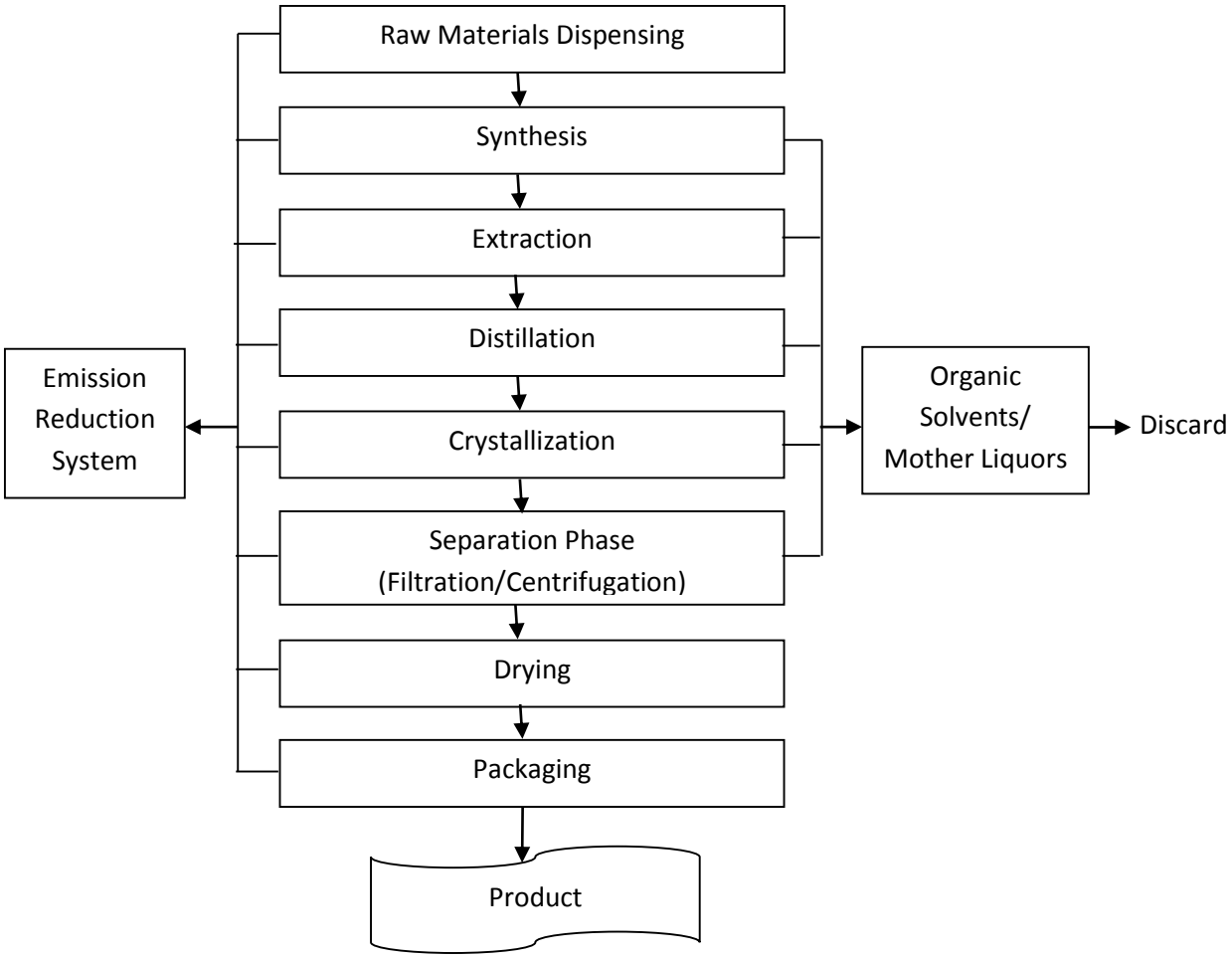
4. Filtering: Whether is necessary to perform the filtering operation, Buckner filter is connected, by a flexible tube, to the vacuum opening on the wall or to the load line dripper, the appropriate filter paper is inserted inside the machine and, closed the lid with hooks, the bottom valve of the reactor is connected to the entrance of the Buckner lid through a pipe of adequate length while opening the ball valve on the discharge line of the reactor and finally that one of the bottom. After the operation, the panel is squeezed closing the bottom valve of the reactor, the mother liquors are discharged by connecting the Buckner bottom valve to the booster pump and then to the storage tank. To wash the panel, the Buckner lid is removed, vacuum is recreated, one of the mobile suction ports is approached and then the panel is cleaned up with a scoop, at this point the cleaning solvent is poured on the panel and the discharged in portable tank. This tank is labeled and transported into the temporary waste storage.

5. Drying: The drying operation of the product is carried out in the finishing local though stoves that are activated by activating the thermostat jacket of the dryer in the technical room. The vacuum pump is turned on, then the collector valves are opened in order to put in communication the pump with the dryers. The value of the pressure measured on the gauge located on the dryer is checked time to time as well as is verified that the air valves are openable in the event of overpressure.

The manufacturing instructions for the different products are contained in the Master Production Record that is the original document that contains all the necessary information. Each process or process phase corresponds to a Master that contains in particular:

- List of weights;
- Directions of manufacturing;
- Directions of process;
- Weighing and sampling sheet;
- Weighing sheet

For more information, it is possible to consult the quality assurance system procedures and the operating directions of the safety management system



4.2.6 STORAGE AREA

The manufacturing facility contains three warehouses: one for the storage of raw materials, one for the storage of finished products and an external warehouse for the storage of flammable materials.

Raw Material warehouse
The Raw materials warehouse function is to stock at a controlled temperature all the raw materials. The raw materials product storage holds drums/containers of solid product in pallets stored in shelves at up to six levels.
Finished products warehouse
The Finished products warehouse function is to stock at a controlled temperature all the finished product and intermediates. The finished product storage holds drums/containers of finished solid product in pallets stored in shelves at up to six levels.
Sampling/weighing room
Sampling/weighing operation is performed in this area. The area must be well ventilated to avoid smells and noxious vapors concentrations. The area must be kept at room temperature, avoiding hot excursions affecting product.
Outdoor storage area
This area is going to be covered by a stable roofing. Temporarily this area is covered by a canopy.

Outdoor warehouse is operative to serve the active production plant

Operative procedure

Sampling

The sampling of incoming materials, intermediates and finished products is conducted in defined locations (Weighing Room/Drying Area) according to procedures designed to prevent contamination of the material sampled and contamination of other materials.

Procedures CQ.SOP.003 "Sampling Methods" and CQ.SOP.003/SOI.01 "Sampling" define in detail the sampling methods employed by the manufacturer.

Only one product is handled with any given moment.

Quarantine

M.SOP.003 ("Management of Batch status") defines the procedure for the proper management of all batches of Raw Materials, Intermediates, Finished Products and Packaging Materials depending on their status (Quarantined/Approved/Rejected).

All batches waiting for Quality Control conformity judgment are stored in the Quarantine area. The quarantine status is indicated in blue letters on a white identification label. Quarantined batches shall not be used prior to Quality Control approval.

Release

Samples are provided to QC for testing and where these are found to meet approved specifications through validated and approved test methods, materials are labeled as "Approved" and made available for processing

Arrangements for the handling of rejected materials and products

All batches not conforming to the specifications are rejected and indicated by the word "Rejected" in a red label.

Rejected materials should be controlled and confined in a segregated area to prevent their unauthorized use in manufacturing.

4.2.7 MAINTENANCE

In this area are carrying out mechanical and electrical repair works.

Maintenance
Ground floor
This area is used as mechanical and electrical workshop.
Third floor
The office is not yet set up.

All maintenance operations within the company are reported in the Maintenance Plan. There is a procedure for "Maintenance for workplace, plant and equipment" within the safety management system for company maintenance management.

The maintenance department, coordinated by the company technical office, principally perform mechanical, electrical and building repairs. It is equipped with a workshop on the first floor at the north end of the building and has its office on the third floor.

Operative procedures

Work phases list:

- Handling of loads (with forklift)
- Mounting components and piping
- Loading-unloading materials
- Control, operation tests, substitutions of the components of plant
- maintenance in height, sporadic (assigned to work at height only);
- small oxyacetylene or electric arc welding
- Loading and unloading active carbons
- Small electrical maintenance work
- Maintenance outside area

5. METHODOLOGY OF HAZARDS IDENTIFICATION AND RISK ASSESSMENT

5.1 IDENTIFICATION OF EXPOSED WORKERS

The risk assessment should be extended to all workers employed in the activity, and it is one of the basic obligations for the employer, or, in most cases, for the owner or legal representative of the company / company concerned.

In this case, within Sterling Chemical Malta Ltd. are working simultaneously employees of Sterling Chemical Malta Ltd. and Sterling S.p.A. Is deemed necessary to proceed to a single risk assessment evaluating the activities carried out within the production site in the complex because both working groups depend by the same employer. The population of those exposed may contain categories more sensitive to risks, such as:

- Handicapped;
- Women who are pregnant and/or have children up to seven months of age;
- Employees with chronic acquired diseases which show immune system disease;
- Underage people;
- Workers with atypical employment contracts;
- Other employed who by age, education or other causes may be considered particularly sensitive to certain risks.

As regards contractors and third parties, the obligations of the risk assessment are attributable to employers who should also cooperate with the principal employer for the reduction of interference risks, according to the article n° 7 of Legal Notice 36 of 2003. The cooperation method is described in the specific procedure.

5.2 IDENTIFICATION OF WORK PHASES, AREA AND/OR HOMOGENEOUS GROUPS

The workers will be divided into homogeneous groups depending on the activity, machinery and products used in the workplace. The identification of areas with homogeneous dangers, allows to set up equal measures of protection against equivalent dangers.
In addition, the intersection between tasks and homogeneous areas, enables to equalize protection measures against similar dangers.

5.3 HAZARDS IDENTIFICATION FOR EACH HOMOGENEOUS GROUPS

The hazard identification is carried out by the Safety Manager in collaboration with the other functions of the managers and supervisors prevention and protection service, through the following activities:

- collection of information and data including work procedures, technical documentation (manuals, reports, studies, projects, etc.), authorization (permits, certificates, etc.), monitoring results, maps and lay-out company, schemes as well as plant and process data;
- collection of statistical data on accidents and incidents.
- direct visit to various areas and facilities of the plant with verification of work activities;
- interviews with the involved personnel.

The collection of data and information referred to above shall also take account of:

- activities carried out outside the company area;
- presence of third parties (companies or craftsmen) and their activities carried out within the company area.
- potential hazards arising from equipment / activities of third parties to which effects the company's staff may be exposed to.

The hazard identification will be guided by the available knowledge of the law and technical standards as well as data derived from experience and on information gathered from the contributions made by those who, for various reasons, are involved in same assessment: Safety Responsible, workers representative, doctor in charge, other figures that can be usefully consulted in regard (workers, supervisors, managers...).
This process allows to identify hazards not only in accordance with the principles generally known, but also through the existence of peculiar dangers related to conditions in which the work takes place. It should be monitored the influence that such identification can exercise on the subjective perception of risk, which can sometimes lead to an underestimation or overestimation of an hazard on the basis of habit or to excessive confidence of sensory impressions.
It should be noted that whereas work and / or work process are in the same homogeneous production unit or production units of the same department it is possible to define in a unified manner a guidance list of hazards to be considered, on the understanding that in each context will be considered verified significant differences, which can lead to the activation of subsequent varied and specific protection measures.

The identified hazards present in the workplace have been sorted into three broad categories defined as:
A) Hazards that can generate *SAFETY RISK (Accidents Risks) due to:*

- Area, outdoor areas and access
- Transit areas and interior workplace-doors, routes and exits in case of emergency
- Fixed and portable stairs
- Working at heights and equipment for work at height
- Machinery
- Hand tools and portable tools
- Direct manipulation of objects - storage objects
- Electrical systems
- Pressure equipment
- Networks and devices for gases and liquids distribution, thermal plants
- Means of transport and self-propelled
- Hoists
- Fire and explosion
- Risk for the presence of explosives
- Lighting
- Chemical hazardous for safety

B) Hazards that can generate *HEALTH RISKS (Hygiene and Environmental Risks) due to:*

- Chemical hazardous for health
- Exposure to carcinogens and mutagens
- Exposure to biological agents
- Industrial ventilation and indoor air pollution
- Air conditioning work premises and thermal microclime
- Exposure to noise
- Exposure to vibration
- Exposure to ionizing and non-ionizing radiations
- Other physical agents
- Work with computer
- Manual handling of loads and awkward postures-repetitive movements
- Hygiene of rooms, toilets, canteen and rest room

C) Hazards that can generate *SAFETY, HEALTH AND ORGANIZATIONAL-MANAGEMENT RISKS (Cross-sectional risks) due to:*

- Work related stress
- Lack of work organization, duties, functions and responsibilities, analysis, planning and control
- Lack of training, information and education
- Instructions, practices and safety procedures
- Signs of health and safety at work
- Lack of maintenance and monitoring
- Use of personal protection equipment
- Management of emergency and first aid
- Lack of health surveillance
- Contractor companies

A) SAFETY RISKS

The Security Risks, or Accident Risks, are the ones responsible for the potential occurrence of an accident or injury, or damage or physical impairments (more or less serious) suffered by people involved in the various work activities, as a result of a physical-traumatic impact of different nature (mechanical, electrical, chemical, thermal, etc.). At least in the majority of cases, the causes of these risks are due to an unsuitable structure of the inherent security features: the working environment; machines and / or equipment used; operating mode; the organization of work, etc.

The study of the causes and relating prevention and / or protection interventions against these types of risks should be aimed at finding a 'Suitable bio-mechanical balance between MAN and STRUCTURE, MACHINE, PLANT' on the basis of the most modern ergonomic concepts.

B) HEALTH RISKS

Health risks, or Hygiene and Environmental Risks, are the ones responsible for the potential deterioration of the biological balance of personnel assigned to operations or processes that involve the release of chemical, physical and biological factor risks, with consequent exposure of personnel to these factors. The causes of these risks are to be found in the onset of unsuitable hygienic-environmental conditions due to the presence of environmental risk factors generated by production (characteristics of the process and / or equipment) and by operating procedures. The study of the causes and related interventions for prevention and / or protection against these types of risk should be aimed at finding a "suitable balance between bio-environmental MAN AND WORK ENVIRONMENT"

C) SAFETY, HEALTH AND ORGANIZATIONAL-MANAGEMENT RISKS

These risks are identified inside the complex relationship between the operator and the work organization of work in which he is involved. This relationship also involves a framework of compatibility and in ergonomic, psychological and organizational interaction. The consistency of this framework, therefore, may also be analyzed transversally between possible risks to safety and health.

Finally, are identified hazards related to categories of workers with special protection needs as:

- Hard demanding work: night-shift
- Isolated work

- Overaged and trainees
- Gender differences
- Age differences
- Handicapped workers
- Foreigners workers
- Labor contract differences

The hazard identification should take into account the work done under ordinary and extraordinary as well as potential emergency situations; such a division is shown inside the RAD in the summary table of risk related to each H.E.G.s.

5.4 ESTIMATED RISK ASSESSMENT

The quantification of risk arises from the possibility of defining risk as the factor of the probability of occurrence (P) multiplied for the gravity of the expected damage (G):

R=P x G

The definition of the probability scale refers primarily to the existence of a more or less direct correlation between the identified deficiencies and the probability of occurrence of the undesired event, taking into account the frequency and duration of the operations / processes that involve risks for the health and safety of workers:

Value Level Definition / Criteria

4 Highly probable

- There is a direct correlation between the detected deficiency and the occurrence of the assumed damage for workers
- Damages have already occurred for the same deficiency detected in similar situations.
- The occurrence of the damage caused by the deficiency detected would not provoke any surprise (in other words, the event would be widely expected)

3 Probable

- The detected deficiency can cause damage even if not automatically or directly
- Already known in the production unit, an episode in which the detected deficiency has already provoked a damage
- The occurrence of the assumed damage would arouse a moderate surprise

2 Less probable

- The detected deficiency can cause damage only in unfortunate circumstances
- Are known only very few episodes that have already occurred
- The occurrence of the assumed damage would arouse great surprise

1 Improbable

- The detected deficiency can cause damage after the combination of multiple improbable and independent circumstances
- No episodes already have occurred
- The occurrence of the assumed damage would arouse disbelief

This judgment can be evaluated in an indirect way through the level of surprise that the event would cause. The definition of the scale of seriousness of the damage is defined primarily if the damage is reversible or not:

4 Very High
- Injury, episode of acute exposure to lethal effects, total disability
- Chronic exposure with lethal effects and / or totally disabling

3 High
- Injury, episode of acute exposure with effects of partial disability
- Chronic exposure with irreversible effects and / or partially disabling

2 Medium
- Injury or episode of acute exposure with effects of reversible disability
- Chronic exposure with reversible effects

1 Law
- Injury or episode of acute exposure with effects of rapidly reversible disability
- Chronic exposure effects with rapidly reversible effects

The accident with the risk of death, although unlikely, should be considered as a priority in the planning of preventive measures. The numerical evaluation of the risk allows to identify a priority scale of the interventions.

The combination between the severity and the probability allow to insert each risk in an absolute criticality category. The ABSOLUTE RISK level is evaluated according a risk range between 1 and 16.

R = G x P

PROBABILITY (P)				
4	4	8	12	16
3	3	6	9	12
2	2	4	6	8
1	1	2	3	4
	1	2	3	4

GRAVITY (G)

Matrix 1: methodology for risk quantification

Unacceptable risk (UR):
Risk such that, regardless of the advantages obtainable, involves blocking the activity associated with the risk until the implementation of corrective actions (by temporary process interruption); could be for example noise exceeding 87 dBA even with the use of ear protection.

Acceptable risk (A):
Risk reduced to a level that could be tolerated by the organization, taking into account the obligations of law and its own policy for health and safety at work.

5.5 SPECIFIC RISK ASSESSMENT METHODOLOGY

Specific risks (chemical, fire, noise, explosion, vibration, accident, etc.) deserve a deep assessment or codified by rules, the assessment methodology is provided in the individual documents to assess the specific risks.
To estimate the extent of certain types of risks (risks ruled), generally provided by specific legal requirements and to standardize on a single criterion for assessing individual job boards, it's possible to draw a correlation matrix that allows to compare the results of specific investigations and / or measures with the amount of risk provided by the matrix G x P above.
"Ruled" risks are those for which the Legal Notice indicate explicit references of applicability, methods of analysis, measuring instruments.

Risk category	Law	Medium	High	Very High
	Acceptable risk	Acceptable risk	Acceptable risk	Non acceptable risk
Noise levels (in accordance with LN 158/2006)	**Lex,** 8h less than 80 dBA **Pp** <135 dB (C)	**Lex, 8h** between 80 and 85 dBA 135 dB (C) <Pp <140 dB (C)	**Lex, 8h** between 85 and 87 dBA 140 dB <(C) **Pp** <200 dB (C)	**Lex,** 8h greater than 87 dBA **Pp**> 200 dB (C)
Mechanical vibration (according to LN 371/2005)	**A (8)** <0.5 m/s2 **Full Body**	0.5 <A (8) <1.0 m/s2 **Full Body**	1.0 <**A (8)** <1, 5 m/s2 For short periods **Full Body**	**A (8)>** 1.15 m/s2 **Full Body**
	A(8) < 2,5 m/s2 **Hand arm system**	2,5 < **A(8)** < 5 m/s2 **Hand arm system**	5 < **A(h)** < 20 m/s2 Per brevi periodi **Hand arm system**	**A(8)** > 5 m/s2 **Hand arm system**
Manual handling loads (NIOSH Method)	IR<0,75	0,75 <= IR < 1,25	1,25 <= IR < 3	IR > 3
Ergonomics and manual handling of loads: tow-push (ref. ISO 11228-2)	GREEN	RED		
Work-related stress risk (Italian guidelines Uni-Inail)	Low (1-17)	Medium (18-34)	High (35-67)	-
ATEX classification (according to LN 41/2004)	Zone 2-22	Zone 1-21	Zone 0-20 (in closed containers)	Zone 0-20 (in closed containers)

a. Planning or implementation of prevention and/or protection measures

The identification of prevention and protection measures resulting from the evaluation as indicated in Article 6 of Legal Notice 36 of 2003, will be referred to the hierarchical principles of risk prevention set out herein:

- avoiding risks;
- minimum use of harmful agents;
- replace what it is dangerous with what it is not dangerous or it is less so;
- avert the risks from the source;
- apply collective protective measures rather than individual;
- minimize the number of workers who are or who may be exposed to risk;
- adaptation to technical progress;
- try to ensure an improvement in the level of protection;
- integrate measures of prevention /protection with those technical and organizational of the company.

The risk potential allows to identify the scale of priorities of the control measures that must be taken in order to eliminate (where possible) or reduce/control the risks by identifying: preventive measures, collective protective measures and, at the end, personal protective equipment.
The evaluation of prevention and protective measures should not neglect the checking on the suitability and effectiveness of those already in place and, progressively, those adopted. The implementation plan should contemplate the operations estimated times, the verification of their effective implementation, the verification of their effectiveness, the periodic review regarding any changes occurred during the production cycle or the organization of work that can compromise or prevent the validity of the actions taken.
The actions to be taken and the control measures (preventive and protective measures) are defined on the basis of the identified risk level:

Risk Category	Acceptance Evaluation	Type of interventions and/or controls and priority degree
Low	**Acceptable: A**	Ongoing activities maintenance and control
Medium	**Acceptable: A**	The risk should be as much as possible reduced from the point of view of cost/benefit (i.e. low and reasonable). Interventions to improve security and control. It involves planning interventions in the medium term (within 18 months) and/or periodic monitoring.
High	**Acceptable: A**	The risk must be as much as possible reduced from the point of view of cost/benefit (i.e. low and reasonable). Corrective action, and check guarantee. It involves planning interventions in the short term (within 12 months) and/or periodic monitoring.
Very High	**Not acceptable: NA**	**Non acceptable: NA** involves the immediate cessation of the phase or process creating the risk, until the minimum security restoration.

b. Monitoring and control of preventive and protection measures

Protection measures to adopt are highlighted for each risk, in order to eliminate or at least minimize the residual risk. Protection measures can be:

- **structural:** editing actions or environmental, facilities, equipment remediation, including the introduction of new machinery and/or equipment.
- **health surveillance:** health protocol for exposed workers;

- **procedural:** in case there is the necessity to introduce security procedures and/or operating instructions;
- **information and training;**
- **personal protective equipment**: identification of those to be considered more suitable for carrying out different activities;
- **the regular maintenance** of premises, equipment, facilities, with regard to safety devices in accordance with the instructions of the manufacturers**.**

The adoption of these measures, according to their level of application will reduce the absolute risk, by identifying both the probability and the gravity, a reduction factor with values ranging from 1 to 3. The preventive measures will influence the probability factor, the protective measures will influence the gravity factor (approximates by default).
The organization shall document and keep up to date the results of the identification of hazards, risk assessments and established controls.
In the tables below are shown the levels of the control measures by distinguishing the preventive by the protective.

5.6 LEVELS OF PREVENTIVE CONTROL MEASURES

Equipment and workplaces	Structural	Maintenance	Information, training and education	Procedures/ instructions	Health surveillance	Safety Signs	TOTAL EFFECTIVENESS LEVEL (Pe)
Full compliance: selection, installation, use, maintenance, suitability and verification	Appropriate conditions with continuous operations for the maintenance of fixed standards	Predictive	Information, Education and Training including specific training	Procedures and instructions present and fully applied	Scheduled verification of the state of health of the employee (pre-hire visits, preventive, periodic, routine)	Full compliance in the selection, installation, maintenance and testing	EFFECTIVE
Potential nonconformity: selection, installation, use, maintenance, suitability and verification	Appropriate conditions with systematic measures for the maintenance of fixed standards	Scheduled preventive	Information and training	Present and partially applied procedures and instructions	Compatibility of the state employee's health (periodic preventive visits)	Potential nonconformity in the selection, installation, maintenance and testing	APPROPRIATE
Some nonconformity: selection, installation, use, maintenance, suitability and verification	Partly adapted terms with occasional interventions for the fixed standards maintenance	Occasional or for breakdown	Information only	Only routine procedures or deficient and/or to update operating instructions	Employee’s state of health sporadic check	Some nonconformity in the selection, installation, maintenance and testing	MINIMUM
Widespread nonconformity: selection, installation, use, maintenance, suitability and verification	Unsuitable conditions	Not suitable	No information	Not suitable	No check on the employee’s state of health	Widespread nonconformity: selection, installation, maintenance and testing	INAPPROPRIATE

5.7 LEVELS OF PROTECTIVE CONTROL MEASURES

Equipment and workplaces (Smoke detection system, fire extinguishers, gas detectors, other collective protection devices)	P.P.E.	TOTAL EFFICIENCY LEVEL
Full compliance: selection, installation, use, maintenance, suitability and verification	Regularly suitable and used	EFFECTIVE
Potential nonconformity: selection, installation, use, maintenance, suitability and verification	Suitable and used	APPROPRIATE
Some nonconformity: selection, installation, use, maintenance, suitability and verification	Suitable but badly and scarcely used	MINIMUM
Widespread nonconformity: selection, installation, use, maintenance, suitability and verification	Not suitable/not used	INAPPROPRIATE

The monitoring system provided in the log monitoring and measuring controls whether the provided measures inside the RAD are implemented.

Based on the report analysis carried out every six months and delivered at the moment of the management review, their effectiveness are checked and evaluate if it is necessary to provide a document revision and amendment of the prevention and protection measures.

5.8 RESIDUAL RISK ASSESSMENT

There is a risk assessment after the prevention and protection measures application (defined as residual risk) in order to evaluate the protective measures effectiveness to be taken.
The OHSAS 18001 provides that when the controls are to be defined, or it is required to take into account the existing controls modifications, consideration must be given to risk reduction according to the following hierarchy:

a) elimination;
b) replacement;
c) controls and maintenance engineering;
d) signage/alarms /or procedural controls;
e) personal protective equipment.

Depending on the entity of residual risk, should be adopted as improvement actions indicated in the suitable program.

Summary table absolute risk/residual risk/preventive and protective measures for H.E.G.s.

H.E.G.																				
RISK		Conditions N/A/E	POTENTIAL HARMFUL EVENTS	Absolute probability P	Absolute gravity G	ABSOLUTE RISK	PREVENTIVE MEASURES							PROTECTIVE MEASURES		EFFICACY OF PREVENTIVE MEASURES (Pe)	EFFICACY OF PROTECTION MEASURES (Ge)	RESIDUAL PROBABILITY	RESIDUAL DANGER	RESIDUAL DANGER
						(P x G)	Equipment and workplaces	Structural	Maintenance	Information, training and education	Procedures / directions	Health monitoring	Safety signs	Equipment and workplaces (Smoke detection system, fire extinguishers, gas detectors, other collective protection devices)	P.P.E.					(PrxGr)
Safety risks																				
Health risks																				
Organizational risks																				

5.9 PROGRAM FOR THE IMPROVEMENT OF THE RISK ASSESSMENT

The improvement program will identify the following elements:

- **involved / concerned tasks**;
- **the risk involved;**
- execution actions / mode;
- **responsibility**: assignment, for any planned action, of its implementation responsibilities of the areas / departments involved;
- **resources / means**: description of resources - technical professional and financial, necessary for the execution of the action;
- **Timing**: definition of the timing of the execution of the action;
- **Monitor the implementation of the action by the Safety Responsible**

6. THE RISK ASSESSMENT

SHEET 01	
CATEGORY	Safety risk
RISK	*Premises, outside areas and entrances*
DETECTED SITUATION	In the surrounding area there are not important transport infrastructure (railways, highways, streets with heavy traffic) while there are located, not neighbors, other chemical-pharmaceutical companies that can produce external risks in the event of an accident. The regulation of external vehicular traffic and the direct access to the garage provides secure access for workers and vehicles. Transit zones, maneuvering and parking of vehicles belonging to the company are properly designed and reported. Access walkways are separated from those for vehicles. The surface of the external areas is smooth and uniform. Circulation areas do not have stumbling, slipping, holes or dangerous depressions. There aren't deposits of waste materials, obsolete, etc.. in outdoor areas. Production operators perform outdoor activities (transport of materials, tanks and drums with a forklift truck, controls utilities areas). Warehouse operators perform outdoor activities (transport and storage of materials, tanks and drums with a forklift truck, weighing activities). The production supervisors do not perform outdoor activities but monitor the work of operators. The operators of maintenance can perform maintenance activities outdoors. The other H.E.G.s do not perform normally outdoor activities
POTENTIAL HARMFUL EVENT	*Slipping, tripping* *Shocks, falls,* *investment*
PREVENTIVE MEASURES TAKEN	*Regulation vehicular and pedestrian circulation, internal audit control*
	Regular maintenance of the road surface
	Signs for road safety
	Information for contractors, visitors and corporate staff
PROTECTIVE MEASURES TAKEN	***PPE**: EN 345 S3 safety shoes with conductive soles and toe anti-crushing (for all except HEG office clerk)*

DAMAGE (G)	*PROBABILITY (P)*	
1 Low	*1 Improbable*	**P x G = RISK**
2 Medium	*2 Less probable*	
3 High	*3 Probable*	
4 Irreversible	*4 Very probable*	

9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6 Medium risk
1 < =R < 4 Low risk

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.2	*Technician employee*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.3	*Technician-production employee*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.4	*Production supervisor*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.5	*Production operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.6	*Warehouse operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.7	*Maintenance operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.8	*Laboratory technician*	*2*	*3*	*6*	*1*	*3*	*3*

IMPROVEMENT MEASURES	

<table>
<tr><th colspan="3">SHEET 02</th></tr>
<tr><td>CATEGORY</td><td colspan="2">Safety risk</td></tr>
<tr><td>RISK</td><td colspan="2">Transit areas and interior work space - Doors, routes and emergency exits</td></tr>
<tr><td>DETECTED SITUATION</td><td colspan="2">The entire building is a new construction, so the maintenance status of all structures, bearing and non, is excellent.
Floors: The floor of the transit areas inside the company is made of suitable materials for the work carried out. The floor of the corridors and passages is regular and uniform. The floor of the corridors and passages is kept clear in particular from slippery substances.
Walls: The walls are painted in light colors and there are no signs of humidity. There are no signs of structural instability (cracks, fissures, walls delamination, etc.). Window walls are stable. The window walls are fully glazed with decals that make them effectively visible. The railings for windows are at least 90cm. When are opened (for ventilation or cleaning) the windows are safe and do not constitute a hazard to workers.
Ceiling: On the ceilings there are no signs of humidity. There are no signs of structural instability (cracks, fissures, walls delamination etc.).
Roof: The roof of the building is completely walkable and is provided with a parapet of adequate height. Access to the roof is via marinara stairs.
Circulation areas: Circulation areas are in good condition. The floors do not have holes or dangerous projections and are not obstructed by materials that block the normal circulation. The floor of the corridors and passages is kept clear in particular from slippery substances. The openings in the floor and overpasses are protected with appropriate parapet.
Doors, routes and emergency exits: The routes and exits are such that workers can use them easily and safely. The number, distribution and dimensions of emergency routes and exits are appropriate to the size of the workplace and the number of those present. The routes and emergency exits are not obstructed by objects, are highlighted by appropriate signs and are well lighted by emergency lighting also. The number of workers in the office area is reduced (<25 people), therefore, also in case of emergency it is considered appropriate emergency door with sliding opening.
Workspace: The doors of the workplace are planned for number, size and location to allow a quick exit of workers. The minimum limits of height, cubic volume and surface area of closed workspace meet the minimum requirements set by legislation.
Lighting: There is a suitable natural and artificial lighting in all areas of the company building.
Confined Spaces: The entrance into reactors is performed only by a licensed contractor and instructed according to LN 41/2004.</td></tr>
<tr><td>POTENTIALLY HARMFUL EVENT</td><td colspan="2">Slipping, tripping
Shocks, falls
Failure to move to a safe place
fall from height</td></tr>
<tr><td rowspan="3">PREVENTIVE MEASURES TAKEN</td><td colspan="2">Cleaning of the environment carried out by an external firm and by production operators</td></tr>
<tr><td colspan="2">Audit for internal control, fire control register</td></tr>
<tr><td colspan="2">Presence of road signs for safety</td></tr>
<tr><td rowspan="2">PROTECTION MEASURES TAKEN</td><td colspan="2">Presence of emergency lighting and smoke detection system and alarm</td></tr>
<tr><td colspan="2">PPE:
- EN 345 S3 safety shoes with conductive soles and toe anti-crushing (for all except HEG office clerk)</td></tr>
<tr><td>DAMAGE (G)
1 Low
2 Medium
3 High
4 Irreversible</td><td>PROBABILITY (P)
1 Improbable
2 Less probable
3 Probable
4 Very probable</td><td>P x G = RISK</td></tr>
<tr><td colspan="3">9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6 Medium risk
1 < =R < 4 Low risk</td></tr>
</table>

H.E.G.		ABSOLUTE RISK			RESIDUAL RISK		
		P	G	R	P	G	R
H.E.G. n.1	Office clerk	2	3	6	1	3	3
H.E.G. n.2	Technician employee	2	3	6	1	3	3
H.E.G. n.3	Tecnician-production employee	2	3	6	1	3	3
H.E.G. n.4	Production supervisor	2	3	6	1	3	3
H.E.G. n.5	Production operator	2	3	6	1	3	3
H.E.G. n.6	Warehouse operator	2	3	6	1	3	3
H.E.G. n.7	Maintenance operator	2	3	6	1	3	3
H.E.G. n.8	Laboratory technician	2	3	6	1	3	3
IMPROVEMENT MEASURES							

SHEET 03		
CATEGORY	Safety risk	
RISK	*Fixed stair and portable ladders*	
DETECTED SITUATION	A fixed stairs connects the parking to the first and second floor of the building, the administrative area, two fixed stairs that connect the ground floor of the production area to the upper floors. The stairs are all equipped with a suitable railing and handrail. The steps surface is uniform but not non-slip. In the production department there is a fixed stair made of non-slip metal and equipped with parapet that connects to the loft. At the end of the stair there is a difference in height not well marked. The operators of production and warehouse as well as production supervisors can use sporadically portable ladders in accordance with EN131, that are periodically checked. For access to the roof there is a marinara ladders. The access must always be authorized.	
POTENTIALLY HARMFUL EVENT	*Slipping, tripping* *Shocks, falls* *fall from height*	
PREVENTIVE MEASURES TAKEN	*Scheduled maintenance of portable ladders* *Internal control audit* *Specific training (high risk)*	
PROTECTION MEASURES TAKEN		
DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**
9 < =R < =16 Very High risk *6< R < 8 High risk* *4 < =R < =6 Medium risk* *1 < =R < 4 Low risk*		

H.E.G.		ABSOLUTE RISK			RESIDUAL RISK		
		P	G	R	P	G	R
H.E.G. n.1	Office clerk	1	3	3	1	3	3
H.E.G. n.2	Technician employee	1	3	3	1	3	3
H.E.G. n.3	Tecnician-production employee	1	3	3	1	3	3
H.E.G. n.4	Production supervisor	2	3	6	1	3	3
H.E.G. n.5	Production operator	2	3	6	1	3	3
H.E.G. n.6	Warehouse operator	2	3	6	1	3	3
H.E.G. n.7	Maintenance operator	2	3	6	1	3	3
H.E.G. n.8	Laboratory technician	1	3	3	1	3	3
IMPROVEMENT MEASURES		*Office stair*					
		Warning of difference in height of the ladder that connects to the loft of the production					

SHEET 04	
CATEGORY	Safety risk
RISK	*Work at height and equipment for work at height*
DETECTED SITUATION	The maintenance operators occasionally work at a height to perform maintenance operations. In particular, these activities can take place on the roof of the buildings, the facades of buildings by means of basket platforms. The company has provided the following PPE: Safety harnesses, positioning lanyard Self-Retracting Lifeline There is also a basket that can be placed in the forks of a forklift to carry out interventions in exceptional cases at high altitude.
POTENTIALLY HARMFUL EVENT	*Fall of material from height* *Fall from height*
PREVENTIVE MEASURES TAKEN	*Training on equipment for work at height*
	Instructions operative maintenance; Management Procedure of Work Permits (Work permit required for work at height)
	Health monitoring of employees according to protocol
	Presence of safety signs. Interdiction of zones with the risk of fall from height.
PROTECTION MEASURES TAKEN	***PPE:*** *- EN 345 S3 safety shoes with conductive soles and toe anti-crushing* *- Self-Retracting Lifeline EN354* *- Safety harness EN 361* *- Helmet*

DAMAGE (G)	*PROBABILITY (P)*	**P x G = RISK**
1 Low *2 Medium* *3 High* *4 Irreversible*	*1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	

9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6 Medium risk
1 < =R < 4 Low risk

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	-	-	-	-	-	-
H.E.G. n.2	*Technician employee*	-	-	-	-	-	-
H.E.G. n.3	*Tecnician-production employee*	-	-	-	-	-	-
H.E.G. n.4	*Production supervisor*	-	-	-	-	-	-
H.E.G. n.5	*Production operator*	-	-	-	-	-	-
H.E.G. n.6	*Warehouse operator*	-	-	-	-	-	-
H.E.G. n.7	*Maintenance operator*	*3*	*4*	*12*	*2*	*3*	*6*
H.E.G. n.8	*Laboratory technician*	-	-	-	-	-	-

IMPROVEMENT MEASURES	*Upgrade education and training on equipment for work at height*

SHEET 05	
CATEGORY	Safety risk
RISK	*Machinery*
DETECTED SITUATION	In offices are used office equipment such as computers, fax, printers, etc.. and manual equipment (scissors, cutters, etc..) that can be dangerous if not used properly. Actually this risk is very low because such equipment is used with care and stored in an appropriate manner after use. The machines are compliant and safe and are used in compliance with the requirements contained in the user manuals. The maintenance and production operators perform their maintenance on machines owned by the company which constitute the chemical plant and related utilities. The machinery inside the company are different for nature and period of construction; they are regularly updated and maintained in accordance with legislation and in accordance with good practice standards. In particular, machines recently purchased by the company comply with the essential safety requirements and have CE marking. The company assembles machines for the production of active pharmaceutical ingredients. Risks due to the machines are described in the risk assessments of each individual machine. In particular, machines assembled by the company comply with the essential safety requirements and have CE marking. The entrance inside the reactors is performed only by a licensed contractor and trained according to LN 41/2004. Sterling personnel is forbidden to entry inside reactors. Production operators use machines in the manufacturing plant, while the production supervisors are in charge of control of the work performed by operators on in the production plant. They are therefore subject to an indirect risk constituted by the use of the machines by operators. Operators receive initial and ongoing training on the use of equipment for the various phases of the production cycle (ref. operative manual of the production plant). Risks due to machines are described in the risk assessments for each individual machine. Warehouse operators do not use machines of the production plant but are subject to an indirect risk constituted by the use of machines by operators. The staff in the laboratory is subject to either direct risk for a direct use of the instruments and indirect risk constituted by the use of machines by operators. The production-technical employees are also subject to an indirect risk constituted by the use of portable machinery and equipment by operators and technicians.
POTENTIALLY HARMFUL EVENT	*cuts and abrasions for contact with moving parts,* *burns from contact with overheated parts, electrical contacts, impact and crushing, cuts and punctures* *slipping, tripping and falling in relation to the machine* *projection of a high-pressure fluid* *projection of the parts (of the machine or machined parts)* *loss of stability (of the machine or parts of it)*
PREVENTIVE MEASURES TAKEN	*Scheduled maintenance according to maintenance plan*
	Course for specific information and training (high risk) *Training on the use of machines and plants*
	Maintenance procedures and plant operating manual
	Safety signs
PROTECTION MEASURES TAKEN	*System of grounding regularly maintained*
	PPE: *For maintenance operators, production operators, warehouse operators, production supervisors* *-Safety Shoes* *-Suit jacket, pants and shirt. Tyvek suits against heat and flame EN11612, EN13034 Chemical Protection, EN 1149 Protection against risk of electrostatic charges* *- Safety glasses EN 166* *- Protective gloves EN388*

	For laboratories: *- Safety glasses EN 166* *- Acid-resistant coat* *- Safety Shoes* *- Protective gloves*	
DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**
9 < =R < =16 Very High risk *6< R < 8 High risk* *4 < =R < =6 Medium risk* *1 < =R < 4 Low risk*		

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*1*	*3*	*3*	*1*	*3*	*3*
H.E.G. n.2	*Technician employee*	*1*	*3*	*3*	*1*	*3*	*3*
H.E.G. n.3	*Tecnician-production employee*	*1*	*3*	*3*	*1*	*3*	*3*
H.E.G. n.4	*Production supervisor*	*2*	*4*	*8*	*1*	*4*	*4*
H.E.G. n.5	*Production operator*	*2*	*4*	*8*	*1*	*4*	*4*
H.E.G. n.6	*Warehouse operator*	*2*	*4*	*8*	*1*	*4*	*4*
H.E.G. n.7	*Maintenance operator*	*2*	*4*	*8*	*1*	*4*	*4*
H.E.G. n.8	*Laboratory technician*	*2*	*3*	*6*	*1*	*3*	*3*
IMPROVEMENT MEASURES							

SHEET 06							
CATEGORY	Safety risks						
RISK	*Portable equipment*						
DETECTED SITUATION	In offices are used office equipment such as computers, fax, printers, etc. and manual equipment (scissors,cutters, etc..) that can be dangerous if not used properly. Actually this risk is very low because such equipment is used with care and stored in an appropriate manner after use. During the various processes in the plant and in the warehouses are used by operators portable equipment such as pumps for the transfer of fluids, pallet trucks for the transport of materials and portable ladders for overcoming differences in height, forklifts and hoists for lifting materials. In laboratories during the various processes are used small portable laboratory equipment and hand tools typical for a laboratory. The equipment used during the various maintenance operations are grinders, drills, welders, hammers, hand tools, etc. and portable ladders to overcome differences in height, equipment for work at height as trestles, baskets, etc. for hoisting materials are used forklifts and pallet trucks. During the various activities of preparing meals are used, in dedicated facilities, scissors, knives and utensils for kitchen use. All equipment shall meet the requirements of the law, are used in compliance with the requirements contained in the user manuals. All items which may constitute a danger are provided of or protected by appropriate safety devices (guard) to avoid possible shock.						
POTENTIALLY HARMFUL EVENT	*Cuts and abrasions to contact with moving parts* *Burns from contact with hot parts* *Electrical direct and indirect contacts* *Projection of material* *Cuts and punctures*						
PREVENTIVE MEASURES TAKEN	*Scheduled maintenance for critical equipment according to maintenance plan*						
	Occasional maintenance or after failure for non-critical equipment						
	Course information and specific training for workers						
	Maintenance procedures and operative plan						
	Safety signs						
PROTECTION MEASURES TAKEN	*System grounding regularly maintained*						
	PPE: *For maintenance operators, production operators, warehouse operators, production supervisors and employees in the management of waste* *-Safety Shoes* *-Suit jacket, pants and shirt. tyvekEN11612 suits against heat and flame, chemical protection EN13034, EN 1149 Protection against risk of electrostatic charges* *-Safety glass EN 166* *-Protective gloves EN38* *For laboratories:* *-Safety glass EN 166* *- Acid-resistant coat* *-Safety Shoes*						
DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*			**P x G = RISK**			
9 < =R < =16 Very High risk *6< R < 8 High risk* *4 < =R < =6 Medium risk.* *1 < =R < 4 Low risk*							

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*1*	*3*	*3*	*1*	*2*	*2*

H.E.G. n.2	*Technician employee*	*1*	*3*	*3*	*1*	*2*	*2*
H.E.G. n.3	*Tecnician-production employee*	*1*	*3*	*3*	*1*	*2*	*2*
H.E.G. n.4	*Production supervisor*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.5	*Production operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.6	*Warehouse operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.7	*Maintenance operator*	*2*	*4*	*8*	*1*	*4*	*4*
H.E.G. n.8	*Laboratory technician*	*2*	*3*	*6*	*1*	*3*	*3*
IMPROVEMENT MEASURES							

SHEET 07	
CATEGORY	Safety risk
RISK	*Direct manipulation and storage of objects*
DETECTED SITUATION	**Area offices:** Objects and documents are stored in special cabinets and shelving. **Warehouse Area:** Inside the company there are several stores, used for the storage of raw materials, finished products and flammable substances. The warehouse for the storage of flammable substances and wastes is located outside the building, the material is stored in an area still unused; is planned the cover of the deposit. In all other stores, metal shelving are proved to have appropriate design features, mechanically stable thanks to the presence of a ground anchor and with signs indicating the maximum load for each shelf. Inside warehouses are present thermohygrograph to constantly detect the temperature and humidity. The areas where are stored containers of hazardous chemical agents are built and equipped against accidental releases and spills (containment basins and liquid collection systems, etc.). The pallets are in good condition and are inspected prior to each use. The production-technical employees are subject to an indirect risk constituted by the storage of objects that takes place in the various departments. In **Quality Control laboratory** the storage of substances takes place inside a small warehouse adjacent to the laboratory. In this warehouse manipulation of stored products is always wearing appropriate PPE. Shelving appear in adequate structural characteristics, mechanically stable and loaded properly.
POTENTIALLY HARMFUL EVENT	*Impact and crushing* *Material falling from height*
PREVENTIVE MEASURES TAKEN	*Internal control audit* *Information and specific training for workers* *Education and training for those involved in the use of forklift trucks* *Operating instruction "loading and unloading goods"* *Safety signs*
PROTECTION MEASURES TAKEN	*Shelving properly anchored* ***PPE:*** *For maintenance operators, production operators, warehouse operators, production supervisors, technical employees* *-Safety Shoes*

DAMAGE (G)	*PROBABILITY (P)*	**P x G = RISK**
1 Low *2 Medium* *3 High* *4 Irreversible*	*1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	

9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6Medium risk
1 < =R < 4 Low risk

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*1*	*3*	*3*	*1*	*3*	*2*
H.E.G. n.2	*Technician employee*	*1*	*3*	*3*	*1*	*3*	*2*
H.E.G. n.3	*Tecnician-production employee*	*1*	*4*	*4*	*1*	*3*	*3*
H.E.G. n.4	*Production supervisor*	*1*	*4*	*8*	*1*	*3*	*3*
H.E.G. n.5	*Production operator*	*2*	*4*	*8*	*1*	*3*	*3*
H.E.G. n.6	*Warehouse operator*	*2*	*4*	*8*	*1*	*3*	*3*
H.E.G. n.7	*Maintenance operator*	*2*	*4*	*8*	*1*	*3*	*3*
H.E.G. n.8	*Laboratory technician*	*1*	*3*	*3*	*1*	*3*	*2*

IMPROVEMENT MEASURES	

SHEET 09	
CATEGORY	Safety risk
RISK	*Pressure Equipment*
DETECTED SITUATION	The devices comply with the Directive 97/23/EC . The liquid nitrogen tanks, granted by external loan, are regularly audited by the suppliers. The systems and pressure vessels are maintained and monitored in accordance with the regulations and with appropriate frequency . The pressure systems are equipped with appropriately sized protective devices (safety valves, bursting discs). Small portable compressors are used by the maintenance for small operations. There are also two compressors for industrial air. The natural gas pipeline is correctly implemented and maintained. The water pipeline is properly implemented and maintained. The technical gases distribution (helium, hydrogen, nitrogen, air) is properly implemented and maintained. Presence of cylinders used for welding , cylinders containing chemical substances including toxic gases (chlorine, ammonia, bromofluorometano).
POTENTIAL HARMFUL EVENT	*Fire* *Explosion* *Outbreak*
PREVENTIVE MEASURES TAKEN	*Internal control Audit (P_455)*
	The employees using toxic gases are properly trained and equipped and with enabling license
	Scheduled maintenance
	Safety Signs
	Operating instructions for technical gases use
PROTECTIVE MEASURES TAKEN	*Properly maintained.firefighting*
	PPE:

DAMAGE (G)	*PROBABILITY (P)*	
1 Low *2 Medium* *3 High* *4 Irreversible*	*1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**

9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6 Medium risk
1 < =R < 4 Low risk

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	-	-	-	-	-	-
H.E.G. n.2	*Technician employee*	*1*	*4*	*4*	*1*	*3*	*3*
H.E.G. n.3	*Tecnician-production employee*	*1*	*4*	*4*	*1*	*3*	*3*
H.E.G. n.4	*Production supervisor*	*2*	*4*	*8*	*1*	*4*	*4*
H.E.G. n.5	*Production operator*	*2*	*4*	*8*	*1*	*4*	*4*
H.E.G. n.6	*Warehouse operator*	*2*	*4*	*8*	*1*	*4*	*4*
H.E.G. n.7	*Maintenance operator*	*2*	*4*	*8*	*1*	*4*	*4*
H.E.G. n.8	*Laboratory technician*	*1*	*4*	*4*	*1*	*3*	*3*

IMPROVEMENT MEASURES	

SCHEET 10	
CATEGORY	Safety risk
RISK	*Networks and distribution devices for gases, liquids and thermal plants*
DETECTED SITUATION	Description: Inside the production premises are installed 3 different gas distribution networks: Compressed air The compressed air is produced by special compressors. The operating pressure is 6 bar while the maximum pressure is 8 bar. The air is used for the filling of the shirts of reactors or for the control system of the transmission line pneumatic. Nitrogen The circuit of nitrogen is constituted by a tank of liquid nitrogen with capacity of 18000 liters and operating pressure of 25 bar, evaporators, pressure reducers, cartridge sterilizing filters and collectors that distribute gas to the various users. Nitrogen is used to inert the centrifuges, to wash the vacuum pumps, to break the vacuum in the reactors and in dryers. Being an inert gas, nitrogen does not require special devices, except the use of appropriate measures at the level of the storage tank, however, prepared by the supplier. Thermal power stations The plant is served by a GPL steam generator with a nominal capacity of about 349 kW and a productivity of 500 kg / h of steam. The steam is used to heat reactors and dryers. The formed condensation is sent away by special condensation traps. The network of the water is properly built and maintained. The distribution network of technical gases (helium, hydrogen, nitrogen, air) is properly implemented and maintained.
POTENTIALLY HARMFUL EVENT	*Fire* *Explosion* *Flooding* *Burns* *Asphyxia*
PREVENTIVE MEASURES TAKEN	*Internal control audit (P_455)* *Scheduled Maintenance for thermal power stations, equipments and plants* *Safety signs*
PROTECTION MEASURES TAKEN	*Fire-fighting devices properly maintained* ***PPE:***

DAMAGE (G)	*PROBABILITY (P)*	**P x G = RISK**
1 Low *2 Medium* *3 High* *4 Irreversible*	*1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	

9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6Medium risk
1 < =R < 4 Low risk

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*1*	*4*	*4*	*1*	*3*	*3*
H.E.G. n.2	*Technician employee*	*1*	*4*	*4*	*1*	*3*	*3*
H.E.G. n.3	*Tecnician-production employee*	*1*	*4*	*4*	*1*	*3*	*3*
H.E.G. n.4	*Production supervisor*	*1*	*4*	*4*	*1*	*3*	*3*
H.E.G. n.5	*Production operator*	*2*	*4*	*8*	*1*	*4*	*4*
H.E.G. n.6	*Warehouse operator*	*1*	*4*	*4*	*1*	*3*	*3*
H.E.G. n.7	*Maintenance operator*	*2*	*4*	*8*	*1*	*4*	*4*
H.E.G. n.8	*Laboratory technician*	*2*	*4*	*4*	*1*	*4*	*3*

IMPROVEMENT	

MEASURES	

SHEET 11	
CATEGORY	Safety risks
RISK	*Means of transport and self-propelled vehicles*
DETECTED SITUATION	For transfers to and from home, employees of Sterling Chemical Malta Ltd. use their own resources, the employees of Sterling S.p.A use the company vechicles. Company or personal vehicles are used to carry out compaly related activities. Only the authorized operators of maintenance, production and warehouse are enabled to use forklift. Forklift are equipped with suitable audible warning devices and light. The capacity limits are respected as described in the user manuals. Forklift are in accordance with standards and equipped with protection cabin for the driver. The staff authorized to drive forklift has received appropriate training (ref. Certificates)
POTENTIALLY HARMFUL EVENT	*Investment* *Accidents while traveling*
PREVENTIVE MEASURES TAKEN	*Training course for employees to drive forklifts*
	Scheduled maintenance of the company vehicles
	Health monitoring of presence of alcohol on staff authorized to drive company vehicle
	Safety and road signs
	Vehicles equipped with appropriate personal protective equipment (airbags, seat belts, cabin protection for the driver, etc.)
PROTECTION MEASURES TAKEN	***PPE:***

DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*1*	*4*	*4*	*1*	*3*	*3*
H.E.G. n.2	*Technician employee*	*1*	*4*	*4*	*1*	*3*	*3*
H.E.G. n.3	*Tecnician-production employee*	*1*	*4*	*4*	*1*	*3*	*3*
H.E.G. n.4	*Production supervisor*	*1*	*4*	*4*	*1*	*3*	*3*
H.E.G. n.5	*Production operator*	*2*	*4*	*8*	*1*	*4*	*4*
H.E.G. n.6	*Warehouse operator*	*2*	*4*	*8*	*1*	*4*	*4*
H.E.G. n.7	*Maintenance operator*	*2*	*4*	*8*	*1*	*4*	*4*
H.E.G. n.8	*Laboratory technician*	*1*	*4*	*4*	*1*	*3*	*3*

IMPROVEMENT MEASURES	

SHEET 12		
CATEGORY	*Safery risks*	
RISK	*Lifting equipment*	
DETECTED SITUATION	Inside the production plant there is available 1 hoist. Hoists are used during the unloading of the centrifuges and are regularly maintained. There is also 1 forklift supplied to operators. All such facilities are subject to periodic controls by external companies.	
POTENTIALLY HARMFUL EVENT	*Material falling from height* *Investment, crushing*	
PREVENTIVE MEASURES TAKEN	*Training course on the use of forklift*	
	Scheduled maintenance for forklift and other lifting equipment	
	Operating instruction loading and unloading goods IO 4.4.3	
	Safety signs	
PROTECTION MEASURES TAKEN	*Vehicles equipped with appropriate personal protective equipment (protection cabin for the driver)*	
	PPE: *Safety shoes with EN 346 resistant toe (for Production operators, technicians, maintenance and warehouse operators, production supervisors)*	
DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**
9 < =R < =16 Very High risk *6< R < 8 High risk* *4 < =R < =6Medium risk* *1 < =R < 4 Low risk*		

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	-	-	-	-	-	-
H.E.G. n.2	*Technician employee*	-	-	-	-	-	-
H.E.G. n.3	*Tecnician-production employee*	*1*	*4*	*4*	*1*	*4*	*4*
H.E.G. n.4	*Production supervisor*	*1*	*4*	*4*	*1*	*4*	*4*
H.E.G. n.5	*Production operator*	*3*	*4*	*12*	*1*	*4*	*4*
H.E.G. n.6	*Warehouse operator*	*2*	*4*	*8*	*1*	*4*	*4*
H.E.G. n.7	*Maintenance operator*	*3*	*4*	*12*	*1*	*4*	*4*
H.E.G. n.8	*Laboratory technician*	-	-	-	-	-	-

IMPROVEMENT MEASURES	*Scheduled monitoring for chains of forklift and other lifting equipment every three months.*

SHEET 13	
CATEGORY	Safety risk
RISK	*Fire*
DETECTED SITUATION	Given the type of activity, the characteristics of the workplace, the equipment and machines used, the company falls into a medium fire risk. The following activities that may cause a fire:

Activity	DESCRIPTION
PRODUCTION	Factories and plants where are produce and/or used, flammable liquids and/or fuels with a flash point up to 125 ° C, with total quantities in the cycle and/or in storage> 50 mc.
THERMAL POWER PLANT	Heat production installations powered with solid fuels, liquid or gas with a capacity greater than 350 kW (up to 700 kW).

	STORAGE	Factories and plants where are produce and/or used, flammable liquids and/or fuels with a flash point up to 125 ° C, with total quantities in the cycle and / or in storage> 50 mc.

POTENTIAL HARMFUL EVENT	*Burn* *Asphyxia* *Intoxication*
PREVENTIVE MEASURES TAKEN	*Scheduled firefighting maintenance*
	Information and training on the Internal Emergency Plan; half-year emergency and evacuation test
	Training and specific firefighters training
	Internal emergency plan (M_DS 4.4.7-A) *internal fire controls (M_IOS_4.5.1-1)*
	Safety signs
PROTECTIVE MEASURES TAKEN	*Fire extinguishers, fire hydrants, alarm systems and smoke detection. Subdivision, Structures fire resistance*
	PPE: *For maintenance operators, production operators, warehouse operators, production supervisors and waste management employees;* *-Jacket, pants and shirt. tyvekEN11612 suits against heat and flame, EN13034*

DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**

9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6 Medium risk
1 < =R < 4 Low risk

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	-	-	*AVERAGE*	*1*	*3*	*3*
H.E.G. n.2	*Technician employee*	-	-	*AVERAGE*	*1*	*3*	*3*
H.E.G. n.3	*Tecnician-production employee*	-	-	*AVERAGE*	*1*	*3*	*3*
H.E.G. n.4	*Production supervisor*	-	-	*AVERAGE*	*1*	*4*	*4*
H.E.G. n.5	*Production operator*	-	-	*AVERAGE*	*1*	*4*	*4*
H.E.G. n.6	*Warehouse operator*	-	-	*AVERAGE*	*1*	*4*	*4*
H.E.G. n.7	*Maintenance operator*	-	-	*AVERAGE*	*1*	*4*	*4*
H.E.G. n.8	*Laboratory technician*	-	-	*AVERAGE*	*1*	*4*	*3*

IMPROVEMENT MEASURES	

SCHEDA 14	
CATEGORY	Safety risks
RISK	*Explosion*
DETECTED SITUATION	Substances and reagents used and stored in the production departments and laboratories may form flammable mixtures with each other and / or in contact with air. For this reason all areas in which an explosive atmosphere is conceivable are provided with ATEX certified equipment. The classification of all the areas should be carried out in order to define precisely ATEX areas and their typology.
POTENTIALLY HARMFUL EVENT	*Explosion*
PREVENTIVE MEASURES TAKEN	*Reduced probability of triggering ignition sources (ref. Explosion Protection Document)*
	Specific training on the risk of explosion (inserted into the specific training for workers)
	Reduced duration of potentially explosive atmospheres by forced ventilation, hoods and suction valves (ref. Explosion Protection Document
	Equipment compatible with the ATEX classification (ref. Document explosion protection)
	Management of work in ATEX zones with Work Permits
	Safety signs
PROTECTION MEASURES TAKEN	*Presence of fire extinguishers, fire hydrants, alarm systems and smoke detection, Compartmentalization, Fire resistance structures*
	All metal construction in plants are connected to the system grounding (ref Operations Manual Production)
	Conductive floor of the production lines and the area of the department centrifugal G (building B)
	Presence of vent system of possible explosions inside the reactors (rupture disk and blow down)
	Presence of Portable Explosive Detector
	PPE: *For maintenance operators, production operators, warehouse operators, production supervisors* *-Suit jacket, pants and shirt. Tyvek suits EN11612 against heat and flame, EN13034 chemical protection, EN 1149 Protection against risk of electrostatic charges* *-Safety shoes with conductive soles*

DAMAGE (G)	*PROBABILITY (P)*	**P x G = RISK**
1 Low *2 Medium* *3 High* *4 Irreversible*	*1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	

9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6Medium risk
1 < =R < 4 Low risk

H.E.G.		***ABSOLUTE RISK***			***RISCHIO RESIDUO***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*1*	*4*	*4*	*1*	*3*	*3*
H.E.G. n.2	*Technician employee*	*1*	*4*	*4*	*1*	*3*	*3*
H.E.G. n.3	*Tecnician-production employee*	*1*	*4*	*4*	*1*	*3*	*3*
H.E.G. n.4	*Production supervisor*	*2*	*4*	*8*	*1*	*3*	*3*
H.E.G. n.5	*Production operator*	*2*	*4*	*8*	*1*	*3*	*3*
H.E.G. n.6	*Warehouse operator*	*2*	*4*	*8*	*1*	*3*	*3*
H.E.G. n.7	*Maintenance operator*	*3*	*4*	*12*	*1*	*3*	*3*
H.E.G. n.8	*Laboratory technician*	*1*	*4*	*4*	*1*	*3*	*3*

IMPROVEMENT MEASURES	Atex classification and therefore to lay down improvement measures

SHEET 15							
CATEGORY	Safety risks						
RISK	*Lighting*						
DETECTED SITUATION	Workplaces have enough natural light. The lighting system is suitable for the type of work. The premises have security lighting.						
POTENTIALLY HARMFUL EVENT	*Eyestrain* *Lack of concentration* *Blows, bumps and bruises* *Abrasions, cuts and wounds to the upper and lower limbs* *Tripping or slipping*						
PREVENTIVE MEASURES TAKEN	*Occasional maintenance or fin occurrence of failure of the lighting fixtures and windows.*						
	Correctly sized plants						
	Periodic inspection of emergency lighting.						
PROTECTION MEASURES TAKEN	*Presence of emergency lighting*						
	-						
	PPE: -						
DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*			**P x G = RISK**			
9 < =R < =16 Very High risk *6< R < 8 High risk* *4 < =R < =6Medium risk* *1 < =R < 4 Low risk*							
H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*2*	*2*	*4*	*1*	*2*	*2*
H.E.G. n.2	*Technician employee*	*2*	*2*	*4*	*1*	*2*	*2*
H.E.G. n.3	*Tecnician-production employee*	*2*	*2*	*4*	*1*	*2*	*2*
H.E.G. n.4	*Production supervisor*	*2*	*2*	*4*	*1*	*2*	*2*
H.E.G. n.5	*Production operator*	*2*	*2*	*4*	*1*	*2*	*2*
H.E.G. n.6	*Warehouse operator*	*2*	*2*	*4*	*1*	*2*	*2*
H.E.G. n.7	*Maintenance operator*	*2*	*2*	*4*	*1*	*2*	*2*
H.E.G. n.8	*Laboratory technician*	*2*	*2*	*4*	*1*	*2*	*2*
IMPROVEMENT MEASURES							

SHEET 16	
CATEGORY	Health and safety risk
RISK	*Health and safety chemicals*
DETECTED SITUATION	As per the risk description, please refer to the Sterling Spa's chemical risk assessment document, as the used substances, the processes in which they are used and the used preventive and protective measures, are identical. By entering into a software created for calculating the amount of chemical risk, from the data contained in the safety data sheets of all the substances used in the company, it has been carried out, for each department, an assessment of the level of risk resulting from the exposure to chemical. For some H.E.G. the level of risk was found to be "not insignificant" for the health of the operators and "low" for their own safety, and for this reason it has been made a more complete analysis, as required by the regulations. In this regard, the company constantly reiterates the exposed workers the importance of the proper use of personal and collective protective equipment together with the correct application of all the procedures. The forced ventilation systems are regularly maintained. In the departments there are hoods or suction nozzles positioned, during the chemicals handling, in the vicinity of the possible source of release. In the sampling room, where occurs the sampling of raw powder and the preparation of related charges for the production, there is an extractor hood. The finished products are sampled in the room instead of the finishing room. The production supervisors are subject to an indirect risk resulting from the operators work control. In support of safety it is assumed that the probability of the event it is the same as for the considered H.E.G.
POTENTIALLY HARMFUL EVENT	*Inhalation* *Contact*
PREVENTIVE MEASURES TAKEN	*Hoods and suction valves scheduled maintenance*
	Annual environmental departments monitoring
	Safety signs
	Presence of a natural or forced air system
	Chemicals Management Procedures
	Presence of MSDS of the products used in the departments
	Presence of department operating instructions
	3 category PPE education and training
	Chemical risk jobs managing by Work Permit
	PPE Using and maintenance operating instructions and protection devices management procedures
	Special training for workers
	Health surveillance
PROTECTION MEASURES TAKEN	*Hoods and suction valves presence in the departments*
	Portable oxygen detector (for production and maintenance)
	Ventilatory Support System to connect with full facial masks or ventilated hoods
	PPE: - ***For maintenance, laboratories, production*** • *Neoprene chemical protection glove EN 374* • *Disposable latex gloves EN 374* • *Safety goggles EN 166* • *Full face mask EN 136* • *Half-mask filters for ABEK1 EN 14387* • *Dust Filters P3 EN 143* • *Full face mask AX Filters with a low boiling point EN371* • *Full face mask filters ABEK2P3 with high boiling point* • *Full Face mask filters for ammonia K2 EN 14387 (only for use of the toxic gases staff)* • *Full Face mask filters for chlorine E2 EN 14387 (only for use of toxic gases staff)* • *Half-mask EN 140* ***Only for production, storage, and maintenance:*** • *Disposable Tyvec Overalls EN 13034* • *Suit jacket, pants and shirt EN 13034*

	• *Safety shoes EN 345* • *Caps to be used in combination with assisted ventilation system* ***Only for laboratories*** • *Lab Coats EN 13034*

DAMAGE (G)	*PROBABILITY (P)*	**P x G = RISK**
1 Low *2 Medium* *3 High* *4 Irreversible*	*1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	

9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6Medium risk
1 < =R < 4 Low risk

G.O.L.		***ABSOLUTE RISK***				***RESIDUAL RISK***			
		P	*G*	*R*		*P*	*G*	*R*	
H.E.G. n.1	*Office clerk*	-	-	*Low for the safety*	*Irrelevant to the health*	-	-	-	-
H.E.G. n.2	*Technician employee*	-	-	*Low for the safety*	*Irrelevant to the health*	-	-	-	-
H.E.G. n.3	*Tecnician-production employee*	-	-	*Not low for safety (4,5)*	*Not irrelevant for health (4,66)*	-	-	*3,14*	*3,04*
H.E.G. n.4	*Production supervisor*	-	-	*Not low for safety (5,29)*	*Not irrelevant for health (6,51)*	-	-	*3,71*	*3,54*
H.E.G. n.5	*Production operator*	-	-	*Not low for safety (5,29)*	*Not irrelevant for health (6,51)*	-	-	*3,71*	*3,54*
H.E.G. n.6	*Warehouse operator*	-	-	*Not low for safety (4,29)*	*Not irrelevant for health (5,29)*	-	-	*1,24*	*2,54*
H.E.G. n.7	*Maintenance operator*	-	-	*Low for the safety (2,27)*	*Irrilevante per la salute (2,89)*	-	-	1,58	*2,72*
H.E.G. n.8	*Laboratory technician*	-	-	*Not low for safety (4,5)*	*Not irrelevant for health (4,66)*	-	-	*3,14*	*3,04*

IMPROVEMENT MEASURES	*Rif Chemical risk assessment*

SHEET 17		
CATEGORY	Health Risk	
RISK	*Exposure to carcinogens*	
DETECTED SITUATION	Among the company's currently listed substances, there are some potentially carcinogenic effect which is now proven, but whose replacement by others that are not, unfortunately, it is not possible for synthesis and/or analysis.reasons. The company is, however, constantly involved in the study and research of substitutes agents. In the meantime, the company tries to limit, where possible, the number of workers exposed to these substances and it is constantly affirmed the importance to workers of the proper use of the supplied personal protective equipment, ensuring the effective daily use. In addition, in all the involved departments, collective protection measures are applied to ensure the workplace health where employees handle carcinogens substances. Also, the company tries to integrate measures of prevention and protection with procedural ones, such as the one concerning the cleaning of the premises and the proper disposal of both the disposable garments and the washing fluids contaminated with carcinogens. The risk assessment is carried out, as for the chemicals, with affinity for substances and processes, referring to Sterling S.p.A. Carcinogenic Risk Evaluation Document. The registration of types, methods, quantity and frequency of use of the various agents is carried out in the Exposed Subjects register, from which it may be concluded that quantity and frequency of use of carcinogenic substances in the company are limited, and that protective measures for workers are such that the risk of exposure is limited.	
POTENTIALLY HARMFUL EVENT	*Inhalation* *Contact*	
PREVENTIVE MEASURES TAKEN	*Presence of hoods and suction valves in the departments*	
	Annual programmed functionality and draw inspection on laboratory aspiration hoods.	
	Workers training and information and ME training on the use of carcinogens and mutagens.	
	Work Instruction on the use of carcinogenic and mutagenic substances	
PROTECTION MEASURES TAKEN	*Presence of hoods and suction valves in the departments*	
	DPI:-For production operators, warehouse operators, production operators involved in the waste management *-Full mask and half-mask with filters AX and ABEK2 P3* *-Latex Gloves EN 374* *-Neoprene gloves EN 374* *-Tyvek Coverall-EN 13034:6* *-Glasses EN 166* *-Safety Shoes* *-Chemical protective clothing* ***For laboratory technicians*** *Full mask and half-mask with filters AX and ABEK2 P3* *-Latex gloves EN 374* *-Neoprene gloves EN 374* *-Tyvek Coverall-EN 13034:6* *-Glasses EN166* *-Anti acid Coating*	
DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**
9 < =R < =16 Very High risk *6< R < 8 High risk* *4 < =R < =6Medium risk* *1 < =R < 4 Low risk*		

H.E.G. (only for staff handling carcinogenics)		*ABSOLUTE RISK*			*RESIDUAL RISK*		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	-	-	-	-	-	-
H.E.G. n.2	*Technician employee*	-	-	-	-	-	-
H.E.G. n.3	*Tecnician-production employee*	-	-	-	-	-	-
H.E.G. n.4	*Production supervisor*	*2*	*4*	*8*	*1*	*4*	*4*
H.E.G. n.5	*Production operator*	*2*	*4*	*8*	*1*	*4*	*4*
H.E.G. n.6	*Warehouse operator*	*2*	*4*	*8*	*1*	*4*	*4*
H.E.G. n.7	*Maintenance operator*	-	-	-	-	-	-
H.E.G. n.8	*Laboratory technician*	*2*	*4*	*8*	*1*	*4*	*4*
IMPROVEMENT MEASURES							

SCHEDA 18		
CATEGORY	Health Risk	
PERICOLO	*Exposure to biological agents*	
DETECTED SITUATION	Biological agents are not manipulated. The biological risk is potentially linked to the spread of pathogenic organisms by ventilation systems and air conditioning.	
POTENTIALLY HARMFUL EVENT	*Infections*	
PREVENTIVE MEASURES TAKEN	*Scheduled cleaning of work environments.*	
	Scheduled cleaning and sanitizing of ventilation systems and air conditioning .	
PROTECTION MEASURES TAKEN		
DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**
9 < =R < =16 Very High risk *6< R < 8 High risk* *4 < =R < =6Medium risk* *1 < =R < 4 Low risk*		

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*1*	*3*	*3*	*1*	*2*	*2*
H.E.G. n.2	*Technician employee*	*1*	*3*	*3*	*1*	*2*	*2*
H.E.G. n.3	*Tecnician-production employee*	*1*	*3*	*3*	*1*	*2*	*2*
H.E.G. n.4	*Production supervisor*	*1*	*3*	*3*	*1*	*2*	*2*
H.E.G. n.5	*Production operator*	*1*	*3*	*3*	*1*	*2*	*2*
H.E.G. n.6	*Warehouse operator*	*1*	*3*	*3*	*1*	*2*	*2*
H.E.G. n.7	*Maintenance operator*	*1*	*3*	*3*	*1*	*2*	*2*
H.E.G. n.8	*Laboratory technician*	*1*	*3*	*3*	*1*	*2*	*2*
IMPROVEMENT MEASURES							

SHEET 19	
CATEGORY	Health Hazards
RISK	*Industrial ventilation system and indoor air pollution*
DETECTED SITUATION	All workplaces have **natural and forced ventilation systems** (doors or windows or extraction plants) providing sufficient air exchange. The forced ventilation systems are regularly maintained. Both in the production and other departments there are hoods and suction valves when working with possible vapor emissions or dust. Smoking point is located outside in lower risk of fire areas
POTENTIALLY HARMFUL EVENT	*Inadequate temperature (hot - cold) with a consequent worker distress* *Unhealthy microclimate* *Related diseases: Sick Building Syndrome* *Diseases that are not quickly solvable abandoning the workplace, whose pathogenesis (mode of onset) is a toxic-infectious allergic*
PREVENTIVE MEASURES TAKEN	*Performing regular maintenance of air conditioning, ventilation, hoods and suction valves.*
	Natural and forced ventilation systems (doors or windows or extraction plants) providing sufficient air changes
	Carrying out regular ventilation systems and conditioning cleaning and sanitizing
	Production departments environmental monitoring
PROTECTION MEASURES TAKEN	
	PPE:

DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**

9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6Medium risk
1 < =R < 4 Low risk

		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*1*	*3*	*3*	*1*	*3*	*3*
H.E.G. n.2	*Technician employee*	*1*	*3*	*3*	*1*	*3*	*3*
H.E.G. n.3	*Tecnician-production employee*	*2*	*3*	*3*	*1*	*3*	*3*
H.E.G. n.4	*Production supervisor*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.5	*Production operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.6	*Warehouse operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.7	*Maintenance operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.8	*Laboratory technician*	*2*	*3*	*6*	*1*	*3*	*3*

IMPROVEMENT MEASURES	

SHEET 20	
CATEGORY	Health Hazards
RISK	*Workplaces air conditioning and thermal microclimate*
DETECTED SITUATION	There are no particular thermal discomfort conditions. The temperature inside the workplace is: in summer (with cooling) **between 23°C and 26°C** [S] in the winter (heating period) **between 20°C and 24°C** [S] . The temperature is guaranteed by the presence of a general conditioning plant in the offices and laboratory area. The relative humidity is **between 30 and 70%** and in any case such as to avoid the formation of fog and condensation. In the production, warehouse and workshop premises there is no air conditioning system, so that the operators are provided with a clothing which is suitable for the room thermal conditions. The interior temperature is sufficiently homogeneous. The natural and forced ventilation systems do not produce dangerous or annoying air flows. The maintenance and warehouse operators are often outside and may find themselves in unfavorable microclimatic conditions caused by winter cold, summer heat, air currents, temperature changes.
POTENTIALLY HARMFUL EVENT	*Temperature changes* *Annoying air currents* *Exposure to too hot or too cold temperatures*
PREVENTIVE MEASURES TAKEN	*Performing regular maintenance of air conditioning systems* *Supply of appropriate to the weather clothing.* *In case of unfavorable and dangerous weather conditions for the workers safety, they have the ability to shelter in interior locations.*
PROTECTION MEASURES TAKEN	 *PPE: - For production operators, warehouse operators, production operators involved in the waste disposal, technical employees* *-Jacket against the cold*

DAMAGE (G)	*PROBABILITY (P)*	**P x G = RISK**
1 Low	*1 Improbable*	
2 Medium	*2 Less probable*	
3 High	*3 Probable*	
4 Irreversible	*4 Very probable*	

9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6Medium risk
1 < =R < 4 Low risk

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*1*	*2*	*2*	*1*	*2*	*2*
H.E.G. n.2	*Technician employee*	*1*	*2*	*2*	*1*	*2*	*2*
H.E.G. n.3	*Tecnician-production employee*	*2*	*2*	*4*	*1*	*2*	*2*
H.E.G. n.4	*Production supervisor*	*2*	*2*	*4*	*1*	*2*	*2*
H.E.G. n.5	*Production operator*	*2*	*2*	*4*	*1*	*2*	*2*
H.E.G. n.6	*Warehouse operator*	*2*	*2*	*4*	*1*	*2*	*2*
H.E.G. n.7	*Maintenance operator*	*2*	*2*	*4*	*1*	*2*	*2*
H.E.G. n.8	*Laboratory technician*	*1*	*2*	*2*	*1*	*2*	*2*

IMPROVEMENT MEASURES	

SHEET 21	
CATEGORY	Health hazards
RISK	*Vibrations*
DETECTED SITUATION	**Office employees, laboratories, production supervisors:** The workers do not use equipment which produce vibrations on the arm system. Personal or company means of transport are only used for back and forth home and from time to time to carry out some company commissions; according to time of use it is verified that the daily action value do not exceed. **Production operators**: production and warehouse operators use an equipment which does not produce vibrations on the hand-arm system but are subject to whole-body vibration (forklifts). **Maintenance operators:** The workers may use equipment that produce vibrations on the hand-arm system (grinders, hammers, drills, etc. ..) and on whole body (vans, forklifts). Currently in use a forklift Toyota 7BEF18 that will soon be replaced and of which currently the company do not have reliable data. For the preliminary assessment of risk it is used the measurement made in Sterling S.p.A. considering, for security purposes, the maximum value of acceleration measured between the forklifts available. For the evaluation of hand-arm vibration, in Sterling Chemical Malta plant, are not currently used equipment which might cause vibrations. It is also used in this case, forecasting purposes, the assessment carried out for all equipment used by maintenance operators at Sterling S.p.A.
POTENTIALLY HARMFUL EVENT	*Circulatory disorders* *Musculoskeletal system disorders* *Neurological disorders* *Posture disorders* *Nuisance and reduced working capacity*
PREVENTIVE MEASURES TAKEN	*Scheduled maintenance of equipment, vehicles and lift trucks* *Specifica training for workers* *Health surveillance (for medium risk)*
PROTECTION MEASURES TAKEN	

DAMAGE (G)	*PROBABILITY (P)*	**P x G = RISK**
1 Low *2 Medium* *3 High* *4 Irreversible*	*1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	

9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6Medium risk
1 < =R < 4 Low risk

H.E.G.		***ABSOLUTE RISK***				***RESIDUAL RISK***			
		P	*G*	*R-WHOLE BODY*	*R-HAND ARM*	*P*	*G*	*R-WHOLE BODY*	*R-HAND ARM*
H.E.G. n.1	*Office clerk*	-	-	*LOW(a<0,5 m/s2)*	-	-	-	*LOW (a<0,5 m/s2)*	-
H.E.G. n.2	*Tecnician-production employee*	-	-	*LOW(a<0,5 m/s2)*	-	-	-	*LOW (a<0,5 m/s2)*	-
H.E.G. n.3	*Production supervisor*	-	-	*LOW(a<0,5 m/s2)*	-	-	-	*LOW(a<0,5 m/s2)*	-
H.E.G. n.4	*Production operator*	-	-	*LOW(a<0,5 m/s2)*	-	-	-	*LOW (a<0,5 m/s2)*	-
H.E.G. n.5	*Warehouse operator*	-	-	*MEDIUM(0,5 m/s2<a<1 m/s2)*	-	-	-	*MEDIUM(0,5 m/s2<a<1 m/s2)*	-
H.E.G. n.6	*Waste disposal operator*	-	-	*LOW (a<0,5*	*BASSO (a<2,5 m/s2)*	-	-	*LOW (a<0,5 m/s2)*	*LOW (a<2,5 m/s2)*

				m/s2)					
H.E.G. n.7	*Maintenance operator*	-	-	*LOW (a<0,5 m/s2)*	*MEDIO(2,5 m/s2<a<5 m/s2)*	-	-	*LOW (a<0,5 m/s2)*	*MEDIUM(2, 5 m/s2<a<5 m/s2)*
H.E.G. n.8	*R&D laboratory manager*	-	-	*LOW (a<0,5 m/s2)*	-	-	-	*LOW (a<0,5 m/s2)*	-
H.E.G. n.9	*R&D laboratory technician*	-	-	*LOW (a<0,5 m/s2)*	-	-	-	*LOW (a<0,5 m/s2)*	-
H.E.G. n.10	*Q,.C. laboratory manager*	-	-	*LOW (a<0,5 m/s2)*	-	-	-	*LOW (a<0,5 m/s2)*	-
H.E.G. n.11	*Q.C. laboratory Analyst*	-	-	*LOW (a<0,5 m/s2)*	-	-	-	*LOW (a<0,5 m/s2)*	-
H.E.G. n.12	*Canteen employee*	-	-	*LOW (a<0,5 m/s2)*	-	-	-	*LOW (a<0,5 m/s2)*	-
IMPROVEMENT MEASURES	*Make a specific assessment of the forklift that should be rented*								

SHEET 22	
CATEGORY	Health Risk
RISK	*Noise*
DETECTED SITUATION	**Office employees**: There are't machines that produce significant noise. The daily exposure level for workers belonging to this homogenous group does not exceed 80 dB (A). At Sterling S.p.A. was carried out noise measurements to assess the level of exposure of workers. Due to affinity of equipment, the evaluation resulted from measurements are considered valid at Sterling Chemical Malta Ltd. **Operators:** The workers are exposed to sources of noise produced by the equipment used in the same homogenous area of activity. **Laboratory employees:** The workers are exposed to sources of noise produced by the equipment used. **Maintenance operators:** The workers are exposed to sources of noise produced by the equipment (grinder, jig saw, grinder, hammer, etc.). *From the measurements made it is proved that the risk is medium (exposure between 80 and 85 dBA).*
POTENTIALLY HARMFUL EVENT	*Hearing disorders* *Nervous system disorders* *Difficulties in communication due to background noise* *Fatigue*
PREVENTIVE MEASURES TAKEN	*Training on the use of noise cancelling PPE* *Health monitoring (for medium risk upon worker's request)* *Safety signs* *Specific training for workers*
PROTECTION MEASURES TAKEN	***PPE:*** ***For maintenance operators:*** ***-ear muffs and ear-bows (for the use of specific equipment)***

DAMAGE (G)	*PROBABILITY (P)*	
1 Low *2 Medium* *3 High* *4 Irreversible*	*1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**

9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6Medium risk
1 < =R < 4 Low risk

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	-	-	*LOW(<80dBA)*	-	-	*LOW (<80dBA)*
H.E.G. n.2	*Technician employee*	-	-	*LOW (<80dBA)*	-	-	*LOW (<80dBA)*
H.E.G. n.3	*Tecnician-production employee*	-	-	*LOW (<80dBA)*	-	-	*LOW (<80dBA)*
H.E.G. n.4	*Production supervisor*	-	-	*LOW (<80dBA)*	-	-	*LOW (<80dBA)*
H.E.G. n.5	*Production operator*	-	-	*LOW (<80dBA)*	-	-	*LOW (<80dBA)*
H.E.G. n.6	*Warehouse operator*	-	-	*LOW (<80dBA)*	-	-	*LOW (<80dBA)*
H.E.G. n.7	*Maintenance operator*	-	-	*MEDIO (80-85dBA)*	-	-	*LOW (<80dBA)*
H.E.G. n.8	*Laboratory technician*	-	-	*LOW (<80dBA)*	-	-	*LOW 80dBA)*

IMPROVEMENT MEASURES	

SHEET 23			
CATEGORY	Safety risk		
RISK	*Exposure to ionizing and non-ionizing Radiation (ROA and electromagnetic fields)*		
DETECTED SITUATION	Ionizing radiation absent There are sources of electromagnetic fields. • power lines • cell phone • switchboards with magnetic fields (electrical room) The presence of the CE marking on the computer means that the electromagnetic fields are in compliance with recommended limits. Some employees also use cell phones. By virtue of the nature of the workplace, the activities carried out and machinery used (VDT and cordless phones), it is believed that the level of risk does not make necessary for the moment a detailed assessment about electromagnetic fields. Regarding artificial optical radiation, inside the Laboratory of Research and Development UV lamps are used for the detection of chromatographic maps. The UV lamps are not justified equipment so non-coherent radiation sources. The UV lamps are fixed lamps, therefore considered non-hazardous and therefore not required to wear specific PPE. Special signs indicating the places where there is such a risk are necessary. During welding operations, the maintenance operators are subjected to non-ionizing radiation and artificial optical radiation ROA. The welding, regardless of the metal used, exceeds the exposure limit values for the UV radiation for exposure of tens of seconds to a meter from the arc. For this reason, the workers must use PPE and must undergo health surveillance. The Tig weldings are not justified equipment so non-coherent radiation sources. In the office there are no machines that produce a quantity of ROA higher than the current regulations therefore are not necessary further attention and measure improvement. There is both natural and artificial lighting, which mixing of frequencies does not involve significant risks.		
POTENTIALLY HARMFUL EVENT	*Non-ionizing radiation (alteration of normal lifespan caused by exposure)*		
PREVENTIVE MEASURES TAKEN	*Education and training*		
	Operating Instructions of maintenance		
	Specific training		
	Health surveillance for welders		
	Safety signs		
PROTECTION MEASURES TAKEN			
	PPE: -For maintenance operators ***-Welding Helmet EN 169***		
DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**	
9 < =R < =16 Very High risk *6< R < 8 High risk* *4 < =R < =6 Medium risk* *1 < =R < 4 Low risk*			

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*1*	*3*	*3*	*1*	*3*	*3*
H.E.G. n.2	*Technician employee*	*1*	*3*	*3*	*1*	*3*	*3*
H.E.G. n.3	*Tecnician-production employee*	*1*	*3*	*3*	*1*	*3*	*3*
H.E.G. n.4	*Production supervisor*	*1*	*3*	*3*	*1*	*3*	*3*

H.E.G. n.5	*Production operator*	*1*	*3*	*3*	*1*	*3*	*3*
H.E.G. n.6	*Warehouse operator*	*1*	*3*	*3*	*1*	*3*	*3*
H.E.G. n.7	*Maintenance operator*	*3*	*4*	*12*	*1*	*3*	*3*
H.E.G. n.8	*Laboratory technician*	*1*	*3*	*3*	*1*	*3*	*3*
IMPROVEMENT MEASURES							

SHEET 24		
CATEGORY	Health Risk	
RISK	*Other physical agents (asbestos, lead)*	
DETECTED SITUATION	Asbestos: not present Lead: not present Powders: maintenance operators load and unload active carbons from filters located in the plant. Is not exceeded during the operation, the occupational exposure limit. In addition, operators are provided with the half-mask with filter FPP3 that allows to reduce the residual risk to a minimum. The powders relating to used chemicals were analyzed within the chemical risk assessment.	
POTENTIALLY HARMFUL EVENT	*Inhalation of dust*	
PREVENTIVE MEASURES TAKEN		
	Environmental monitoring dust	
	Operating instruction "Managing Work Permits"	
	Operating instruction "Information for Contractors"	
	Signs	
PROTECTION MEASURES TAKEN		
	PPE:-For maintenance operators ***-Half-mask filter ABEK P3***	
DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**
9 < =R < =16 Very High risk *6< R < 8 High risk* *4 < =R < =6Medium risk* *1 < =R < 4 Low risk*		

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*1*	*3*	*3*	*1*	*3*	*3*
H.E.G. n.2	*Technician employee*	*1*	*3*	*3*	*1*	*3*	*3*
H.E.G. n.3	*Tecnician-production employee*	*1*	*3*	*3*	*1*	*3*	*3*
H.E.G. n.4	*Production supervisor*	*1*	*3*	*3*	*1*	*3*	*3*
H.E.G. n.5	*Production operator*	*1*	*3*	*3*	*1*	*3*	*3*
H.E.G. n.6	*Warehouse operator*	*1*	*3*	*3*	*1*	*3*	*3*
H.E.G. n.7	*Maintenance operator*	*2*	*4*	*8*	*1*	*4*	*4*
H.E.G. n.8	*Laboratory technician*	*1*	*3*	*3*	*1*	*3*	*3*
IMPROVEMENT MEASURES	*-Supply equipment for extracting dust during the operation of replacement of the active carbon*						

SHEET 25	
CATEGORY	Health Hazards
RISK	*Work with Display Screen Equipment*
DETECTED SITUATION	In the recruitment phase is evaluated by the Employer, in collaboration with the service manager and the Doctor in charge whether the type of activity implies that workers spend more than 20 hours per week on the computer. People working with pc shall be able to make a break or change of the activity of **15 minutes** if work for **2 consecutive hours**. Users have received specific education and training in relation to the risks arising from the use of display screen equipment. Use of keyboards to write.
POTENTIALLY HARMFUL EVENT	*Visual fatigue* *Physical and mental fatigue* *Skeletal muscle damage related to posture*
PREVENTIVE MEASURES TAKEN	*Compliance with requirements identified in Annex XXXIV for VDU workstations.*
	The worker have breaks during the working day.
	Education and training, in relation to the risks arising from the use of display screen equipment.
	Regular health monitoring according to the protocol established by the Doctor in charge.
PROTECTION MEASURES TAKEN	

DAMAGE (G)	*PROBABILITY (P)*	
1 Low *2 Medium* *3 High* *4 Irreversible*	*1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**

9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6Medium risk
1 < =R < 4 Low risk

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*2*	*2*	*4*	*1*	*2*	*2*
H.E.G. n.2	*Technician employee*	*2*	*2*	*4*	*1*	*2*	*2*
H.E.G. n.3	*Tecnician-production employee*	*1*	*2*	*2*	*1*	*2*	*2*
H.E.G. n.4	*Production supervisor*	*1*	*2*	*2*	*1*	*2*	*2*
H.E.G. n.5	*Production operator*	*1*	*2*	*2*	*1*	*2*	*2*
H.E.G. n.6	*Warehouse operator*	*1*	*2*	*2*	*1*	*2*	*2*
H.E.G. n.7	*Maintenance operator*	*1*	*2*	*2*	*1*	*2*	*2*
H.E.G. n.8	*Laboratory technician*	*2*	*2*	*4*	*1*	*2*	*2*

IMPROVEMENT MEASURES	

SHEET 26	
CATEGORY	Health hazard
RISK	*Manual handling of loads, repetitive movements and awkward postures*
DETECTED SITUATION	**Employees, managers, and laboratory analysts:** For this type of work it's not required a systematic manual handling of loads. The personnel may be subject to awkward postures with secondary phenomena of fatigue and muscle contracture. These disturbs are generally caused by the position taken, for the most part, by the height or type of the chair. In other cases depend on the size of the work station (ex. lack of space for proper support of the forearms, inadequate height and angle of the screen) or by the non-compliance of the keyboard. **Production operators:** The greater risk is linked to the handling of materials (ex. for connection of mobile pipes) or drums containing chemical substances during the process phases. It should however be noted that the manual handling is reduced to a minimum as for the heavier pieces (more than 25 kg) are moved by more persons and operators are equipped with hand trucks and forklifts for the transport and storage of materials It is not possible to make a NIOSH analysis or similar cause the extreme variability of the materials handled for size and shape. In the various phases of work the posture is generally characterized by the upright position, and in some cases the position of the spine can be necessarily flexed forward. During the work shift, there is the opportunity to take breaks in sitting position and to frequently change job type because it is not a work "chain" and then there are no fixed work stations. It's necessary to undergo operators of production and warehouse to health surveillance. Production supervisors are not required to perform manual and systematic handling of loads therefore are not subject to health surveillance for this type of risk. It's necessary to undergo staff canteen to health surveillance because, even though the materials are not heavy, manual handling of loads is quite common.
POTENTIALLY HARMFUL EVENT	*Injuries musculoskeletal system, cardiovascular system* *Accidents (falling material, projection of material, cuts)*
PREVENTIVE MEASURES TAKEN	*Supply of pallet trucks and trolleys for handling materials. Presence of forklifts, hoists and jib crane for lifting materials.*
	The worker have breaks during the working day.
	Information and training, in relation to the risks arising from the MMC
	Regular health monitoring according to the protocol established by the Doctor in charge.
PROTECTION MEASURES TAKEN	

DAMAGE (G)	*PROBABILITY (P)*	**P x G = RISK**
1 Low	*1 Improbable*	
2 Medium	*2 Less probable*	
3 High	*3 Probable*	
4 Irreversible	*4 Very probable*	

9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6 Medium risk
1 < =R < 4 Low risk

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*1*	*2*	*2*	*1*	*2*	*2*
H.E.G. n.2	*Technician employee*	*1*	*2*	*2*	*1*	*2*	*2*
H.E.G. n.3	*Tecnician-production employee*	*1*	*2*	*2*	*1*	*2*	*2*
H.E.G. n.4	*Production supervisor*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.5	*Production operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.6	*Warehouse operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.7	*Maintenance operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.8	*Laboratory technician*	*1*	*2*	*2*	*1*	*2*	*2*

IMPROVEMENT MEASURES	

SHEET 27			
CATEGORY	Health Risk		
RISK	*Hygiene of environment, sanitation, canteen and rest room*		
DETECTED SITUATION	The equipment, furnishings and work environments are regularly cleaned and checked (as far as possible because the cleaning is carried out of hours). In the vicinity of the workplace and their dependencies, are not located deposits of waste. In the workplace or in their immediate vicinity water is available in sufficient quantity. In the workplace or in their immediate vicinity are lavatories and washbasins. The workers have separate lavatories for men and women. The toilets are equipped with washbasins with running water. The toilets are equipped with detergents and means to dry. The toilets are equipped with dressing. There is a refectory for eating meals. It's forbidden in any case (expressly and in writing) distribute and take alcoholic drinks and spirits at work that produce high risk of accidents or safety, the safety or health of others.		
POTENTIALLY HARMFUL EVENT	*Injuries musculoskeletal system, cardiovascular system,* *Accidents (falling material, projection of material, cuts,)*		
PREVENTIVE MEASURES TAKEN	*Cleaning of rooms*		
PROTECTION MEASURES TAKEN			
DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**	
9 < =R < =16 Very High risk *6< R < 8 High risk* *4 < =R < =6Medium risk* *1 < =R < 4 Low risk*			

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*1*	*2*	*2*	*1*	*2*	*2*
H.E.G. n.2	*Technician employee*	*1*	*2*	*2*	*1*	*2*	*2*
H.E.G. n.3	*Tecnician-production employee*	*1*	*2*	*2*	*1*	*2*	*2*
H.E.G. n.4	*Production supervisor*	*1*	*2*	*2*	*1*	*2*	*2*
H.E.G. n.5	*Production operator*	*1*	*2*	*2*	*1*	*2*	*2*
H.E.G. n.6	*Warehouse operator*	*1*	*2*	*2*	*1*	*2*	*2*
H.E.G. n.7	*Maintenance operator*	*1*	*2*	*2*	*1*	*2*	*2*
H.E.G. n.8	*Laboratory technician*	*1*	*2*	*2*	*1*	*2*	*2*

IMPROVEMENT MEASURES	

SHEET 28	
CATEGORY	Safety and health risks, organizational and managerial aspects
RISK	*Work-related stress*
DETECTED SITUATION	Psychosocial risks can affect both the physical and mental health directly and indirectly, through the experience of stress. Stress is the result of an adaptation process that involves the individual during his interaction with the environment, in this case the work place. The work-related stress occurs when the demands of the work environment exceed the subject's ability to deal with them. The risks that cause stress can be identified , but not limited to: - Lack of organization and planning (excessive pace of work, the uncertainty regarding the role to be performed, the lack of control of their work, the outrageous claims and mismanagement of change and working time). - Issues related to the work environment such as traditional risks such as accident, physical, chemical , biological, ergonomic risks - Violence, or threats of violence - Verbal intimidation by external people and intimidation by colleagues. Stress at work could become a problem for the company: - Absenteeism, poor control of working time, disciplinary problems, damage to the company image; - Reduction in productivity or quality, accidents, errors, etc.; - Costs for a possible compensation or medical expenses, etc. The company has carried out, regarding to article 6 of c.8 D.Lgs.81/08, and following the directions and methods recommended by the Advisory Committee, a preliminary assessment to determine possible risk factors for work-related stress. (For results see technical report specification).
POTENTIALLY HARMFUL EVENT	*Behavioral disorders* *Damage on a psychological level* *Damage on a physical level*
PREVENTIVE MEASURES TAKEN	*Annual monitoring of the indicators* *The measures are specifically indicated in the document.*
PROTECTION MEASURES TAKEN	

DAMAGE (G)	*PROBABILITY (P)*	
1 Low *2 Medium* *3 High* *4 Irreversible*	*1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**

9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6Medium risk
1 < =R < 4 Low risk

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	-	-	*MEDIUM*	-	-	*MEDIUM*
H.E.G. n.2	*Technician employee*	-	-	*MEDIUM*	-	-	*MEDIUM*
H.E.G. n.3	*Tecnician-production employee*	-	-	*MEDIUM*	-	-	*MEDIUM*
H.E.G. n.4	*Production supervisor*	-	-	*MEDIUM*	-	-	*MEDIUM*
H.E.G. n.5	*Production operator*	-	-	*MEDIUM*	-	-	*MEDIUM*
H.E.G. n.6	*Warehouse operator*	-	-	*MEDIUM*	-	-	*MEDIUM*
H.E.G. n.7	*Maintenance operator*	-	-	*MEDIUM*	-	-	*MEDIUM*
H.E.G. n.8	*Laboratory technician*	-	-	*MEDIUM*	-	-	*MEDIUM*

IMPROVEMENT MEASURES	

SHEET 29		
CATEGORY	Safety and health risks, organizational and managerial aspects	
RISK	*Lack of organization of work, duties, functions and responsibilities, analysis planning and control*	
DETECTED SITUATION	The organization of work, duties, functions and responsibilities as well as measures to monitor and control are made known through information and training, supply of work procedures and possibly through formal appointment. The company is also equipped with a system of environment and safety management.	
POTENTIALLY HARMFUL EVENT	*Misapplication of work procedures* *Risks due to a lack of knowledge of correct procedures*	
PREVENTIVE MEASURES TAKEN	*Internal and external audits relating to management systems*	
	Procedures and operating instructions of the management system of the safety, environmental and GMP	
	Information and training on existing management systems	
PROTECTION MEASURES TAKEN		
DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**
9 < =R < =16 Very High risk *6< R < 8 High risk* *4 < =R < =6Medium risk* *1 < =R < 4 Low risk*		

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.2	*Technician employee*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.3	*Tecnician-production employee*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.4	*Production supervisor*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.5	*Production operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.6	*Warehouse operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.7	*Maintenance operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.8	*Laboratory technician*	*2*	*3*	*6*	*1*	*3*	*3*

IMPROVEMENT MEASURES	

SHEET 30	
CATEGORY	Safety and health risks, organizational and managerial aspects
RISK	*Lack of education, information and training*
DETECTED SITUATION	The employer shall ensure that each worker receives sufficient and appropriate information and training on health and safety with particular reference to: the concepts of risk, harm, prevention, protection, organization of prevention corporate rights and duties of the various corporate entities, supervisory, control, assistance; risks relating to the duties, possible damage and the resulting protective and preventive measures proper of the industry sector. The employer shall ensure that each worker receives sufficient and adequate training in relation to specific risks. Everything is made in respect of the Agreement between State and Regions on the training of workers, supervisors and managers. The training and, where applicable, specific training takes place: establishment of the employment relationship; change of duties, introduction of new work equipment or new technologies, new dangerous substances and preparations. Workers in charge of fire prevention and firefighting, evacuation of the workplace in the event of serious and imminent danger, rescue, first aid and emergency, emergency management, and the workers representative have received appropriate and specific training. It 's also applied a procedure on management information and training of workers.
POTENTIALLY HARMFUL EVENT	*Damage associated with lack of knowledge of procedures, instructions, prohibitions, etc.* *Non worker participation in accident prevention*
PREVENTIVE MEASURES TAKEN	*Internal and external audits relating to management systems* *Basic and specific training in the basis of the Agreement between State and regions* *Procedure "Management Training" P_4.4.2 Document D4.4.2 "Basic Training Course Content"*
PROTECTION MEASURES TAKEN	

DAMAGE (G)	*PROBABILITY (P)*	**P x G = RISK**
1 Low *2 Medium* *3 High* *4 Irreversible*	*1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	

9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6Medium risk
1 < =R < 4 Low risk

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.2	*Technician employee*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.3	*Tecnician-production employee*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.4	*Production supervisor*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.5	*Production operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.6	*Warehouse operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.7	*Maintenance operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.8	*Laboratory technician*	*2*	*3*	*6*	*1*	*3*	*3*

IMPROVEMENT MEASURES	

SHEET 31	
CATEGORY	Safety and health risks, organizational and managerial aspects
RISK	*Safety and health signs*
DETECTED SITUATION	Inside the company there are specific safety signs, located in the production department, warehouses, canteen, offices and laboratories in order to warn of potential hazards or dangers and to prohibit or prescribe certain behaviors. In

	some cases, serve to provide information about emergency exits or means of rescue and relief. All the signs in the company complies, as regards type and colors used, the general characteristics required by law and is located in a rational manner, avoiding redundancy of signals and / or signs. The good condition and or operation of safety signs is regularly checked by the Responsible of Safety and/or by collaborator and in case maintained. The signals are properly installed, located and maintained. The signs are clear and understood by all potential users.
POTENTIALLY HARMFUL EVENT	*Damage associated with lack of knowledge of procedures, instructions, prohibitions, etc.*
PREVENTIVE MEASURES TAKEN	*Internal and external audits relating to management systems*
	Basic and specific training on the basis of the agreement between Government and Regions
	Appropriate signs
PROTECTION MEASURES TAKEN	

DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**

9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6 Medium risk
1 < =R < 4 Low risk

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.2	*Technician employee*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.3	*Tecnician-production employee*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.4	*Production supervisor*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.5	*Production operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.6	*Warehouse operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.7	*Maintenance operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.8	*Laboratory technician*	*2*	*3*	*6*	*1*	*3*	*3*

IMPROVEMENT MEASURES	

SHEET 32	
CATEGORY	Safety and health risks, organizational and managerial aspects
RISK	*No maintenance and testing*
DETECTED SITUATION	The machines are not tampered with by users and there are all the safety requirements regularly installed by the manufacturer of the machine. The maintenance of machinery and firefighting equipment is performed regularly and periodically, extra-ordinary interventions are performed by companies authorized and qualified personnel. The internal maintenance department have the task to intervene only in case it is a maintenance due to breakage or provided by the maintenance plan and for which the operators possess the technical skills and the material needed to carry out the intervention. In the event that the maintenance should be commissioned to an outside firm, it receives prior specific training on safety and quality (GMP) to be used in the workplace. The maintenance procedure is applied for the workplace, production plant and equipment.
POTENTIALLY HARMFUL	*Accidents (falling material, projection of material, cuts, blows, crushing, shock,*

EVENT	*injury etc.), occupational diseases*
PREVENTIVE MEASURES TAKEN	*Internal and external audits relating to management systems*
	"Maintenance " procedure P 4.4.6-I
PROTECTION MEASURES TAKEN	

9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6 Medium risk
1 < =R < 4 Low risk

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.2	*Technician employee*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.3	*Tecnician-production employee*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.4	*Production supervisor*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.5	*Production operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.6	*Warehouse operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.7	*Maintenance operator*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.8	*Laboratory technician*	*2*	*3*	*6*	*1*	*3*	*3*

IMPROVEMENT MEASURES	

SHEET 33		
CATEGORY	Safety and health risks, organizational and managerial aspects	
RISK	*Use of Personal Protection Equipment*	
DETECTED SITUATION	The personal protection equipment (PPE) means any equipment designed to be worn and held by the worker to protect him against one or more risks that threaten the safety and health at work; PPE must be used when the risks cannot be avoided or sufficiently reduced by preventive technical measures, by means of collective protection or work organization methods. The PPE are provided by the company to all employees that carry out duties for which it is required to use them. The PPE "disposable" are always available in the various departments and regularly replenished by the safety department; those personally supplied to the operator, for which the individual is responsible for proper storage, are provided by the safety department, which provide necessary training at the time a new entry in the company. In particular, it distinguished the use of semi-facial mask and the full-face mask, pointing out what is the maximum duration of the filters and recommending the replacement at the appropriate time. Finally, it is stressed the utmost importance of the use of protective glasses by all those who perform tasks where there is the risk of ejection of jets / splashes in the eyes.	
POTENTIALLY HARMFUL EVENT	*Accidents (falling material, projection of material, cuts, blows, crushing, shock, injury etc.); occupational diseases*	
PREVENTIVE MEASURES TAKEN	*Internal and external audits relating to management systems*	
	Procedure "Management of protection equipment PS 4.4.6.-L; Operating directions "Use and maintenance of PPE" IOS 4.4.6.-L1	
	Basic and specific training on the basis of the agreement between Government and Regions; training on the use of PPE of 3rd category.	
PROTECTION MEASURES TAKEN		
DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**
9 < =R < =16 Very High risk		

6< R < 8 High risk *4 < =R < =6 Medium risk* *1 < =R < 4 Low risk*							
H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*1*	*3*	*3*	*1*	*3*	*3*
H.E.G. n.2	*Technician employee*	*3*	*3*	*3*	*1*	*3*	*3*
H.E.G. n.3	*Tecnician-production employee*	*2*	*3*	*6*	*1*	*3*	*3*
H.E.G. n.4	*Production supervisor*	*3*	*3*	*9*	*1*	*3*	*3*
H.E.G. n.5	*Production operator*	*3*	*3*	*9*	*1*	*3*	*3*
H.E.G. n.6	*Warehouse operator*	*3*	*3*	*9*	*1*	*3*	*3*
H.E.G. n.7	*Maintenance operator*	*3*	*3*	*9*	*1*	*3*	*3*
H.E.G. n.8	*Laboratory technician*	*3*	*3*	*9*	*1*	*3*	*3*
IMPROVEMENT MEASURES							

SHEET 34		
CATEGORY	Safety and health risks, organizational and managerial aspects	
RISK	*Emergency management and First Aid*	
DETECTED SITUATION	Within the company there is a room used for medical assistance. In addition, in laboratories, and in the production department and warehouse are available first aid kits and emergency equipment such as emergency showers and eyewash kit. They are also available throughout the company and on the basis of the possible risk a significant number of fire prevention devices (fire extinguishers, hydrants, mobile groups, foam, firefighting equipment specific for the emergency team, etc.). For a full list of fire prevention and first aid, please refer to Fire Prevention Registry available in the company. The members of the emergency team are adequately prepared to carry any first aid and deal with specific hazards associated with the task. The company has a contingency plan that lists the duties and responsibilities of the members of the emergency team	
POTENTIALLY HARMFUL EVENT	*Mismanagement of emergency situations*	
PREVENTIVE MEASURES TAKEN	*Scheduled exterior maintenance and internal control of firefighting and first aid devices*	
	Training firefighters and first aid team, training on the use of breathing apparatus	
	Rescue and firefighting signs	
	Fire Prevention Registry IOS 4.5.1-1; First Aid materials Registry IOS 4.5.1.2; Internal contingency plan DS_4.4.7-A	
PROTECTION MEASURES TAKEN	The whole building is provided with smoke detection system and alarm system (except the canteen); presence of principals extinguishers and first aid **PPE:** *Specific PPE for the emergency team(breathing apparatus, flame resistant gloves, helmets, fireproof jackets etc.)*	
DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**
9 < =R < =16 Very High risk *6< R < 8 High risk* *4 < =R < =6 Medium risk* *1 < =R < 4 Low risk*		

H.E.G.		ABSOLUTE RISK			RESIDUAL RISK		
		P	G	R	P	G	R
H.E.G. n.1	Office clerk	3	4	12	1	3	3
H.E.G. n.2	Technician employee	3	4	12	1	3	3
H.E.G. n.3	Tecnician-production employee	3	4	12	1	3	3
H.E.G. n.4	Production supervisor	3	4	12	1	3	3
H.E.G. n.5	Production operator	3	4	12	1	3	3
H.E.G. n.6	Warehouse operator	3	4	12	1	3	3
H.E.G. n.7	Maintenance operator	3	4	12	1	3	3
H.E.G. n.8	Laboratory technician	3	4	12	1	3	3
IMPROVEMENT MEASURES							

SHEET 35		
CATEGORY	Safety and health risks, organizational and managerial aspects	
RISK	*Lack of health surveillance*	
DETECTED SITUATION	Taking into account the activities carried out by the company, this has appointed a doctor in charge. The doctor establishes the health protocol, performs monitoring visits to employees, issues declaration of eligibility regarding the tasks and performs other tasks prescribed by Legal Notice 36 of 2003. Periodically the doctor issues a health report with results of the monitoring, anonymously. There is also available management procedure on health surveillance.	
POTENTIALLY HARMFUL EVENT	*Damage and occupational diseases arising from non-health surveillance*	
PREVENTIVE MEASURES TAKEN	*Procedure "Health Surveillance" PS_4.4.6.-M* *Presence and application of the health protocol*	
PROTECTION MEASURES TAKEN		
DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**
9 < =R < =16 Very High risk *6< R < 8 High risk* *4 < =R < =6 Medium risk* *1 < =R < 4 Low risk*		

H.E.G.		ABSOLUTE RISK			RESIDUAL RISK		
		P	G	R	P	G	R
H.E.G. n.1	Office clerk	2	3	6	1	3	3
H.E.G. n.2	Technician employee	2	3	6	1	3	3
H.E.G. n.3	Tecnician-production employee	2	3	6	1	3	3
H.E.G. n.4	Production supervisor	2	3	6	1	3	3
H.E.G. n.5	Production operator	2	3	6	1	3	3
H.E.G. n.6	Warehouse operator	2	3	6	1	3	3
H.E.G. n.7	Maintenance operator	2	3	6	1	3	3
H.E.G. n.8	Laboratory technician	2	3	6	1	3	3
IMPROVEMENT MEASURES							

SHEET 36			
CATEGORY	Safety and health risks, organizational and managerial aspects		
RISK	*Management of contractors and visitors*		
DETECTED SITUATION	In compliance with the Legal Notice 36 of 2003 whenever there is the necessity to commission a service to any outside firm who has to perform this activity at Sterling Chemical Malta, is activated the procedure Management of Contractors. In case of necessity of commissioning the service to specialist company or self-employed person, just the manager of department shall authorize the request of intervention on the basis of need, activating different procedures depending on the types of interventions. For dangerous jobs it's also necessary to fill out a Work Permit authorizing to start the work as described in the procedure "Management of Work Permits". The Visitors are always accompanied by Sterling staff inside the buildings and are informed by the front desk or by Department Managers about behavior regulation and about PPE to be worn in various departments.		
POTENTIALLY HARMFUL EVENT	*Accidents (falling material, projection of material, cuts, blows, crushing, shock, injury etc.). Occupational diseases*		
PREVENTIVE MEASURES TAKEN	*Internal and external audits relating to management systems, monitoring by the Responsible*		
	The contractors are informed and trained through the delivery of the Operating Directions "Information about risks for contractors"		
	Procedure "Management of Contractors" MP4.4.6-H; the issue of DUVRI; Operating Directions "Management of Work Permits".		
	Safety, rescue and firefighting signs		
PROTECTION MEASURES TAKEN	*The whole building is provided with smoke detection system and alarm system (except the canteen), fire extinguishers and first aid devices*		
DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**	
9 < =R < =16 Very High risk *6< R < 8 High risk* *4 < =R < =6 Medium risk* *1 < =R < 4 Low risk*			

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*2*	*4*	*8*	*1*	*3*	*3*
H.E.G. n.2	*Technician employee*	*2*	*4*	*8*	*1*	*3*	*3*
H.E.G. n.3	*Tecnician-production employee*	*2*	*4*	*8*	*1*	*3*	*3*
H.E.G. n.4	*Production supervisor*	*2*	*4*	*8*	*1*	*3*	*3*
H.E.G. n.5	*Production operator*	*2*	*4*	*8*	*1*	*3*	*3*
H.E.G. n.6	*Warehouse operator*	*2*	*4*	*8*	*1*	*3*	*3*
H.E.G. n.7	*Maintenance operator*	*2*	*4*	*8*	*1*	*3*	*3*
H.E.G. n.8	*Laboratory technician*	*2*	*4*	*8*	*1*	*3*	*3*
IMPROVEMENT MEASURES							

7. RISK ASSESSMENT FOR CATEGORIES OF WORKERS WITH SPECIAL PROTECTION NEEDS

SHEET 37	
CATEGORY	Risks for workers with particular protection needs
RISK	*Work at night – work on shifts*
DETECTED SITUATION	The production supervisors and production operators work on three shifts (6-14,14-22, 22-6). Therefore they also work at night. The other indicated H.E.G.s work on two shifts (6-14, 14-22 or 7-15, 13-21). The shifts are established according to the National Collective Bargaining Agreement of the chemical industry. For night workers is expected the annual monitoring by the Doctor in charge. The company organizes the work on shifts ensuring the presence of enough number of employees of the firefighter team and first aid on each shift. The production department is provided of a mobile phone to call in case of emergency rescue operations, other departments are provided of cordless telephones. In addition, the staff is trained about the emergency plan and the organization of the emergency team takes into account the organization on work shift. During the night shift the activities carried out are less complex and dangerous and all maintenance activities inside and outside are suspended (unless emergency maintenance)
POTENTIALLY HARMFUL EVENT	*Alteration of the normal biological rhythm* *Inability to handle emergency situations*
PROTECTION AND PREVENTIVE MEASURES TAKEN	*Education and training on the emergency plan and evacuation plan* *Phones for emergency calls* *Organization of work shifts ensuring the presence of enough number of employees of the firefighter team and first aid on each shift* *Scheduled Activities less complex and dangerous*

DAMAGE (G)	*PROBABILITY (P)*	**P x G = RISK**
1 Low	*1 Improbable*	
2 Medium	*2 Less probable*	
3 High	*3 Probable*	
4 Irreversible	*4 Very probable*	

9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6 Medium risk
1 < =R < 4 Low risk

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	-	-	-	-	-	-
H.E.G. n.2	*Technician employee*	-	-	-	-	-	-
H.E.G. n.3	*Tecnician-production employee*	-	-	-	-	-	-
H.E.G. n.4	*Production supervisor*	*2*	*4*	*8*	*1*	*3*	*3*
H.E.G. n.5	*Production operator*	*2*	*4*	*8*	*1*	*3*	*3*
H.E.G. n.6	*Warehouse operator*	*2*	*4*	*8*	*1*	*3*	*3*
H.E.G. n.7	*Maintenance operator*	*2*	*4*	*8*	*1*	*3*	*3*
H.E.G. n.8	*Laboratory technician*	-	-	-	-	-	-

IMPROVEMENT MEASURES	

SHEET 38								
CATEGORY	Risks for workers with particular protection needs							
RISK	*Isolated work*							
DETECTED SITUATION	This category of risks arises from isolated work, so the risk that may result from a fortuitous event which involves the loss of autonomy in getting to safety. Whenever operators should work alone inside the plant or in any area must work in pairs if possible, otherwise warn the supervisor of their location.							
POTENTIALLY HARMFUL EVENT	*Loss of autonomy in getting to safety due to an accident / incident* *Inability to handle emergency situations*							
PROTECTION AND PREVENTIVE MEASURES TAKEN	Staff exposed to risk of isolated work is highly trained and informed about all risks; this type of staff is also highly professional competent Operators who may work alone are equipped with communication devices (mobile phone, cordless phones, etc.). Whenever operators should work alone inside the plant or in any area must work in pairs if possible, otherwise warn the supervisor of their location.							
DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*		**P x G = RISK**					
9 < =R < =16 Very High risk *6< R < 8 High risk* *4 < =R < =6 Medium risk* *1 < =R < 4 Low risk*								
H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***			
		P	*G*	*R*	*P*	*G*	*R*	
H.E.G. n.1	*Office clerk*	-	-	-	-	-	-	
H.E.G. n.2	*Technician employee*	-	-	-	-	-	-	
H.E.G. n.3	*Tecnician-production employee*	*2*	*4*	*8*	*1*	*4*	*4*	
H.E.G. n.4	*Production supervisor*	*2*	*4*	*8*	*1*	*4*	*4*	
H.E.G. n.5	*Production operator*	*2*	*4*	*8*	*1*	*4*	*4*	
H.E.G. n.6	*Warehouse operator*	*2*	*4*	*8*	*1*	*4*	*4*	
H.E.G. n.7	*Maintenance operator*	*2*	*4*	*8*	*1*	*4*	*4*	
H.E.G. n.8	*Laboratory technician*	-	-	-	-	-	-	
IMPROVEMENT MEASURES	*Provide operators that may work isolated of the man down device and create operational instructions for the management of work isolated and carry out related training*							

Underage and apprentices

The law provides special measures of protection for apprentices and underage. In case of the presence of underage in the work staff, the employer shall carry out a specific risk assessment, with particular regard to:

a) The personal development is not yet complete, lack of experience and awareness of workplace risks, existing or potential, in relation to age:
b) equipment and workplace;
c) type, degree and duration of exposure to chemical, biological and physical agents;
d) manual handling of loads;
e) accommodation, choice, use and handling of equipment, as agents, machines, apparatus and instruments;
f) plan of work processes, schedule of work and their interaction on the general organization of the work;
g) education and training of minors

Underage may not be used for processes and jobs, as prescribed in LN 91/2000 amended by LN 283/2004. Regarding minors, information about risks is also extended to parental authority.
In the company there aren't underage workers. The risk is absent.

SHEET 39	
CATEGORY	Risks for workers with particular protection needs
RISK	*Gender differences-Childbearing age women*
DETECTED SITUATION	This category includes risks of all the phenomena of the natural function due to differences that exist between man and woman (maternity, mother role), and discrimination that may result from these differences in the workplace (differences in treatment, career opportunities, training, layoffs). In the company there are both working men and women. In case of pregnancy the company upon receipt of notification shall endeavor, in consultation with the doctor in charge, to evaluate the operations performed by the employee and shall, where possible, to find a workplace that does not endanger the health of the mother or the unborn child. It's possible for the woman to work even up to a month before giving birth as long as the pregnancy is regular and that the working conditions are not risky. To be able to work up to this period the woman concerned must apply to the employer, attaching a medical certificate acquired in the seventh month of pregnancy proving that there are no risks to the health of the baby and the mother.
POTENTIALLY HARMFUL EVENT	*Health hazards (chemical agents, physical agents, biological agents, work pace)* *Risks for reproductive health*
PROTECTION AND PREVENTIVE MEASURES TAKEN	*- Defining the work tasks, the company evaluates maximum limits of manual handling of loads reserved to women, applying the international reference standard ISO 11228:1-2-3;* *- In case of pregnancy the company upon receipt of notification shall endeavor, in consultation with the doctor in charge, to evaluate the operations performed by the employee and shall, where possible, to find a workplace that does not endanger the health of the mother or the unborn child;* *- Compliance with the provisions of regulations concerning the protection of pregnancy and maternity (LN 92/2000);* *Women are informed in advance about the presence of any health risks for pregnant women and unborn child and reproductive health.*

DAMAGE (G)	*PROBABILITY (P)*	
1 Low *2 Medium* *3 High* *4 Irreversible*	*1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**

9 < =R < =16 Very High risk
6< R < 8 High risk
4 < =R < =6 Medium risk
1 < =R < 4 Low risk

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G. n.1	*Office clerk*	*2*	*4*	*8*	*1*	*2*	*2*
H.E.G. n.2	*Technician employee*	*2*	*4*	*8*	*1*	*2*	*2*
H.E.G. n.3	*Tecnician-production employee*	*2*	*4*	*8*	*1*	*2*	*2*
H.E.G. n.4	*Production supervisor*	-	-	-	-	-	-
H.E.G. n.5	*Production operator*	-	-	-	-	-	-
H.E.G. n.6	*Warehouse operator*	-	-	-	-	-	-
H.E.G. n.7	*Maintenance operator*	-	-	-	-	-	-
H.E.G. n.8	*Laboratory technician*	*2*	*4*	*8*	*1*	*2*	*2*

IMPROVEMENT MEASURES	

SHEET 40		
CATEGORY	Risks for workers with particular protection needs	
RISK	*Age difference*	
DETECTED SITUATION	This category includes risks due to the age difference and that is, those factors related to minor labor (NOT PRESENT), or to workers who have a different level of tolerance to external factors due to "advanced" age. The average age of the company is quite low. For 'older' workers, the company provides health surveillance more frequently than 'younger workers, as prescribed by health protocol. As a company custom there is a particular sensitivity in the choice of the task based on age. For this reason risks due to age differences could arise are moderately low.	
POTENTIALLY HARMFUL EVENT	*Age difference*	
PROTECTION AND PREVENTIVE MEASURES TAKEN	Health surveillance more frequently for older workers (workers that use visual display unit VDU)	
DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**
9 < =R < =16 Very High risk *6< R < 8 High risk* *4 < =R < =6 Medium risk* *1 < =R < 4 Low risk*		

H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G.	*All*	*1*	*2*	*2*	*1*	*2*	*2*
IMPROVEMENT MEASURES							

SHEET 41								
CATEGORY	Risks for workers with particular protection needs							
RISK	*Workers with handicap*							
DETECTED SITUATION	Workers with handicap at Sterling are employed for tasks appropriate to their abilities and do not have disabilities that affect the organization and structure of society. Their presence was also evaluated in the emergency plan business							
POTENTIALLY HARMFUL EVENT	*Risks caused by disability*							
PROTECTION AND PROTECTIVE MEASURES TAKEN	Workers with handicap at Sterling are employed for tasks appropriate to their abilities							
DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**						
9 < =R < =16 Very High risk *6< R < 8 High risk* *4 < =R < =6Medium risk* *1 < =R < 4 Low risk*								
H.E.G.		***ABSOLUTE RISK***			***RESIDUAL RISK***			
		P	*G*	*R*	*P*	*G*	*R*	
H.E.G.	*All*	*1*	*4*	*4*	*1*	*2*	*2*	
IMPROVEMENT MEASURES								

SHEET 42			
CATEGORY	Risks for workers with particular protection needs		
RISK	*Workers from other countries*		
DETECTED SITUATION	This category includes risks due to differences in written and spoken communication, and thus the impossibility of training and education of workers regarding the risks of the work to be done. At the moment Sterling Chemical Malta has no organic workers from foreign countries, but there are workers of Sterling Spa from Italy. This does not seem to affect the safety of the workers as both groups of workers use both the Italian and the English language without any problems.		
POTENTIALLY HARMFUL EVENT	Risks due to lack of training and information due to lack of knowledge of the language		
PROTECTION AND PREVENTIVE MEASURES TAKEN	*The training on health and safety is provided both in English and/or Italian as needed.*		
DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**	
9 < =R < =16 Very High risk *6< R < 8 High risk* *4 < =R < =6 Medium risk* *1 < =R < 4 Low risk*			
H.E.G.	***ABSOLUTE RISK***	***RESIDUAL RISK***	

		P	G	R	P	G	R
H.E.G.	*All*	*2*	*4*	*8*	*1*	*2*	*2*
IMPROVEMENT MEASURES							

SHEET 43		
CATEGORY	Risks for workers with particular protection needs	
RISK	*Contractual differences*	
DETECTED SITUATION	Rientrano in questa categoria di rischi tutti quei fenomeni dovuti alle differenze della tipologia contrattuale e quindi alla possibilità di "sfruttamento" della forma contrattuale o dei rischi dovuti alla mancanza di esperienza, formazione, addestramento e informazione.	
POTENTIALLY HARMFUL EVENT	Sfruttamento della forma contrattuale	
PROTECTION AND PREVENTIVE MEASURES TAKEN	Tutti i lavoratori interinali assunti vengono sottoposti a formazione-informazione f sui rischi di base e specifici della mansione di appartenenza per la sicurezza in azienda e a sorveglianza sanitaria (Rif. PS 4.3.2) • Tutti i lavoratori interinali, stagisti, oppure con contratto a tempo determinato sono sottoposti a un periodo di addestramento per lo svolgimento della specifica mansione; • Tutti i dipendenti sono regolarmente assunti in conformità al CCNL;	
DAMAGE (G) *1 Low* *2 Medium* *3 High* *4 Irreversible*	*PROBABILITY (P)* *1 Improbable* *2 Less probable* *3 Probable* *4 Very probable*	**P x G = RISK**
9 < =R < =16 Very High risk *6< R < 8 High risk* *4 < =R < =6 Medium risk* *1 < =R < 4 Low risk*		

H.E.G.		***RISCHIO ASSOLUTO***			***RISCHIO RESIDUO***		
		P	*G*	*R*	*P*	*G*	*R*
H.E.G.	*All*	*1*	*3*	*3*	*1*	*2*	*2*
IMPROVEMENT MEASURES							

8. MONITORING OF MAJOR-ACCIDENT ROSKS INVOLVING DANGEROUS SUBSTANCES

The normative reference for the risk assessment regarding major accident is the Legal Notice 36 of 2003, "Control of Major Accident Hazard Regulation", as amended by Legal Notice 6 of 2005.

The Sterling plant, based on the verification carried out, does not fall within the scope of the regulation as there are no substances listed in the Annexes in required quantities.

9. CHART OF IMPROVEMENT PLAN

As part of the general protection measures, the company has adopted a plan to improve the measures of prevention and protection. The preventive measures to be taken are listed in the individual sections risk.
The risks that cannot be completely eliminated will be kept under control, both with technical systems and direct monitoring of the correct application of health and safety instructions.