


# Safety & Occupational Health Handbook

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**Schneider**  
 Electric™

# Safety and Occupational Health



## Policy

One person injured is  
one person too many.

# Health & Safety Policy



Together, we protect our Health & Safety

All our employees and contractors must benefit from the highest possible standards of Health & Safety in our work activities

**Risk taking is never acceptable when it comes to the health and safety of our people.**

Each manager and employee is responsible for following established safe work practices to prevent occupational accidents/illness and for managing their own health.

**We want to be a leading reference company regarding Occupational Health & Safety.**

Managers lead by example delivering continuous improvement in health and safety. Entities clearly define levels of responsibility and accountability at all levels. All stakeholders (employees and their representatives, contractors and sub-contractors...) are involved whenever health and safety is at stake. Together, we share best practices and learn from any incident.

**Each entity strives for continuous improvement by implementing a Health & Safety management system.**

A dedicated Health & Safety management system is an efficient way to sustain continuous performance improvement. It ensures annual health and safety targets are achieved. It is built on regular risk assessment, legal compliance and annual preventive programs.

**Our group policy and key commitments are defined globally and adapted to local context.**

In accordance with our "Principles of Responsibility" and the World Health Organization definition of health<sup>1</sup>, the global Health & Safety department is responsible for defining consistent guidelines and requirements to be deployed throughout Schneider Electric. These guidelines will be adapted locally to suit regulatory requirements.

«I count on each one of you to play your role and together we will protect our health and safety!»

<sup>1</sup> « Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity »



Jean-Pascal Tricoire  
President and  
Chief Executive Officer

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# Purpose

This handbook describes the framework of Schneider Electric's Pillars of Safety and Occupational Health and critical operational topics for all Schneider Electric employees. We agree globally on a core set of standards that drive excellence through proactive injury prevention, training and execution for all Schneider Electric employees.

Schneider Electric's sole objective in this area is to attain ZERO ACCIDENTS. With this purpose, the handbook is a valuable resource support to all of our team members. Each of us has daily responsibilities that include zero incidents, injuries and illness prevention.

This handbook applies to all worksites and customer sites by all employees, temporary workers and contractors.


It is our intent that this handbook be used as an important tool to help align Schneider Electric's operations worldwide with a set of principles that we all can embrace, adopt and enforce as one Schneider throughout the world.

## General Disclaimer

This handbook is not intended to cover all situations that could occur, so if you have any questions or comments, please contact your Safety and Occupational Health business partner who supports your location.

# Safety Mandates

All locations shall implement and communicate the following Safety Mandates:

- 
1. Safety is everyone's responsibility
  2. All injuries and occupational illnesses can be prevented
  3. Management has a responsibility to train all employees to work safely
  4. Working safely is a condition of employment
  5. Preventing safety incidents and injuries contributes to business success.

# Frequently Asked Questions

## 1. What is Safety & Occupational health all about?

It's all about preventing people from being harmed at work by taking the right precautions – and providing a safe and healthy working environment.

## 2. Why are there Safety and Occupational health laws?

Because Health and Safety at work is so important, there are rules that require all of us not to put ourselves or others in danger. The laws are also there to protect the public from workplace dangers that could affect them.

## 3. What can I do to contribute to the Zero Accident Objective?

As a Schneider Electric employee, each of us can make a difference in improving Safety and Occupational Health. You must first follow all safe work practices. In addition, you are to be mindful of unsafe conditions and report them immediately. Be aware of others who may be taking unnecessary risks, or maybe exposing themselves or others to a hazardous condition. Take every necessary step to communicate the risk or hazard to your co-worker and beyond as a legitimate concern for their Safety and Health.

## 4. What is the difference between an incident, near miss, accident and first aid?

An incident is an undesired event which could have resulted in an injury or loss. A near miss is an incident, which under slightly different circumstances, could have led to an injury, loss time occurrence or property damage. An accident is an incident which resulted in an injury, loss time occurrence, property damage, or impact on the environment. A first aid is an accident with non serious injury that requires minor care on site.

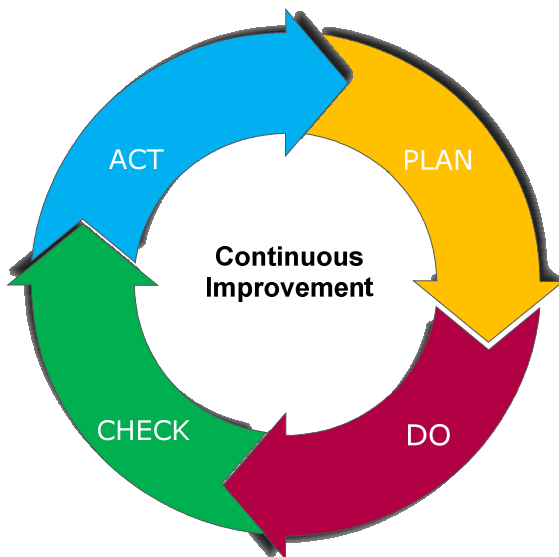


# Safety Process

## SAFETY MANAGEMENT PRINCIPLES & PROCESS

The Safety for our employees is one of the main elements of the Sustainable Development policy. Our only objective is to attain ZERO ACCIDENTS.

### Model to continuous improvement for Safety



1. Engagement of the direction through a Safety Policy
2. Safety objectives planned and linked with the Safety Policy
3. Implementation of the actions planned
4. Verification & evaluation of Safety results and continuous progress
5. Continuous revision to improve the system

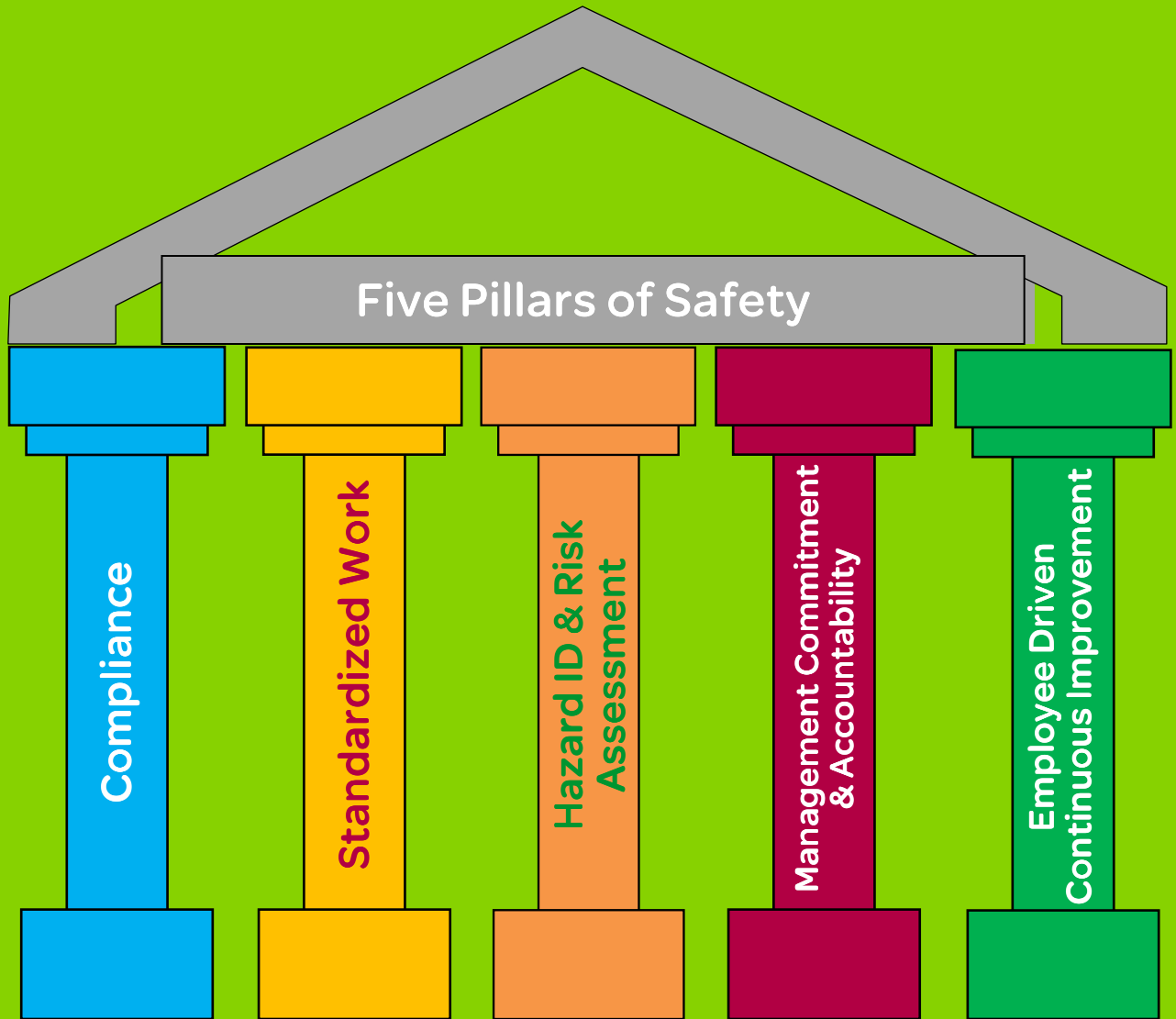
Safety must be sustained through a Continuous Improvement Process based on five pillars:

1. Safety & Environment - Regulatory Compliance
2. Work Standardization – Training
3. Management – Accountability
4. Hazard / Risk Assessment
5. Employee - Accident Prevention

To ensure safety throughout our organization, safe behaviors must be a standard practice. In addition, employees are to actively participate in training and be educated on the risks and hazards in the workplace. The continuous improvement of Safety performances and permanent risk reduction must be foremost in the mind of everyone.



# Safety and Occupational Health



## 5 Pillars

# 5 Pillars of Safety & Occupational Health

## I. COMPLIANCE

### *Description of Organizational Compliance:*

The global SERE (Safety, Environment and Real Estate) organization is responsible for defining consistent guidelines and requirements to be deployed throughout Schneider Electric. We adopt the most stringent regulations within each of the Schneider Electric Organizations as the principle to follow. The guidelines are then adopted locally to comply with all regulatory requirements. Listed below are some examples that we follow to uphold exemplary safety and occupational health standards:

#### **TOOLS:**

- OHSAS, ILO, NIOSH, etc.
  - Schneider Electric Safety Management System
- National Regulatory Agencies
- Voluntary Agencies
- Global, Regional and Local Policies
- National & Local Authorities
- Compliance Training Programs
- Safety and Environmental Leadership and Expertise.



# 5 Pillars of Safety & Occupational Health

## II. STANDARDIZED WORK

### ***Description of Standardized Work:***

The word “standardized work” describes the “normal” and “usual” way of doing something in order to guarantee efficiency, quality, costs and the Safety of the operation. It should always be visual (drawings, pictures, models...). Following the standard is mandatory. The design of our products and processes must incorporate the ability to use existing proven equipment and standard work practices as a primary objective for safe and efficient manufacturing processes to be deployed. Each manager and employee is responsible for following the established safe work practices to prevent occupational accidents and illnesses. Standardized organized and defined work processes using proven tools, and equipment reduces variability and increases predictable outputs. As a result, Schneider Electric’s goal is to produce repeatable safe and healthy work environments for our employees, visitors, temporary employees and contractors. Listed below are several tools that are used to ensure that this process is followed:

### **TOOLS**

Engineering Design of products, processes & equipment

- Standard Work Instructions
- SPS processes
- Ergonomic Evaluation Checklist
- Job Safety Analyses
- Visual Workplaces
- Operator Trainings
- Tool usages
- Workstation Designs
- Poka Yoke
- One piece flow
- Operational Procedures
- 5S Standards



# 5 Pillars of Safety & Occupational Health

## III. HAZARD ID & RISK ASSESSMENT

### **Description of Hazard (ID) Identification and Risk Management:**

Risk taking is never acceptable when it comes to the safety and occupational health of our people. No job at any location by any employee is to be performed in an unsafe manner. All company personnel, regardless of position, have the authority to suspend any operation which constitutes a risk of injury or severe illness to any person. Schneider Electric has the responsibility to provide a safe and healthy workplace for its employees. The primary tool used to achieve a safe and healthy workplace is our standardized work instructions.

It is the responsibility of all managers and supervisors to ensure that hazard identification and risk management is fully implemented in their area(s) of control and to consult with staff as part of undertaking the hazard identification, risk assessment and control process. It is the responsibility of the each employee to cooperate and comply fully.

Check if there is a Law, Regulation, Advisory Standard, Industry Code or guidance material made about any of the hazards you have identified?

**Step 1:** Spot the Hazard

**Step 2:** Assess the Risks, follow the information in the Regulation, Standard, or Code.

**Step 3:** Decide on the preventative action required, using the following principle:

- a) Cancel the cause of the hazard
- b) Isolate hazard from employees
- c) If none of the previous solutions are possible, put in place work safety instructions & PPE.

**Step 4:** Make the change

**Step 5:** Monitor and Review

### TOOLS

Listed are tools to identify hazards, assess risks and to prevent an incident from occurring:

- Hazard Identification Checklists
- Risk Assessments Checklists & Matrix
- Incident Investigation Forms (reporting of incidents & Near Miss)
- Sharing lessons learned from incidents
- Safety Barrier Logs
- Inspections and Audits



# 5 Pillars of Safety & Occupational Health

## IV. MANAGEMENT COMMITMENT AND ACCOUNTABILITY

### *Description of Management Commitment and Accountability:*

Our management team is committed to preventing occupational injuries and illnesses and to maintaining a safe and healthy work environment for our people and for the communities in which we operate.

The role of our Managers is a key point in this process, for this, a clear and precise Safety organization will be defined in all activities:

- The Safety role and assignments are defined for each management level
- The delegations in terms of Safety are formalized
- The maintaining of skills is effective
- The managers have been trained in risk prevention

To become personally involved:

- A safety visit is to be carried out at least once a month (by a member of the management team)
- Managers are personally involved in the achievement of the Safety results of their Business Unit.

Making sure his/her actions are visible and legible:

- Safety displays are in place, shared and up-to-date
- Management meetings begin with a Safety update (a few minutes on the most significant facts)
- Documented comments on the follow-up of improvement actions

### TOOLS

- Internal and External Assessments and Audits.
- Annual Performance Plans and Reviews
- Steering Committees (Monthly Review-prioritized open issues)
- Mgmt Reviews (ILO-OSH & OHSAS18001)
- Corrective Actions
- Recognitions
- Visible Management
- Monthly Audits – “Go See” observations
- SIM meetings
- Incident Investigation led by a management team member
- Performance measurements are managed & being accomplished



# 5 Pillars of Safety & Occupational Health

## V. EMPLOYEE DRIVEN CONTINUOUS IMPROVEMENT

### ***Description of Employee Driven Continuous Improvement:***

Our employees are trained to think of ways to drive safety and occupational health improvements and to go one step further and be a part of the solution. Every idea is worthy of consideration as an improvement to the current state. Therefore, we expect every employee to utilize their creativity to prevent incidents, simplify the process, and reduce fatigue and strain within the workplace. Listed below are standard tools that are used by our employees to communicate both vertically to management, and horizontally with co-workers, to assure that the continuous improvement cycle occurs on a frequent basis.

### **TOOLS**

- Accident Prevention Training
- Employee Suggestions
- Preventative Actions
- Safety committee involvement
- Valuable Practice Sharing
- Green Teams
- Barrier Logs
- Results
- SIM
- Use of Healthy lifestyle programs



Safety and Occupational Health



Operational  
Procedure

# Chemical Risk (SDS-HAZCOM)

## WHAT ARE THE RISKS (SDS – Safety Data Sheet)?

Packages and containers with dangerous substances are labeled according to the nature of their risk.

- HARMFUL
  - If inhaled, swallowed, penetrated or absorbed through the skin.
- HIGHLY FLAMMABLE
  - Substances which can spontaneously combust in air at ambient temperatures.
- TOXIC
  - If inhaled, swallowed or absorbed through the skin can have serious effects up to and including death.
- CORROSIVE
  - Substances which can destroy living tissue.
- IRRITANT
  - Substances which can cause inflammation on immediate, repeated or prolonged contact with mucous membranes or skin.
- REACTIVE & EXPLOSIVE

## HOW TO AVOID RISKS?

Risk evaluation shall be done and prevention measures shall be taken to reduce exposure to the employee. All employees exposed to hazardous chemicals must be trained in the protective measures (eg: what PPE is to be worn), how to properly dispense, store, use and dispose of the chemical. Training also includes emergency response.

Incorrect storage and handling of hazardous substances will result in either damage to property, more seriously injury or chemical exposure; therefore, all chemicals must be stored according SDS instructions, regulatory and legal compliance.

## RULES FOR INTRODUCING NEW CHEMICALS:

All employees have the “Right to Know” about the chemicals to which they are exposed. No chemical shall be used or stored in the facility without an SDS. Everyone shall comply with the SDS requirements:

- Before introducing a new chemical, receive approval from the Safety and Occupational Health department.
- SDS sheets must be obtained from the supplier or manufacturer, be included in your safety instructions and made available for all employees.
- Employees must be fully aware of the risks of the chemicals.
- PPE is made available; checked for damage, rated appropriately and fit before usage.
- All chemical shall be stored with proper secondary containment.



# Confined Space Entry

## WHAT ARE THE RISKS?

These spaces are not designed for permanent human occupancy. Their configurations do not ensure adequate air exchanges and could lead to asphyxia risks, explosion risks and respiratory exposure to a chemical or allow the worker come in close contact with a potential hazard.

## HOW TO AVOID RISKS?

A trained and formally authorized person must approve the starting of work after checking that the required procedures have been followed:

- A written inventory of confined spaces has been established and is available (where applicable).
- Warning signs are posted at every confined space entry such as “Permit Required Confined Space”.
- Concerned parties (Schneider Electric employees, temporary employees and/or Contractors) have been identified and notified before work commences.

## RULES FOR CONFINED SPACE ENTRY:

A working procedure has been established at each site with confined spaces and includes at a minimum:

- The definition of confined spaces, with adequate training, information, and authorization to work in specific confined spaces.
- Issuance process and posting of a confined space permit at the point of entry for the duration of work for the Permit Required Confined Space.
- Inspections conducted prior to starting work, including atmospheric sampling to monitor oxygen or airborne contaminants.
- The role of the emergency response teams or site rescue teams.
- Safety practices to be followed during work, including the proper use of PPE.
- The role of the entrant, attendant and Confined Space Supervisor.
- Inspections conducted at the end of work.
- An elimination or minimization program for permit required confined space is set up to progressively eliminate risks and the need to perform work in confined spaces.

# Contractor Safety

## WHAT ARE THE RISKS?

The activity of external companies on Schneider Electric sites can present unanticipated risks because of the following:

- Subcontracted activities.
- Simultaneous activities carried out on site around Schneider Electric personnel and with equipment.
- A potential lack of awareness of local rules and Safety standards by the subcontractor.
- A lack of Safety consciousness by subcontractor personnel.

## HOW TO AVOID RISKS?

A contractor selection, evaluation and approval process including safety aspects should be set up to guide the site in the contractor selection process. Contractor personnel at the site must comply with all applicable Safety and Occupational health regulations and Schneider Electric's Safety & Environmental policies and procedures.

## RULES FOR CONTRACTOR SAFETY:

Before work commences, the following steps must be performed:

- The employee in charge is to complete a written pre-job plan to describe the actions and duties of all affected employees, contractors and temporary personnel.
- The Pre-job plan topics will include Hazards ID, precautions, energy source control (lockout), and PPE.
- All contracted employees must sign-in, attend a safety orientation and receive a badge or identification before commencing work.
- The contractor shall follow Schneider Electric's safety processes defined in the safety orientation.
- Before work commences a prevention plan shall be defined to avoid risks.
- All contractor employees shall be trained and shall follow the prevention plan.
- Responsibilities shall be delegated for on-site monitoring and supervision.

**Schneider Electric reserves the right to terminate any approved Contractor for failure to comply with site rules and regulations and/or failure to correct unsafe conditions or practices.**

# Cranes and Hoists

## WHAT ARE THE RISKS?

Cranes and hoist are design to safely lift and transport heavy objects.

Some of the potential risks are:

- Potential fall or drop of objects
- Cranes, hoists or accessories can be broken due to overloading
- Accidents with Pedestrians
- Property damage

These and other potential hazards can occur and must be prevented for safe operation of cranes and hoists.

## HOW TO AVOID RISKS?

At a minimum, all crane and hoist operators should be trained and pass a competency test before operating these devices.

- Inspect the crane and hoist lifting equipment carefully before use.
- To prevent overloading the weight of the load must be determined. Do not guess.
- The path of travel must be clear of obstacles and pedestrians must be notified that the crane is in use.

## RULES FOR CRANE AND HOISTS SAFETY:

Operators shall comply with the following rules while operating cranes and hoists:

- Never use any device in question.
- Wear appropriate PPE, such as hard hats, safety shoes, safety gloves, etc.
- Follow standard safety rules such as;
  - Obey stop signals at all times
  - Do not be distracted while unit is in operation
  - Do not move a load towards or over people
  - Avoid side pulls
  - Do not overload a crane's bridge, individual hoist, or any sling or fitting.
- Only authorized personnel are to perform routine maintenance by following the manufacturer requirements.
- Report any unsafe conditions

# Customer Worksites

## WHAT ARE THE RISKS?

External activities in Customer worksites have specific risks linked to the type of services that we can provide such as; repair, modifications, technical assistance, commissioning of equipments, etc. Insufficient knowledge of the work environment or time constraints is often connected with the following:

- Electrical system out of our control or specific electrical risks like electric shock or arc flash hazard.
- Risks of slip, trip, falls from heights (ladders & scaffolding) and floor openings.
- Unsafe working conditions such as: loud construction noise, severe weather (when working outdoors), limited access to perform work.
- Unrealistic or unplanned demands.

## HOW TO AVOID THE RISKS?

Before commencing work:

- A leader is appointed to conduct all safety checks and risks analysis.
- The customer and the Schneider Electric leader will agree to the tasks being performed and that all risks are understood and under control.
- Service technicians are to only perform tasks that they are trained and qualified in, and use appropriate tools and PPE such as Arc Flash rated.

In the case of Schneider Electric field service technicians, the customer is responsibility for the LOTO process. The field service technician must attach their personal lock and tag and verify the zero energy state before performing any work. This will help ensure that the power source is under control until all work is completed.

## RULES FOR CUSTOMER WORKSITES:

Specific measures have to be implemented:

- To work on a customer service site one must be field qualified.
- The leader in charge conducts a pre-job safety plan to identify, direct and mitigate collateral risks, and reviews the plan with the customer and all field employees.
- As a general principle, when additional risks become apparent, work must be stopped and the customer informed until the risk has been safely addressed.
- Establish an incident reporting system such that incidents are recorded, regularly analyzed and shared to avoid reoccurrence.
- Any modifications asked by the Customer are to be documented with an agreement on Safety measures.
- When energized testing takes place (This should be exception and not norm) secure work area to restrict access.

# Driving & Travel Safety

## WHAT ARE THE RISKS?

The business traveler's exposure to accidents is much greater than the typical leisure traveler. During travel, an accident can take the form of violence, fire, natural disaster, medical emergency or another form of "accident" that has the potential to lead to injury or death.

## HOW TO AVOID RISKS?

The following are tips for you to decrease the risk of such occurrences during travel:

- Determine your route to your destination before travel.
- Always exercise defensive driving techniques.
- Follow the speed limit.
- Do not block the designated fire lanes.
- Keep your car locked at all times.
- Do not leave any valuables in the car.
- Be alert when walking to and from your vehicle and, when driving, be courteous and alert to pedestrians.

**Remember, the use of seat belts is required on company business, including all passengers. This includes taxis and limos. Do not talk on the cell phone while driving.**

## RULES FOR DRIVING & TRAVEL SAFETY:

- Prepare well for your travel, never rush.
- Check the weather of your destination & dress appropriately.
- Keep emergency contact phone information available.
- Keep your family and host informed of your journey details.
- Leave a copy of important documents with your family, include air ticket, driver's license, passport, visa etc...
- Post a tag on your luggage.
- Have your prescription medication along with prescriptions with you.

# Electrical Safety

## WHAT ARE THE RISKS?

Electricity cannot be seen or heard, but it can kill. Coming into contact with or near a live exposed electrical circuits or parts can cause electrical shock and burns. Serious injury or even death may occur.

## HOW TO AVOID RISKS?

The most effective technique is to avoid contact with exposed energized electrical circuits and parts. When working with electric tools, outlets or machinery follow the safety process:

- Be sure to visually inspect for defects before powering up and commencing work.
- Do not use damaged leads, plugs, prongs, cords, etc...
- Qualified and unqualified employees shall be trained in electrical safety-related work practices as well as any other procedures necessary for safety from electrical hazards.
- Before performing work with electricity always wear appropriate PPE and use rated insulated tools.

## RULES FOR ELECTRICAL SAFETY:

It is very important to obey safety rules when working with electricity such as:

- Never perform electrical work if not authorized. Only electrically qualified persons are allowed to modify or repair electrical devices within, or outside of the facility.
- As a general rule, electrical equipment shall be de-energized by a qualified employee before performing work using lockout tagout process.
- Only qualified employees are to perform electrical quality tests or troubleshooting of Schneider Electric products.
- Regularly inspect electrical equipment, systems and testing stations.
- The employee in charge shall conduct a pre-job safety planning meeting (toolbox meeting) with the employees and subcontractors involved. When at a customer's site, the meeting shall include the customer's representative.
- The meeting shall cover such subjects as: hazards associated with the site and the job, work procedures involved, special precautions, energy source controls (e.g. lockout), and personal protective equipment.

# Emergency Planning

## WHAT ARE THE RISKS?

Schneider Electric has established emergency plans that will provide guidance to protect employees and company property. These plans allow for an orderly and organized response to emergencies that may arise anywhere in the world. The possible emergency conditions would be:

- Fire
- Medical emergencies
- Explosion or chemical leaks
  - In case of severe medical injury or large quantity spillage inform local authorities.
- Nature disasters and severe weather;
  - Earthquake, typhoon/tornado, tsunami/flooding, hurricane, snow/ice etc...

## HOW TO AVOID RISKS?

An emergency plan becomes necessary and important to ensure that our ability to eliminate and/or minimize any emergency impacts to our people, operations and business. The minimum requirements for an emergency plan should include:

- Identify and evaluate all possible emergency situations and define emergency response plans.
- Set up an Emergency Response Team (ERT) and prepare for emergency response equipment / materials, etc
- Train emergency response team (ERT) and all employees.
- Regularly implement fire evacuation drills or other drills per emergency plans.

## RULES FOR EMERGENCY PLANNING:

- Establish emergency preparedness & response plans to identify emergency situations, and define roles & responsibilities.
- Implement preventative action plans, including ERT staffing, emergency communication, and regular inspections of fire sprinklers, pumps extinguishers, etc...
- Define annual training plans to train employees and ERT staff.
- Organize regular fire drills per the defined emergency action plans.
- Establish Business Continuity Plans (BCP) to identify the vital emergencies regarding business interruption.
- Regularly test the BCP plans to ensure functionality.

# Ergonomics

## WHAT ARE THE RISKS?

Ergonomics is the study of designing equipment and devices that fit the human body, its movements, and its cognitive abilities. Many traditional work injuries occur suddenly, as a result of a specific incident. However typical injuries that are tied to ergonomic risk factors are: Cumulative Trauma Disorders (CTDs) or Musculoskeletal Disorders (MSD), which occur gradually. Symptoms, such as pain or numbing in the hands, wrists, etc, may not be noticeable until weeks, months or even years later. Many injuries of this type may be caused by prolonged stress of a particular body part, often compounded by awkward work postures. Be aware of pain or discomfort in the joint areas of the body that are most frequently used, including your back.

## HOW TO AVOID RISKS?

- Train all process engineers or other designees in Ergonomics principles and methods.
- A risk analysis of your workstation can determine the risk factors and the ergonomic conditions you are exposed to.
- Ergonomic principles can be used to reduce or eliminate the risk factors by improving the workstation, tool, posture and work environment.
- Before work, begin stretching exercises to prepare your body for the rigors of the day.
- Job rotations should be incorporated into the workplace to avoid prolonged exposure to high frequency tasks.

## RULES FOR ERGONOMICS:

Schneider Electric rules for Ergonomics are defined in the SPS (Schneider Production System) standard. It can be found in "SPS Ergonomics Rules", chapter "SPS Methodologies". Some examples are listed below:

- Train employees to apply and respect ergonomics principles, mainly concerning postures and lifting techniques.
- As a general rule for material handling, use lifting tools as the first consideration.
- Proper posture while working shall be applied to prevent pain and discomfort.
- Management shall assure that these rules are incorporated into the workplace, as well as monitored and enforced.



# Fall Protection

## WHAT ARE THE RISKS?

Fall hazards are present when work is conducted at unprotected (without standard guardrails or similar protection) elevated heights. "Work at elevated heights" often leads to many serious accidents.

## HOW TO AVOID RISKS?

Perform a comprehensive fall hazard assessment to identify fall hazards associated with the activity. Make every effort to avoid working at elevated heights, use the following principles only if you are unable to perform the work at ground level:

- Steps and scaffolding are not to be used as permanent workstations if they are not equipped with a guardrail.
- While traveling at heights, (e.g. climbing ladders to reduce the risk of fall), follow the "3 points of contact rule", 1 hand and 2 feet or 2 hands and 1 foot need to be in contact at all times. Never work while climbing or elevating.
- Check ladders and stepstools before using. Never use a defective one - remove the defective ladder/stool from service.
- Standard railings, ladders and floor guards must be in place on elevated work platforms.
- Toe guards or similar floor barriers must be provided to prevent slip, fall hazards when working on elevated surfaces.
- Equipment that requires someone to be elevated to access or service must be performed by an authorized and trained worker. Signage must be posted and access must be secured to prevent unauthorized personnel.

## RULES FOR FALL PROTECTION:

- Take no chances -- falls are dangerous.
- Fall protection systems must be utilized when fall hazards are present in compliance with local regulations and in all cases when working at heights of two (2) meters or more.
- Fall protection equipment must be maintained in good condition and free of visible damage.
- Use the appropriate ladder specific to the task you are doing. Never use a conductive metal ladder near electrical power.
- When not in use, store ladders/stools where they will not become a trip hazard.
- Material handling equipment (such as powered industrial trucks) must not be used to elevate employees without an appropriate basket adapter.

# Fire Protection

## WHAT ARE THE RISKS?

The “Fire Triangle” identifies the three components of any fire:

- Fuel (paper, wood, flammable gas, energized electrical equipment, etc.)
- Energy (heat), sufficient to support combustion, referred to as an ignition source.
- Oxidizer (air)

IF ANY ONE OF THESE IS MISSING, A FIRE CANNOT CONTINUE

## HOW TO AVOID RISKS?

Prevention is based on eliminating or minimizing one of the components of the “Fire Triangle”. Other fire prevention methods include:

- Train employees on fire protection, evacuation and communication.
- Train Emergency response team on fire protection and emergency response.
- Heat and/or smoke detectors.
- Automatic fire sprinkler systems.
- Building codes (design and standard) and materials.
- Flame retardant furnishings and materials.
- For fire prevention always follow local, regional, and national regulations including Hot Work permit requirements.

## RULES FOR FIRE PROTECTION:

Each employee is a valuable part of our fire prevention program. Your compliance with the following Fire Prevention guidelines is vital.

- DO NOT block doors open
- DO NOT place any items in front of Fire Protection Equipment
- DO NOT BLOCK (even for a few minutes) any egress/exit routes
- DO NOT allow waste to accumulate
- DO NOT use excessive or damaged extension cords
- DO NOT stack any material closer than 30 cm (12in) to sprinkler heads
- Flammable material (cleaners, solvents etc) must be stored appropriately.
- NO smoking in the site except smoking area
- REPORT any defective equipment/hazardous conditions immediately

## HOW TO RESPOND TO A FIRE EMERGENCY:

If fire or smoke is seen or detected, these are the procedures to follow:

- Observer assesses the scene and triggers the fire alarm.
- All employees proceed to the nearest exit for evacuation
- Assemble outside the facility at a designated assembly point.
- Do not reenter until the all clear signal is given by the management team.

# Lockout/Tagout (LOTO)

## WHAT ARE THE RISKS?

“Lockout / Tagout” refers to specific practices and procedures to safeguard employees from the unexpected energization or startup of machinery and equipment, or the release of hazardous energy during service or maintenance activities. An unexpected release of hazardous energy can include any unintended motion, energization, start-up or release of stored energy during service or maintenance activities. The utmost attention must be given to the LOTO process due to the potential of serious injury including death.

Hazardous energies can be, but not limited to the following:

- Electrical
- Mechanical
- Pneumatic
- Gravity
- Chemical Coolant
- Hydraulic
- Water
- Steam
- Gases
- Thermal
- Radiation

## HOW TO AVOID RISKS?

Each authorized individual shall be qualified by Schneider Electric through LOTO training for the type of equipment being maintained. The machine operator turns off and disconnects the machinery or equipment from its energy source(s). The authorized employee, before performing service or maintenance, locks and tags the energy-isolating device(s) to prevent the release of hazardous energy and takes steps to verify that the energy has been isolated effectively.

In the case of field services, the customer is responsible for the LOTO process. The field service technician must attach their personal lock and tag and verify a zero energy state before performing any work. This will help ensure that the power source is under control until all work is completed.

## RULES FOR LOTO:

We apply without exception the use of the LOTO procedure when performing maintenance or repair. An examples of a LOTO process:

- Screen off the area (example, caution tape or physical barrier)
- Check on and prevent any risks of working near other energized equipment
- Power down the equipment to discharge all residual energy
- Lock the equipment with your own locking devices all the incoming energies
- Put tags signaling I am working
- Verify the absence of energy
- Regular inspection of “Lockout /Tagout” procedure application is carried out by management.

# Machine Safety

## WHAT ARE THE RISKS?

Injuries and incidents caused by machines, if not numerous can be very serious. Primary areas of concern are the hands and fingers of the operator. Machine definition could stretch from portable motorized tools, to complex automatic machine or presses, used in routine and non routine operations.

When operating these machines, the following risks should be considered:

- Hand and fingers crushing, cuts, amputations, etc.
- Electrocutation
- Impact to different parts of body (head, arm...)
- Limb or clothing stuck or caught in the point of operation

## HOW TO AVOID RISKS?

- Any machinery deemed “unsafe” shall be taken out of service until repaired or replaced.
- Powered Equipment such as; presses (mechanical, pneumatic, hydraulic), press brakes, powered crimpers, riveting machines, shears, and staking machines shall be provided with a point of operation safeguard. These shall be installed in such a manner that the failure or removal of the safeguard shall prevent the machine from operating.
- Clear instructions that include start up and shut down, operator maintenance and cleaning shall be established and followed.
- PPE required for the use of the machines shall be defined, supplied and worn.

## RULES FOR MACHINE SAFETY:

- Hands shall never be placed in the point of contact of powered equipment. As a result, Schneider Electric strictly enforces “no hands in die” standards.
- The machine operator shall be trained and authorized by the company before operating equipment. In addition, refresher training should be established to maintain their qualifications.
- Always use a machine for the task. Never compromise the integrity of the machine by modifying it without the agreement of the supplier or manufacturer.
- Preventative maintenance shall be established considering statutory checks and controls according to national, local and provincial rules to maintain equipment in optimal condition.

# Non-Routine Operations

## WHAT ARE THE RISKS?

Non routine operations are very often the cause of serious accidents.

These operations are characterized as the following:

- Tasks that are performed on a random or non frequent basis.
- Little or no work instructions are available prior to performing tasks.
  - Examples of these include, but not limited to:
    - Emergency response
    - Equipment or building repair
    - Kaizen activity, temporary removal of stationary equipment
    - Non routine adjustment and material handling.

Various risks can be incurred during these non routine operations, such as (falls, electrocution, chemical burns, and physical injury).

## HOW TO AVOID RISKS?

- Use caution tape or other signage to alert employees.
- Always try to standardize non routine operations into routine operations with precisely defined work instructions (never bypass safety procedures).
- Train the concerned employees to strictly respect these instructions.
- Track the implementation and verify the execution.

## RULES FOR NON ROUTINE OPERATIONS

- Before starting work, a pre-job plan shall be written by the employee in charge to identify direct and collateral risk. These are to be reviewed with all affected employees, contractors and temporary personnel
- The meeting shall cover such subjects as: hazards associated with job, work procedures, special precautions, energy source controls (e.g. lockout), and PPE.
- Always stop and think before acting and check :
  - Existing instructions
  - Required PPE
  - The adequate equipments and tools
  - LOTO or other relevant procedures.
  - The potential risks incurred during the operation
- Stop operations when an unknown risk or abnormal situation occurs.
- Never rush or be pressured to perform non routine tasks, every precaution shall be taken and supported by the whole management team.
- Never underestimate the hazard; even the simplest tasks can cause a serious injury.

# Personal Protective Equipment (PPE)

## WHAT is PPE?

“PPE”, Personal Protection Equipment, refers to all devices that a person can wear to protect against one or several risks that may endanger one’s Health or Safety.

These include safety shoes, safety glasses, hard hat, gloves, arm guards, and other clothing to protect against any identified hazard, etc...

## WHEN TO USE?

Each location performs a risk analysis to determine the risk to which an employee may be exposed. As a reminder, PPE is the last method of protection. In this case, a program is in place to describe when and where to use PPE in a clear, visible and non ambiguous way. The program should include an inventory of the jobs/occupations and situations requiring the use of PPE and of the types of PPE that should be used and made available.

## HOW TO USE PPE?

Each employee is to be trained on the use of PPE and when to wear it appropriately. Remember, the protection offered is only as good as the PPE selected. PPE must be appropriate for job task and hazard.

- Always check PPE for damage before and after use.
- Dispose of and replace damaged PPE.
- Clean and properly store PPE and avoid conditions that could cause damage, such as heat, light, moisture, etc.

## RULES FOR PPE:

The use of PPE is not optional. It is the responsibility of management to assure that all employees comply. Any deviation to these safety rules will be followed by relevant disciplinary actions. If PPE is not available, the employee has the right and the duty to stop work, and must inform the supervisor before proceeding.

A written procedure for PPE is established and applied. Regular audits are necessary to drive continuous improvement.

In case of any modifications or changes, new PPE must be evaluated and implemented if necessary, followed by adequate information and training of concerned employees.

# Powered Industrial Trucks (PIT)

## WHAT ARE THE RISKS?

These are classified as specialized material handling industrial trucks powered by electric motors or internal combustion engines. The physical nature, speed and mass of these trucks can cause devastating accidents as a result of the following:

- Multiple blind spots effecting operator's visibility
- Limited vehicle lifting capacity
- Load manipulation, lifting, stacking and unstacking
- Turning in narrow aisles
- Traveling on ramps, slopes or other elevated surfaces such as docks.
- Closed environments with insufficient ventilation can accumulate exhaust fumes.
- Refueling or battery charging operations.

## HOW TO AVOID RISKS?

Employees are to operate equipment which they have been specifically trained and authorized to use

- Perform safety checks or pre-use inspections before operating.
- Always verify that the load is safe before lifting and transporting.
- Assure that the path of travel is free from obstacles.
- Always use defensive driving techniques to avoid pedestrians and other PIT's.
- During the loading or unloading of trucks, chocks will be used to avoid movement.

## RULES FOR POWERED INDUSTRIAL TRUCKS:

All operators must meet the following basic requirements prior to starting:

- Must have no adverse vision problems that cannot be corrected by glasses or contact lenses.
- No physical impairments that would prohibit safe operation of the PIT.
- Never take any medication that affects perception, vision or physical abilities.
- Report any equipment damage or missing gear.
- Use appropriate PPE and safety seat belts before operating.
- A Preventative maintenance program is in place and inspections are complete.
- Management takes necessary corrective action for all near miss and PIT accidents.
- Pedestrians should not come within 1m (3ft) of a motorized PIT in operation or 3m (10ft) within a PIT carrying a load.
- As a good practice, visitors, contractors or other personnel walking or working in highly congested aisles with PIT traffic shall wear a highly visible color coded vest.

Safety and Occupational Health



Training



# Training

Course Title	Target Audience	Length
Health & Safety at Schneider Electric (Safety Awareness)	All SE Associates and specifically Supervisors and Managers	1 hour
Occupational Health & Safety (OHS) Risk Assessment	All SE Associates who have responsibility for leading the OHS Risk Assessment and OHS Risk Assessment Steering Committee Members	1 hour
Basics of Electrical Safety	All SE associates	1 hour
Basics of Ergonomics	All SE associates	1 hour
The Basics of Fire Safety	All	1 hour
Basics of fall protection	All SE associates	1 hour
Basics of machine safety & LOTO	All	1 hour
Advanced Electrical Safety	Qualified Workers	1 day
Chemical Management	Associates in Maintenance, Finishing, Shipping & Receiving, EHS, Wastewater Treatment	2 hours
Driving Safety	All associates who operate an automobile for Schneider Electric	1 hours
Advanced fall protection	All associates who work at heights or who supervise elevated work	4 hours
Advanced machine safety & LOTO	All associates working with or around machinery	4 hours
Electrical Safety: Train the Trainer	Trainers for Advanced Electrical Safety	3 days

Safety and Occupational Health



Summary

# Summary

Remember, Health & safety is all about preventing people from being harmed at work by taking the right precautions – and providing a safe and healthy working environment.

**S**pot the hazard

**A**ssess the risk

**F**ind a safer way

**E**mpower your team

**T**rack deviations

**Y**ou all are managers of safety

If you require further information related to Safety & Occupational Health, contact the site Safety and Health designee, your direct supervisor and or your HR personnel.

Safety and Occupational Health



Glossary

# Glossary

Advisory Standard:	Is a recognized committee or organized source that provides benchmarks of minimum requirements up to and including excellence or superior attainment.
Asphyxia:	A condition arising when the body is deprived of oxygen, which can cause unconsciousness or death. In the workplace, this is commonly caused by inhaling an oxygen deficient atmosphere.
Business Continuity Plan (BCP):	Involves devising a plan that guards against business disruption in case of unforeseen events. The business continuity plan defines the process needed to keep the company up and running through interruptions of any kind including: power failures, IT system crashes, emergency management, and natural disasters.
Permit Required Confined Space:	Is a confined space that has one or more of the following: <ol style="list-style-type: none"><li>1. Contains or has the potential to contain a hazardous atmosphere,</li><li>2. Contains a material that has the potential for engulfing the entrant,</li><li>3. Has an internal configuration that might cause an entrant to be trapped or asphyxiated by inwardly converging walls or by a floor that slopes downward and tapers to a smaller cross section, and/or</li><li>4. Contains any other recognized serious safety or health hazards.</li></ol>
Flame Retardants:	Are chemicals used in textiles and coatings such as; gloves and clothing that inhibit or resist the spread of fire.
Hot work Permits:	Includes all temporary operations involving open flames or producing heat and/or sparks. This includes, but is not limited to, brazing, cutting, welding, grinding, and soldering.

# Glossary

ILO:	The international labor organization responsible for drawing up and overseeing international labor standards
LO/TO:	Lockout / Tagout
NIOSH:	The National Institute for Occupational Safety and Health is responsible for conducting research and making recommendations for the prevention of work-related illnesses and injuries.
OHSAS	Occupational Health & Safety Assessment Series
Qualified Person (Employee):	One who has skills and knowledge related to the construction and operation of electrical equipment and installations and has received safety training to recognize and avoid the hazards involved.
Risk Management:	The process of bringing awareness, identification and mitigation to the hazards present in the workplace. The mission of Risk Management is to protect people, the environment, and company property from losses.
Safety Mandate:	Is a safety requirement or obligation that every Schneider Electric Employee or Temporary personnel shall uphold.



