

Available Treatment Programs

The Company sponsors an Employee Assistance Program designed to assist employees with personal problems, including, but not limited to alcohol or drug abuse. It is Management's desire that employees voluntarily seek assistance under this program. However, participation in the program will not exempt any employee from the provisions of this policy. Participation in this program will exempt employees only if they are in treatment for drug or alcohol abuse and are free of drugs and alcohol.

Training

It shall be the responsibility of the Corporate HSE Officer to develop and administer a Company wide drug training and education program for all Management and personnel with emphasis on the following:

- ❖ Prohibited drugs and alcohol as they relate to safety in the workplace.
- ❖ Recognition of prohibited drugs and drug paraphernalia.
- ❖ Recognition of the symptoms associated with taking prohibited drugs or alcohol or the misuse of prescribed medicines.
- ❖ Appropriate action to be taken.

Administration of Policy

The Company shall exhibit permanent posted signs, clearly readable, at prominent locations on Company property. In addition, the senior member of Management will cause to be posted bulletin board notices informing employees of the Prohibited Drug and Alcohol Policy and its search, enforcement and disciplinary provisions.

The appropriate personnel will conduct safety meetings periodically for the purpose of informing all employees of the Prohibited Drug and Alcohol Policy and its related search, enforcement and disciplinary provisions. Attendees shall be requested to sign and return an acknowledgment form.

Enforcement**Types of Tests Performed**

- ❖ **Pre-Employment** - All pre-employment physical examinations will include medical analysis for the detection of prohibited drugs and alcohol. The individual so tested will be informed of such test prior to the physical exam. Employment will be denied to any individual whose medical analysis is positive for prohibited drugs or alcohol.
- ❖ **Post Accident** - In the event of any significant accident involving injury to persons or property of the Company, employees involved may, at the discretion of Company Management, be required to provide a specimen for analysis within two hours of said accident. Failure to comply may be grounds for termination. If testing is deemed necessary, Management will make arrangements with a local facility for the performance of all such tests.



Section I Forms & Information

Valid from: November 2008

- ❖ **Random** - Covered employees will be tested for alcohol at an annual rate of ten percent (10%), and for drugs at an annual rate of twenty-five percent (25%) of the total number of covered positions at the beginning of the calendar year, or at such annual rates as otherwise modified / established in response to significant changes in the total number of active employees.

Random selection shall be performed independently by the Companies Consortium / Third Party Administrator (C/TPA) utilizing a computer-based scientifically valid method of selection. The selection process will give each covered employee an equal chance of being selected each time a selection is made.

The Company will conduct a minimum of four (4) selections annually and the dates for administering random tests will be spread reasonably throughout the calendar year. Each covered employee selected for testing will be tested within the selection period.

Random testing of covered employees will be unannounced (i.e., no advance notice to the employee). Upon notification of selection for random drug and / or alcohol testing, each covered employee must proceed immediately to the designated testing site.

- ❖ **Reasonable Cause** - The Company will require a covered employee to submit to an alcohol and/or drug test(s) when it has reasonable cause to believe the employee has violated the provisions of this policy and engaged in prohibited alcohol/drug-related conduct.

A Supervisor's determination that reasonable cause exists to require an alcohol or drug test(s) must be based on specific observations concerning the appearance, behavior, speech or body odors of the employee. Observations may include indications of the chronic and withdrawal effects of controlled substances.

Where practicable, the reasonable cause determination should be based on the observation of the covered employee by two persons in supervisory positions. At least two of the employee's supervisors, one of whom is trained in the detection of the symptoms of possible drug/alcohol use, shall substantiate and concur in the decision to test an employee who is reasonably suspected of drug/alcohol use.

- ❖ **Return to duty** - The Company shall ensure that before an employee returns to duty after engaging in prohibited conduct concerning alcohol, the employee shall undergo a return-to-duty alcohol test with a result indicating an alcohol concentration of less than 0.02.

The Company shall ensure that before an employee returns to duty after engaging in prohibited conduct concerning controlled substances, the employee shall undergo a return-to-duty drug test with a result indicating a verified negative result for drug use.

The covered employee must comply with the education and/or treatment recommendations prescribed by the SAP in order to be considered eligible to return-to-duty and prior to taking the required return-to-duty test(s).

- ❖ **Testing required by Customer contract** – Numerous Customers of **REPOWER USA** require that Drug and Alcohol testing be performed as a condition of entry and work on a Customer's site. In the event that the **REPOWER USA** Anti Drug and alcohol program does not meet the requirements of the Customer, then any and all relevant Employees (full time and contract employees) will be subject to the requirements and testing procedures of the Customer's Program.

Coordination with Law Enforcement Officials

As required, contact with law enforcement officials shall be made to define law enforcement's role in the following:

- ❖ Chemical analysis of any substances suspected of being a prohibited drug or alcohol or item used as drug paraphernalia. Any independent analysis of suspected substances will be undertaken only with the consent and knowledge of law enforcement officials.
- ❖ The disposition of any suspected prohibited drug or alcohol or drug paraphernalia.
- ❖ The reporting of any suspected criminal activities.

When contact with law enforcement officials is necessary, an investigation report will be prepared by a designated member of Management for each incident and retained in a permanent file. Included in such reports will be a copy of a letter confirming the understanding reached with enforcement officials regarding the incident in question.

Searches

- ❖ **General** - Senior Management shall have the authority to order a general search of Company and/or employee personal property located on Company premises. Such searches shall be conducted in the presence of at least two representatives of Management, including one Company Supervisor. Specially trained canine search teams may additionally be utilized as required.
- ❖ **Random** - With the consent of Management, random searches of Company premises and personal property of employees will be conducted in the presence of at least two representatives of Management, including one Supervisor.
- ❖ **Personal** - Should a Supervisor or other member of Management determine that reasonable cause exists to believe a violation of the Prohibited Drug and Alcohol Policy has been committed so as to justify a personal search of an Employee, he shall:
 - Confront the employee and request an explanation.
 - If the explanation is not satisfactory, the Supervisor will ask the employee to accompany him to a designated location for the purpose of a personal search. Any refusal to submit to such search should be witnessed where possible by another representative of Management.

- If the employee's person is to be searched, his consent must first be obtained in Consent to Search.
- A personal search shall be conducted in the presence of two Management representatives, including one Company Supervisor and an additional witness, if the employee so chooses. Only other females or witnesses shall search female employees.
- Should the search result in the discovery of suspected prohibited drugs or alcohol, or drug paraphernalia, such contraband will be confiscated and the employee will be given a receipt and suspended without pay pending completion of the investigation.
- Should the employee refuse to submit to the personal search, he/she shall be suspended without pay pending completion of an investigation.

In the administration of these procedures, it is essential that the personal privacy of the employee is given maximum consideration.

Consequences of Violations of the Policy

Any employee suspected to be in violation of the Prohibited Drug and Alcohol Policy shall be immediately suspended without pay pending completion of an investigation. During the course of the investigation, the suspected employee shall have the opportunity to make an explanation.

A determination shall be made by appropriate Management as to whether or not the employee violated the Prohibited Drug and Alcohol Policy. Should the determination be made that no violation occurred, the employee will be reinstated without penalty.

Any employee who is known to have engaged in prohibited conduct with regard to alcohol misuse (measured breath alcohol level of .04 or greater) or use of controlled substances, is subject to the following consequences.

The employee shall be immediately removed from his/her position, and shall be advised by the Company of the resources available to them in evaluating and resolving problems associated with the misuse of alcohol or use of controlled substances.

The employee will be evaluated by a substance abuse professional (SAP) who shall determine what intervention or assistance is required for the employee associated with alcohol misuse and/or controlled substances use. In addition, the employee must be re-evaluated by a SAP to determine that the covered employee has followed the rehabilitation program prescribed.

Before returning to duty, the employee shall undergo a return-to-duty alcohol test with a result indicating a breath alcohol level of less than 0.02 if the conduct involved alcohol, or a drug test with a verified negative result if the conduct involved drug use.



Section I Forms & Information

Valid from: November 2008

It must be the start of the employee's next regularly scheduled duty period, but not less than eight (8) hours following the administration of a test, before an employee may be returned to duty after an alcohol test result indicating a breath alcohol level of 0.02 or greater but less than 0.04. The Company will not take any action against a covered employee based solely on test results showing an alcohol concentration of less than 0.04.

In addition, each employee must be re-evaluated by a SAP to determine that the employee has followed the rehabilitation program prescribed.

The employee shall also be subject to unannounced follow-up drug and / or alcohol testing, as prescribed by the SAP.

Contractors and Sub-Contractors

All contractors and subcontractors shall be notified of the REPOWERUSA safety rule concerning the Prohibited Drug and Alcohol Policy by means of a Letter to the contractor. Should any employee of a contractor or subcontractor violate the safety rule, his or her employer shall be promptly notified and such individual shall be barred from Company premises and from further performance of contract work.

Guidelines Concerning use of Legally Prescribed Drugs

Legally prescribed drugs are permitted in the workplace provided the supply does not exceed two days.

Each prescription should be recorded with the employee's immediate supervisor along with the prescribed dosage.

Supervisors should observe those employees on prescribed medication and be alert for any indication that suggests abuse or effect the medication has that presents a safety hazard to the employee and/or his or her co-workers.

Prescription drugs must be kept in the original container as issued by the pharmacist. Employees are not to mix different prescription drugs into the same container.

Employees can only be in possession of their own prescription. They cannot have their spouse's or anyone else's prescription.

No one, unless licensed, is allowed to dispense medication. For example, a wife is not allowed to give her husband (our employee) her diet pills. If the husband is overweight, he needs to get a prescription in his own name from his physician.

Drugs and medication that can be obtained over-the-counter should also be kept in its proper container. Doing this will prevent confusion.

Definitions

- ❖ **Drug** - A drug is a chemical substance that produces physical, mental, emotional or behavioral change in the user.
- ❖ **Prohibited Drug** - A prohibited drug is any drug which the use, possession, transfer or storage thereof is illegal or any other drug, including, but not limited to, a prescription drug(s), used for any reason other than a legitimate medical purpose.
- ❖ **Paraphernalia** - Paraphernalia is any item, which can be used for the administering, transferring or storing of a prohibited drug.

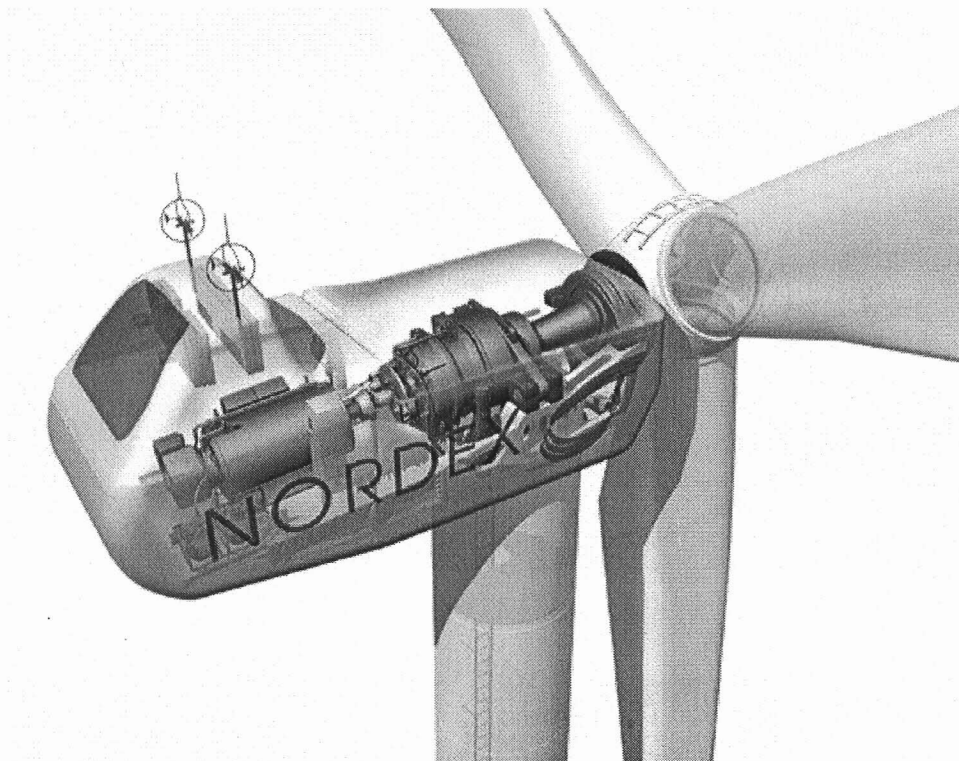
These items include, but are not limited to:

- Blenders, bowls, containers, spoons, mixing device used or intended for use in compounding controlled substances.
- Capsules, balloons, envelopes and other containers used or intended for use or concealing in packaging small quantities of controlled substances.
- Hypodermic syringes, needles or other objects designed or intended for injecting controlled substances into the human body.

Objects used or intended for use or designed for use in ingesting, inhaling or otherwise introducing marijuana, cocaine, hashish, hashish oil, etc. into the human body, such as metal, wooden, acrylic, glass, stone, plastic or ceramic pipes with or without screens, permanent screens, hashish heads or punctured metal bowls, water pipes, carburetion tubes and devices, smoking and carburetion masks, roach clips or other objects used to hold smoking materials such as a marijuana cigarette that has become too small or too short to be held by hand, chamber pipes, electric pipes, air driven pipes, chillums, bongs, ice pipes, or rolling paper (Zigzag, E-Z Wider, Bamba, Job, Joker, etc.) not associated specifically with tobacco products.

Safety Manual

Rules of Conduct on, in and around Wind Turbines Turbine Classes K06, K07, K08 All Types



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This documentation was created with greatest care taking into account the currently applicable standards.

However, due to continuous development, the figures, functional steps and technical data are subject to change without prior notice.

Scope

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Table of Contents

1.	Conventions.....	7
1.1	Symbols and notes	7
1.1.1	Hazard of personal injury	7
1.1.2	Warning of material damage	7
1.1.3	Notes and information	7
1.1.4	Integrated safety notes and information	7
1.2	Lists and work steps	8
1.3	Italic text	8
2.	Introduction	9
3.	Terms and Abbreviations	11
4.	Safety regulations	12
4.1	Intended use.....	12
4.2	General rules	12
4.2.1	Basic occupational safety equipment	12
4.2.2	Access	13
4.2.3	Inside/around the WT	13
4.2.4	Operation.....	14
4.2.5	Ascending to the nacelle	14
4.2.6	Exiting the WT	16
4.3	Additional safety regulations for specialized personnel.....	17
4.3.1	General.....	17
4.3.2	Working in the separated transformer area (only for WTs with transformer inside tower)	19
4.3.3	Using the vertical ladder during erection	19
4.3.4	Work in the nacelle	19
4.3.5	Work on and in the rotor hub	21
4.3.6	Work on the electrical system	21
4.3.7	Work on the hydraulic system and with hydraulic tools	22
4.3.8	Dealing with hazardous substances and environmental protection	23
4.3.9	Regulations for crane work.....	23
4.4	Special obligations of the owner.....	24
5.	Warning and safety instructions inside the WT	26
6.	Residual risks	27
7.	Safety equipment	29
7.1	Personal protective equipment (PPE)	29
7.1.1	Inspection/maintenance	29
7.1.2	Components of the PPE	30
7.1.3	Handling the safety harness.....	32

7.2	Additional equipment for service employees (K06 and K08).....	33
7.2.1	Hub rope, including accessories	33
7.2.2	Hub ladder (K06)	34
7.3	Abseiling equipment	34
7.3.1	Equipment/accessories	35
7.3.2	Inspection/maintenance	37
7.4	Fire extinguisher	37
7.5	First-aid kit	38
8.	Safety devices	39
8.1	Fall arrest system	39
8.1.1	Fall arrest systems used	39
8.1.2	Attaching the fall arrester	40
8.2	Rotor lock	43
8.3	Attachment points	43
8.4	Emergency stop switches	46
8.5	Access hatch switch	46
8.6	Area limit switches and battery disconnectors in the rotor hub	47
8.7	Rotor brake selector switch	49
8.8	Emergency lighting	50
9.	Behavior in specific situations	51
9.1	Grid failure	51
9.2	Thunderstorm	51
9.3	Fire	52
9.3.1	Fire in the WT	52
9.3.2	Fire in medium-voltage switchgear or transformer	53
9.4	Accident	53
9.5	Oil spill	54
9.6	Earthquake	54
9.7	Leaving the nacelle in hazardous situations (abseiling)	55
9.7.1	Attaching the edge protection (K08 beta and K06)	55
9.7.2	Fastening the descender	56
9.7.3	Abseiling yourself	60
9.7.4	Abseiling casualties	60
10.	Ascending inside the tower	62
10.1	Preparing for the ascent	62

Table of Contents

10.2	Using the vertical ladder	63
10.3	Using the service lift	65
10.4	Entering the nacelle.....	67
11.	Special features of K06	68
11.1	Operating the rotor brake without system pressure	68
11.2	Operating the rotor lock.....	70
11.3	Operating the roof	72
11.4	Operating the roof hydraulics for turbine class K06	74
11.5	Entering the rotor hub.....	76
11.5.1	Attaching the hub rope	77
11.5.2	Crossing the rotor hub	77
11.6	Transporting objects into the nacelle.....	80
11.6.1	Using the on-board crane	81
11.6.2	Using the edge protection for the working rope.....	83
12.	Special features of K07 alpha	85
12.1	Operating the rotor brake without system pressure	85
12.2	Operating the rotor lock.....	87
12.3	Entering the rotor hub.....	89
12.4	Transporting objects into the nacelle.....	90
12.4.1	Using the on-board crane	90
12.5	Operating the hydraulic unit	92
13.	Special features of K08 beta	93
13.1	Operating the rotor brake without system pressure	93
13.1.1	WTs with active rotor brakes	93
13.1.2	WTs with passive rotor brakes	94
13.2	Operating the rotor lock.....	96
13.2.1	Rotor lock on the rotor shaft	97
13.2.2	Rotor lock on brake disk	101
13.3	Operating the roof	102
13.4	Operating the roof hydraulics for turbine class K08	105
13.4.1	WTs with active brake	105
13.4.2	WTs with passive brake	107
13.5	Entering the rotor hub.....	109
13.5.1	Attaching the hub rope	110
13.5.2	Crossing the rotor hub	111

13.6	Transporting objects into the nacelle.....	114
13.6.1	Using the on-board crane	115
13.6.2	Using the edge protection for the working rope.....	118
14.	Special features of K08 gamma	120
14.1	Operating the rotor brake without system pressure	120
14.1.1	Applying the rotor brake (manually)	120
14.1.2	Releasing the rotor brake	121
14.2	Operating the rotor lock.....	121
14.2.1	Rotor lock on the rotor shaft	121
14.2.2	Rotor lock on the brake disk.....	122
14.3	Entering the rotor hub.....	123
14.4	Transporting objects.....	125
14.4.1	Using the electric chain hoist.....	126
14.4.2	Using the on-board crane	129
15.	Revision Index	131
15.1	Introduction.....	131
15.2	Terms and abbreviations.....	131
15.3	132

1. Conventions

1.1 Symbols and notes

1.1.1 Hazard of personal injury



Unless the instructions and notes are observed, life-threatening injuries will result.



Unless the instructions and notes are observed, serious injuries may result.



Unless the instructions and notes are observed, injuries will result.

1.1.2 Warning of material damage

NOTICE

Warning of damage to components or material

1.1.3 Notes and information



NOTE

Provides additional information, notes and hints



OBSERVE DOCUMENT

Reference to information in other documents

1.1.4 Integrated safety notes and information

Information and safety notes integrated into the text. Indicated by the signal word in bold: Note, Notice, Caution, Warning.

Example

Notice: To prevent damage to the paintwork, the tower sections must not touch the ground.

1.2 Lists and work steps

- Work step
 - ▶ Result of a work step
- List
 - Subordinate list

1.3 Italic text

Identification of proper names: e.g. manufacturer names, document titles.

2. Introduction

This document is confidential and intended for the owner/operator, NORDEX employees and employees of contractual companies.

This document contains general regulations and notes for the safe and risk-free operation as well as execution of all necessary work steps for the erection, commissioning and maintenance of a NORDEX wind turbine (WT).

It applies to all turbine types of the classes K06, K07 and K08, see "Table: Overview of wind turbine classes and types".

For this reason, it is absolutely essential that all persons operating or working on a wind turbine read this document carefully, and act in accordance with the instructions and regulations.

The safety manual must be understood in order to guarantee safety on and around the WT. If questions arise when reading this document, clarify them first and, if required, consult NORDEX.

The respective, specific safety instructions in the technical documentation which, for example, describe the operation or maintenance must also be read and understood.

In addition, the current version of the Document *NX_HS_0002 Instructions for all Work Steps to be Performed in and on Wind Turbines (WT)* is binding for NORDEX employees. The Document *NX_HS_0004* applies for employees from contractual companies.

The Chapters *Special features of K06* and the following apply to trained, specialized personnel, such as service employees.

In the interest of their own safety, the owner/operator should only perform any operations if they or a casualty must be abseiled out of the nacelle in a hazardous situation or if they belong to the group of trained, specialized personnel.

Table: Overview of wind turbine classes and types

Turbine class	Type
K06	N54-Mk3/1000 N60/1300 N62/1300
K07 alpha	S70/1500 S77/1500
K07 beta	N70/1500 N77/1500 N82/1500
K08 beta	N80/2500 N90/2300 N90/2500
K08 gamma	N100/2500

3. Terms and Abbreviations

The following terms and abbreviations are defined in this document:

Term	Definition
Self-contained electrical operating site	Self-contained electrical operating sites are spaces or locations which are used solely to operate electrical systems and are kept locked. Only electrically skilled and electrically instructed persons have access. Persons without electrotechnical training must only enter these rooms when supervised by electrically skilled persons.
Electrically skilled person	An electrically skilled person is somebody who on account of expert training, knowledge and experience as well as the relevant standards is capable of evaluating the tasks allocated and detecting potential risks.
Electrically instructed person	An electrically instructed persons is somebody who has been instructed and, where necessary, trained by an electrically skilled person about the allocated task and potential risks of improper behavior as well as informed about the necessary protective equipment and protective measures.
Trained, specialized personnel	Trained, specialized personnel include those trained, instructed and authorized for the professional execution of work on wind turbines.
PPE	Personal protective equipment
Expert for personal protective equipment against falling from a height	Expert for personal protective equipment against falling from a height is somebody who, on account of expert training and experience, has sufficient knowledge in the field of personal protective equipment against falling from a height and is familiar with the relevant occupational health and safety regulations, accident prevention regulations and generally accepted standards of technology to be able to evaluate whether or not a personal protective equipment against falling from a height is in a safe condition and is applied properly. In Germany, these requirements are fulfilled by anyone who has successfully participated in a training course, in accordance with the BG (Institution for Statutory Accident Insurance and Prevention) policy "Selection, training and proof of capability of experts for PPE against falling from a height" (BGG 906).
WT	Wind turbine

4. Safety regulations

4.1 Intended use

The WT is solely intended to convert the kinetic energy of the wind into electrical energy, and to feed this into an existing electricity network.

The WT must only be used for the intended purpose within the specified performance limits and operating conditions.

Usage outside of these parameters is not permitted.

4.2 General rules

Persons who want to enter the WT and operating or working on the WT must first have read and understood this Safety Manual and the Operating Instructions for the WT.

It is within the interest of your own safety and the safety of the WT to strictly adhere to the safety and operation regulations contained in these documents.



NOTE

The owner must ensure that this Safety Manual and the current Operating Instructions are always available in the WT and are in a usable condition.

4.2.1 Basic occupational safety equipment

Persons who want to enter the WT must have the following basic occupational safety equipment:

- Working suit
- High safety shoes class S3
- Safety helmet
- Safety gloves

This equipment is compulsory for service employees.

Depending on the task in hand, service employees also require:

- 1 pair of safety glasses for work steps involving hydraulic tools
- 1 set of hearing protection, when noisy work is carried out in the tower or nacelle

The personal protective equipment (PPE) must also be used for the ascent in the tower using the vertical ladder or the service lift, or while staying in a fall hazard area, see Chapter 7.1 "Personal protective equipment (PPE)".

4.2.2 Access

The WT is classified as a self-contained electrical operating site.

For this reason, persons who want to enter the WT or must carry out work in or on the WT must meet special requirements.



DANGER

Persons with pacemaker are not permitted to enter the turbine.



NOTE

The owner of the WT must take suitable measures (e.g. key authorizations) to ensure that unauthorized persons cannot access the WT.

The following persons are authorized to access the WT:

- Electrically skilled persons
- Electrically instructed persons

Persons without electrotechnical training must only enter the WT under the supervision of one of the aforementioned persons.

If the medium-voltage transformer is installed in the tower, then it is located in a separated, locked area, due to the high electrical voltage applied. This must only be entered when de-energized, and by electrically skilled persons only.

4.2.3 Inside/around the WT

When inside the WT or in its direct proximity, safety helmets and high safety shoes must be worn.

All warning and safety signs in the WT and all operating instructions must be strictly followed.

While inside the WT, it must be ensured that unauthorized persons cannot enter the WT. This is achieved by means of corresponding signs.

If more than one person is inside or around the WT, the tower door can be locked from inside.

However, prerequisite for this is that, in case of emergency, access for the emergency services is ensured, e.g. by visibly leaving a key to the turbine in the locked service vehicle.

When inside the WT for prolonged periods, particularly when working in the nacelle, as well as on and in the rotor hub, depending on the general weather conditions, observe changes to the weather.

This is necessary in order to take measures early enough to prevent dangerous situations caused by freshening wind or approaching thunderstorms.

Loose, long hair, loose clothing, or jewelry that may get caught or dragged into rotating parts is not permitted.

Smoking is not permitted in the WT.

4.2.4 Operation

The WT has been designed, built and erected using state of the art technologies and in accordance with the relevant technical standards and regulations.

Despite this, incorrect usage can result in dangerous situations, which can put persons' health and lives, and the WT or other material assets at risk.

For this reason, the WT must only be operated:

- According to its intended use
- In technically sound condition
- In compliance with the operating and maintenance regulations

The owner/operator may only perform operator control actions on the WT after receiving expert instructions.

Operator control actions by the owner/operator are restricted to starting and stopping the WT, and querying WT production data using the software provided by the manufacturer.

Individual components of the WT must only be manually operated by trained specialized personnel, who are trained, instructed and authorized for this purpose.

Operating personnel currently undergoing training must only work on the WT under the supervision of an experienced person.

The successfully completed training must be confirmed in writing.

The WT is operated automatically.

Operational faults are identified by the control system, and trigger corresponding error messages, right through to shutting down the WT.

Faults must only be identified and rectified by trained, specialized personnel.

4.2.5 Ascending to the nacelle



NOTE

- Only persons who are physically capable and have a valid certificate for working at heights are permitted to ascend into the nacelle
- The abseiling equipment must be carried along
- An emergency eyewash bottle must be carried along

It is only permitted to enter the nacelle in the following conditions:

- 10 minute average wind speeds up to
 - 20 m/s for tubular towers
 - 12 m/s for lattice towers
- A second person is present
- Service lift and vertical ladder with fall arrest system are in sound condition (valid test badge or test certificate).

Before ascending into the nacelle:

- Inform the responsible remote monitoring
- Stop the WT and secure it against re-activation
- Disable remote access to the control system
- Put on the personal protective equipment (PPE)

When ascending to the nacelle, at least one mobile communication device (two-way radio, cell phone) must be carried along in order to ensure communication with persons remaining on the ground and, in cases of emergency, with the emergency services.

If no further persons are remaining on the ground, a communication device, which is activated and secured against access by third parties, must be deposited in the tower base.

If there is a service lift in the WT, the following applies:

- The service lift must be generally used for ascending and descending the tower. Only use the vertical ladder if the service lift is out of order.
- The service lift must only be operated by persons instructed in its operation
- It is not permitted to use the service lift and the vertical ladder at the same time, as this would endanger the person using the vertical ladder
- When using the service lift, it is obligatory to always secure against falling from a height. For this purpose, the PPE must be used together with the attachment points in the service lift cage.

The following rules apply when using the vertical ladder:

- Before using the vertical ladder, remove any loose objects from pockets in clothing and either leave these behind or safeguard them against falling out
- It is obligatory to always secure against falling. For this purpose, use the PPE in connection with the fall arrest system
- Before and during the ascent, visually inspect the vertical ladder and fall arrest system for damage
 - If in any doubt, cancel the ascent, and, if necessary, also secure yourself on the ladder upright using the lanyard with energy absorber
 - Immediately inform the responsible service company, FOM and remote monitoring

- Only one person at a time may be on the vertical ladder in the area between two tower platforms
- If a tower platform has an access hatch, this must be closed immediately after passing through it

Rules for using the PPE:

- Only use your own PPE
- All components of the PPE must have a valid test badge
- The PPE must be checked for damage before use
- A PPE that has been put under stress due to a fall must no longer be used, and must be inspected by an expert
- The PPE must be inspected regularly by an expert, at least once a year

4.2.6 Exiting the WT

Owner and operator must restore the operational state of the WT before leaving it.

This means the following:

- Inform the remote monitoring of the intention to leave the WT
- For lattice towers:
 - Bring the service lift cage into the parked position
 - De-activate the supply voltage to the service lift
- For towers with external ascent:
 - Attach the ladder guard and secure it with a lock
 - Store the key for the lock on the bracket for the PPE
- The PPE must be complete and properly stored in the correct place
- If necessary, restart the WT, if it has been stopped manually
- Log off on the turbine PC
- If necessary, re-establish remote access to the control system
- Switch off the lights
- Lock the door in the tower base (tubular tower) or the transformer station (lattice tower)

The same applies to specialized personnel after completion of work on the WT.

The following must also be ensured:

- The rotor lock must be released and the rotor lock bolt secured
- The working rope and the chain for the on-board crane must be hauled in
- If available, the jib of the on-board crane must be in the parked position

- The chain bag of the on-board crane must be secured (K08 only)
- The nacelle roof (K06 and K08 beta) must be closed and secured
- The WT control system must be ready for operation
- Any contamination must be removed, and the WT must be cleared of tools and packaging

If specialized personnel intend to briefly leave the WT, although the work is not yet complete, the following must be ensured:

- Remote access to the WT control system must not be possible
- The WT must be in a safe condition
- The nacelle roof (K06 and K08 beta) must be closed
- Unauthorized persons must not be able to access the WT

4.3 Additional safety regulations for specialized personnel

4.3.1 General

Work steps for erecting, commissioning, and maintaining the WT must only be performed by trained, specialized personnel.

Specialized personnel working on the WT must:

- Regularly take part in rescue training and first-aid training
- Possess a valid certificate for working at heights

During work in the WT, at least 2 employees must be on site at all times.

- Each employee must carry and use their own PPE
- The PPE and, if applicable, the abseiling equipment provided in the WT is only intended for use by the owner
- Hearing protection must be used when carrying out noisy work, particularly in the tower.

When using hearing protection, it must be ensured that those persons present are able to communicate by using hand signals agreed in advance.

- For the period of the completed work, the responsible employee is technically and disciplinary responsible for all subordinate employees.

Before starting the work, he must instruct them in the safety regulations to be observed, and he must ensure that they are adhered to.

- The responsible employee must be familiar with the telephone numbers of the local rescue services and the power utility and keep them readily available
- It must be ensured that all those involved are able to perfectly communicate at all times (if necessary, an interpreter must be used).

An adequate number of two-way radios with uniform frequencies must be available. It must be checked whether or not the frequencies are permitted in the relevant countries where the turbines are erected.

If parts of the WT or the entire WT are switched off during maintenance or repair work, these parts must be secured against automatic or accidental re-activation.

**⚠ WARNING****AUTOMATIC RESTART**

The WT may be at a standstill due to an error that occurred during idle mode (standby). If the error is no longer active, the WT would automatically restart. Prior to starting work on the WT, perform a manual stop and disable remote access to the control system.

If necessary, for individual turbines, the telephone plug must be removed from the telephone socket. In the case of a wind park, the network plug must be removed, in order to prevent remote access to the control system.

To ensure that the WT can operate correctly and safely, factory-set switching points on monitoring and control components, such as pressure monitoring devices, valves, throttles or control parameters, must only be changed for testing purposes.

Once tests have been completed, the specified values must be reset immediately.

Only use original spare parts from the manufacturer for repair work. It is prohibited to use parts from manufacturers that have not been expressly approved by the manufacturer of the WT.

Any damaged machine components must be replaced. If this is not possible, the WT must not be started again.

If it is necessary to disassemble safety devices in order to execute work steps, these must be re-assembled directly after the work has been completed, and must then be checked for proper functioning. It is not permitted to permanently put safety devices out of service.

Do not transport persons with the on-board crane. Do not stand or walk under suspended loads.

After the work has been completed, thoroughly clean the WT. Remove tools, spare parts and inflammable material such as cloths or packaging. This must be checked by the responsible employee.

In addition, the generally accepted rules on safe and proper execution of work as well as the latest versions of the accident prevention regulations must be observed.

In all countries where turbines are erected the existing national regulations concerning accident prevention and environmental protection must be adhered to.

4.3.2 Working in the separated transformer area (only for WTs with transformer inside tower)

If the medium-voltage transformer is installed in the tower, and if work must be executed in this specially separated area (e.g. maintenance work on foundation screw connections), the following special safety regulations apply:

- Before entering the separated, locked area of the transformer, an electrically skilled person with switching authorization must de-energize this area, including the supply cables for the medium-voltage cables (ring cable), observing the five safety rules.
- Only electrically skilled persons with a valid switching authorization for the medium-voltage switchgear for the corresponding voltage level are authorized to enter the transformer area. Other persons are only permitted to work in this area under their supervision.
- While in the transformer area, the escape route must be kept free at all times. If the WT has a service lift, it must be parked on the next highest platform.

Once the work steps in the transformer area have been carried out, the switch-authorized electrically skilled person must check whether everyone has left the area and that all objects brought into the area have been removed again.

Only after this check the entire system, including the medium-voltage cables, must be connected again.

4.3.3 Using the vertical ladder during erection

During erection, it may occur that the fall arrest system is not yet available, or has not yet been released.

If the vertical ladder must still be used, then special rules of conduct must be adhered to:

- A sign on the vertical ladder must explicitly indicate that the fall arrest system is not yet available, and that the person ascending the vertical ladder must be secured against falling using the lanyard with energy absorber
- Always safeguard yourself against falling by alternately attaching the two ends of the lanyard with energy absorber to the ladder uprights

4.3.4 Work in the nacelle

Immediately after entering the nacelle, the following initial tasks must be carried out prior to performing any maintenance or repair work:

- Switch the service switch on the manual control unit of the Topbox to service mode
- Close the access hatch, if available
- Ensure that the rotor brake is applied and cannot be released by the control system

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