Basic
Health, Safety, and Environmental Rules

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We are all responsible for our own health, safety, and well-being, and for that of others, which might be affected by our work/ actions.
ANDRITZ Basic Health, Safety, and Environmental Rules

All work is to be carried out in a safe manner.

The goals of these rules are:
- Safe execution of work
- Zero accidents
- Prevent harm to people
- No damage to plant and equipment
- Prevent damage to the environment

These rules are valid for all employees of ANDRITZ as well as any contractor.

In general, national legislation, applicable standards, and Health, Safety and Environmental procedures have to be met. In case of any contradiction, the more stringent rules apply.
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1. Safe System of Work

Work must not be carried out unless:

- The hazards have been identified and sufficient precautions have been taken.

- All persons are physically and mentally qualified and competent - having the necessary technical knowledge, skills, and training - to do the job safely.

- All equipment is maintained in a safe condition and is appropriate for the task.

- Personal protective equipment is used as per the risk and site requirements.

- Permits for hazardous work have been issued by authorised persons.

- Emergency response plans have been generated and communicated.

Everyone has the obligation to stop work that is unsafe. In case of doubt, ask your supervisor!
2. Safe Behavior

- Drugs and alcohol are strictly forbidden at work.
- Do not smoke except in designated areas.
- Do not endanger others or yourself.
- Do not proceed if work is unsafe.
- Do not perform or undertake a task for which you are not competent.
- Familiarize yourself with your surroundings.
- Adhere to safety and environmental rules.
- Co-ordinate your task with others affected.
- Ensure you receive an introduction prior to commencement of work.
- Do not accept information that is wrong.
- In case of doubt, ask your superior.
3. Safe Places of Work

- Safe access and way out are maintained to all work areas.

- Aisles, doors, emergency exits, fixed ladders, stairways, first aid stations, eye wash stations, and fire extinguishers must not be blocked.

- Holes, edges of structures, and openings have to be clearly marked, securely guard railed or fixed by stable covers.

- Sufficient lighting of the work place and roads has to be provided and maintained.

- All working areas have to be kept clean and tidy.

- All materials and substances have to be stored safely.

- Avoid noise and dust formation.
4. Permit to Work

Before commencing work on electrical, hydraulic plant, or on other stored energy systems, entry into confined spaces, excavations in which buried services may exist, hot work in potentially flammable or explosive environments, x-ray tests, or work with asbestos a permit must be issued by the authorized person(s) with the following content:

- Definition of the scope of work
- Identified hazards
- Definition of control measures to eliminate or mitigate hazards
- Coordination of activities with other work permits or operations
- Communication of the above information to all persons involved in the work
- Adequate control measures for the return to normal operations
- Follow the Lock-Out / Tag-Out principles
5. Accidents and Near Misses

- In case of an accident, the local emergency procedure has to be followed.
- Everyone must report accidents, incidents, and near misses to the management or to the person nominated.
- Every accident, incident, or near miss must be recorded. The facts have to be investigated and corrective measures have to be implemented.

6. Security Abroad

- Inquiries about the country and the security status have to be made before starting a business trip or a stay abroad.
- Frequent contact with the next ANDRITZ office or national representation agency has to be maintained by the person responsible.
- In case of security problems or health hazards, the project management and the home office have to be contacted immediately. Required measures have to be determined in cooperation with the ANDRITZ Management.
7. Emergencies

Everybody has to make himself familiar with the location, fire fighting equipment, alarm call points, emergency telephone numbers, escape routes, fire exits, and assembly points.

Emergency procedures must be in place at each location, communicated, and strictly observed by everybody.

Behavior in case of an emergency:

- Stay calm, raise alarm, warn others
- Emergency call: where, what, which injuries, how many, who
- Do not endanger yourself
- Secure the scene of the emergency, attempt fire fighting, give first aid
- Escape to a safe place

Emergency equipment and emergency facilities must not be modified, blocked, or misused.
8. Fire Prevention

- Flammable liquids, gases, and materials must be stored properly and kept to a minimum in the workplace.
- Oily rags and other combustible waste must be removed from the work place and disposed of properly in separate metal bins, with close-fitting metal lids.
- A sufficient number of fire extinguishers as appropriate for the potential fire hazards must be kept in visible positions.
- Fire fighting equipment must be inspected and maintained regularly.
- Hot work such as welding, brazing, and use of open fire, must not be carried out in potentially flammable or explosive environments, unless a permit has been issued by an authorized person.
- Smoking is prohibited except in the areas designated.
9. Personal Protective Equipment

- Personal protective equipment (PPE) must be worn as required by the task.
- PPE has to be properly stored, maintained, and inspected prior to each use.
- PPE has to be used carefully according to the operating instructions.
- Safety shoes must be worn within the workshop.
- Safety shoes/boots, hard hat and ANDRITZ identification must be worn at construction sites as a minimum requirement.
10. Manual Handling

- Risks of manual handling shall be assessed and kept to a minimum.
- Mechanical or automated handling aids should be used.
- Encourage proper lifting techniques as keeping the body upright during lifting, carrying, and setting down of the load, loading the body evenly and keeping the load close to the body.

11. Ergonomics in Offices

Ergonomical principles have to be considered for work in offices. e.g.:

- Correct posture
- Proper distance to the screen
- Proper arrangement of the furniture
- Proper lighting
- Avoidance of glare, or bright reflections on the screen
12. Work on / in Electrical Systems

- Work on/in electrical systems must not be carried out unless a permit has been issued by the senior authorized person.
- Work on/in electrical systems shall only be carried out by competent and trained personnel.
- Before commencing work on an electrical plant the following steps shall be met:
  1. Disconnect completely
  2. Secure against re-connecting
  3. Verify that the installation is dead
  4. Carry out grounding and shortcircuiting
  5. Provide protection against adjacent live parts

- After finishing work, the 5 steps above shall be carried out in reverse order.
- Proper insulated tools, protection devices, and personal protection equipment must be used and checked for damage before each use.
- For electrical tests, a competent person has to prepare a specific-task safety concept.
13. Equipment and Tools

- Equipment and tools shall only be operated by competent and trained personnel.
- Equipment and tools must be appropriate for the task.
- Equipment and tools must be used correctly according to the operating instructions.
- Dangerous parts must be guarded. Guards must not be removed.
- Appropriate personal protective equipment must be used.
- Cables, plugs, and sockets must be of approved types, maintained in good condition, and protected against damage (sharp edges, loops, heat, vehicles, etc.).
- Equipment and tools must be stored and kept in a safe condition.
- Regular inspections of electrical equipment and tools must be carried out by competent persons.
14. Hazardous Substances

- The risks of hazardous substances, including chemicals, gases, dust, and contaminants, have to be assessed. Proper precautions have to be taken, if these substances cannot be avoided.
- Material safety data sheets / instructions must be available for all substances.
- Hazardous substances have to be stored in proper containers, clearly marked, and correctly used. Waste has to be disposed correctly.
- Sources of ignition adjacent to chemicals, fumes, and dust must be avoided.
- Contact with skin or eyes, swallowing, or inhalation must be avoided.
- Personal protective equipment to be used: e.g. protective clothing, gloves, goggles, and barrier creams.
15. Welding and Cutting

- Welding shall only be carried out by competent and trained personnel.
- Welding equipment, gas cylinders, and associated equipment must be stored properly, regularly maintained, and checked before each use. Defective equipment must not be used.
- The surrounding area has to be protected against UV radiation and sparks.
- Flammable materials must be removed. Stationary objects must be covered or specifically protected.
- Proper ventilation has to be ensured if exhaust ventilation applied if necessary.
- Personal protective equipment must be used: hard hat, eye and face protection, gloves, leather apron, and safety shoes.
- Be aware of hot surfaces.
16. Explosion Protection

- Explosion hazards have to be assessed whenever dangerous substances (liquids, gases, dust) are used. Areas with potentially explosive atmospheres must be classified into zones.
- Work in hazardous explosive areas (EX zones) must not be carried out unless a Permit to Work has been issued.
- Equipment and machines must be certified and checked for use in explosive areas.

17. Radiation

- X-ray tests shall only be carried out by competent, qualified and authorised operators.
- An operating procedure must be prepared before work starts and must include measures to prevent over-exposure of any personnel, as well as measures to prevent loss or damage of the isotope.
- X-ray test bays must be clearly marked and fenced with barriers to prevent unauthorized access.
18. Working at Height

- Work at height of 2 meters or more may only be carried out by using scaffolding or mobile elevating platforms. Correct fall arrest equipment has to be used if required.
- Precautions must be taken against falling objects: e.g. toe boards, mesh guards, limited access, and avoidance of loose objects.

19. Ladders

- Ladders must be in good condition and appropriate for the task.
- Ladders must rest against a solid surface and be secured against slipping sideways or outwards.
- Ladders must be inspected prior to their use.
- Use suitable, properly insulated ladders when working in high-voltage areas.
20. Scaffolds

- Scaffolds may only be erected, altered, and dismantled by competent persons.
- Scaffolds must be regularly inspected by a competent person. The results must be recorded.
- Incomplete or defective scaffolds must be secured by barriers, and warning signs must be posted to prevent use.
- Scaffolds must have firm footing and must be secured to the building or structure to prevent collapse.
- Scaffolds must have adequate upper guard rails, intermediate guard rails, and toe boards.
- Scaffolds must be fully boarded in a way to avoid tipping or tripping and must not be overloaded.
- Scaffolds must be provided with safe access. Precautions have to be taken against collision.
- The wheels of tower scaffolds have to be locked when in use and the platforms must be empty when tower scaffolds are moved.
21. Mobile Elevating Work Platforms

- Work platforms may be operated and used by trained and authorized persons only.
- Work platforms may only be used on firm level ground in a stable position and must not be overloaded.
- Work platforms must have adequate guard rails and toe boards.
- Specific precautions have to be taken against collisions with other equipment and overhead lines.
- Work platforms must be kept in a safe condition and inspected and maintained regularly.
22. Lifting Operations

- Lifting operations must be planned by a competent person. Operating instructions must be observed.
- Lifting equipment may be operated by competent operators only, who are authorized and trained to operate the equipment.
- The load has to be checked for weight and center of gravity. The load must not exceed dynamic or static capacities of the lifting equipment.
- Lifting devices such as fixtures, slings, chains, and hooks have to be selected properly for the load, checked before use, and applied correctly by competent persons.
- Lifting devices must be properly stored, maintained, marked, and regularly inspected.
- Test certificates of thorough examinations of lifting equipment and lifting devices must be available.
- Avoid standing or working below suspended load.
- Precautions must be taken against collisions with other equipment (e.g., elevated platforms). Where required, the lifting operation/crane operations must be stopped.
23. Confined Space

- No confined space, such as containers, excavations, ducts, etc. shall be entered unless all other options have been ruled out.
- No confined space shall be entered unless the risks have been assessed and a permit has been issued by an authorized person.
- An atmosphere test, especially on oxygen, flammable gas, fumes, toxic substances, and chemical deposits, must be carried out before entry and repeated if necessary.
- Sufficient ventilation has to be provided. Respiratory protective equipment shall be used if necessary.
- Special tools and lighting with extra-low voltage have to be considered.
- A standby person must be available at all times.
- Emergency measures have to be defined and a rescue drill has to be carried out before entry. Proper rescue equipment has to be provided.
24. Environmental Protection

- Environmental risks for soil, water, and air have to be identified and proper preventive measures have to be taken.
- Oil or other hazardous substances must not get into water or soil. Emergency measures must be planned.
- Substances hazardous for water or soil have to be stored in save areas or on drip pans.
- Fumes and dust have to be removed by suction, filtered, and drained.
- Environmentally safe substances with low solvent content should be used.
- Waste has to be disposed of in the correct containers or at the places designated.
- Waste must not be burned or buried.
- Waste has to be handed over to licensed waste management companies.
- Resources should be used economically.
- Equipment with potentially adverse environmental effect has to be checked regularly.
25. Traffic

- Vehicles and heavy equipment may only be operated by authorized and trained personnel.
- Vehicles and heavy equipment must be used appropriately, and all public traffic regulations and site-specific traffic regulations must be met.
- Vehicles and heavy equipment must be suitable for their intended use, in good condition, and inspected.
- Vehicles and heavy equipment must not be overloaded.
- Loading and unloading operations must be coordinated and lay-down areas must be observed.

26. Security

- Anybody coming to any ANDRITZ location or construction site has to register at the entrance and receive a safety induction. Access is strictly prohibited for unauthorised personnel.
- Vehicles, equipment, and hazardous substances have to be secured to prevent misuse.
27. Requirements for Contractors

- Contractors are obliged to meet these Basic Health, Safety and Environmental Rules. Detailed health and safety instructions, that are consistent with these rules, shall be prepared by contractors as required for the type of work and other relevant circumstances.

- The fact that detailed procedures are not specified shall not relieve the contractor from contractual or legal obligations.

- A competent person has to be designated responsible for the implementation of health, safety and environmental requirements.

- Contractors are responsible for providing their personnel with health and safety advice, training, and surveillance, including aptitude tests.

- ANDRITZ reserves the right to carry out audits and to stop work that infringes legal or contractual requirements.
28. Reporting of accidents and safety-critical incidents

Fatal/serious accidents, or safety-critical incidents have to be reported to the:
- Division Management
- Business Area Management
- Executive Board
- Group Quality and Safety Management
- Security Officer

The accident report has to be send to the following email address:

   EmergencyReport@andritz.com

In case of fatal/serious accidents, emergencies like illness, traffic accidents, need for legal assistance or critical security situations when travelling abroad on business please call the ANDRITZ Emergency Helpline:

   Medical Support: + 43 50805 51111
   Security Support: + 43 50805 52222