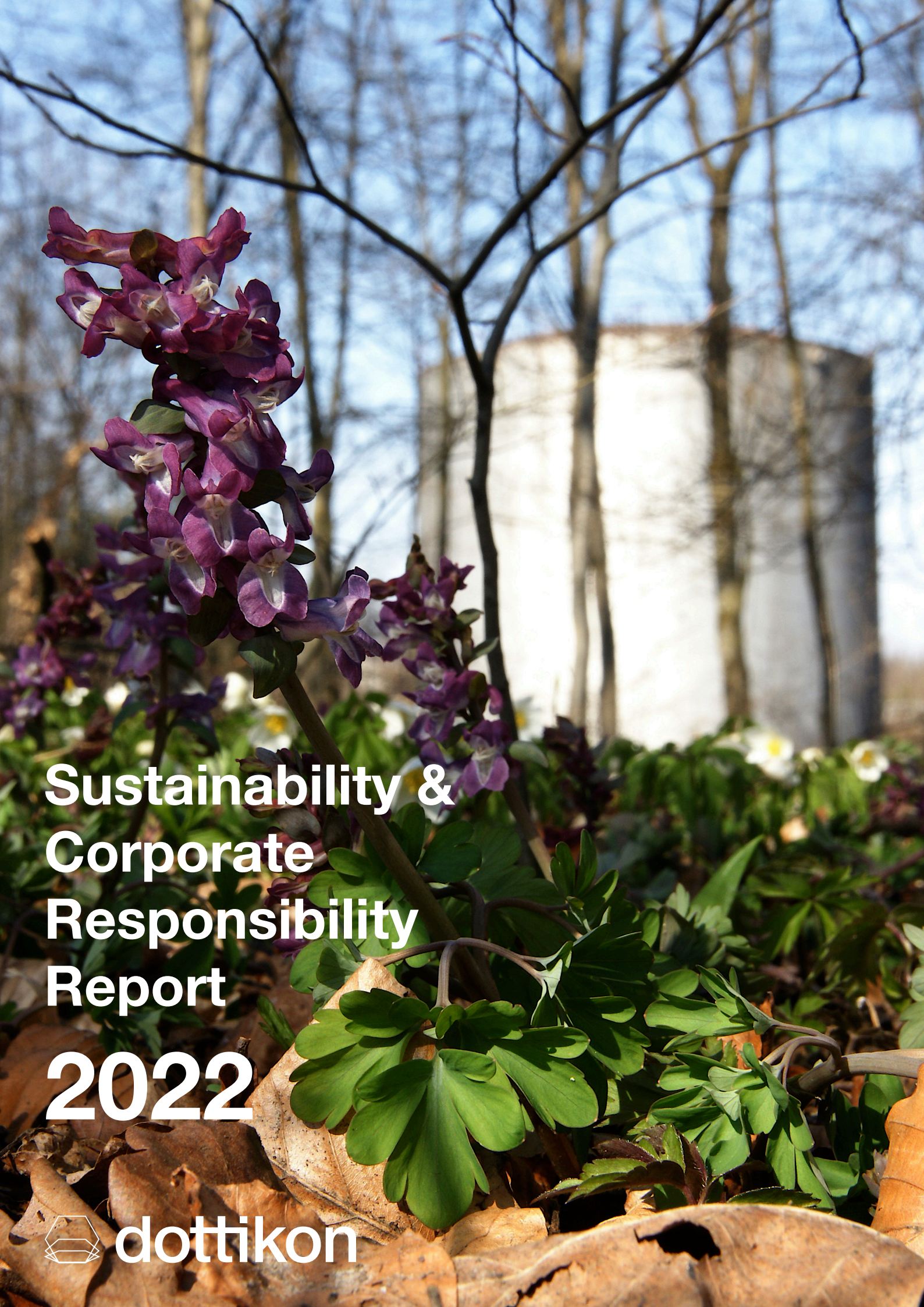
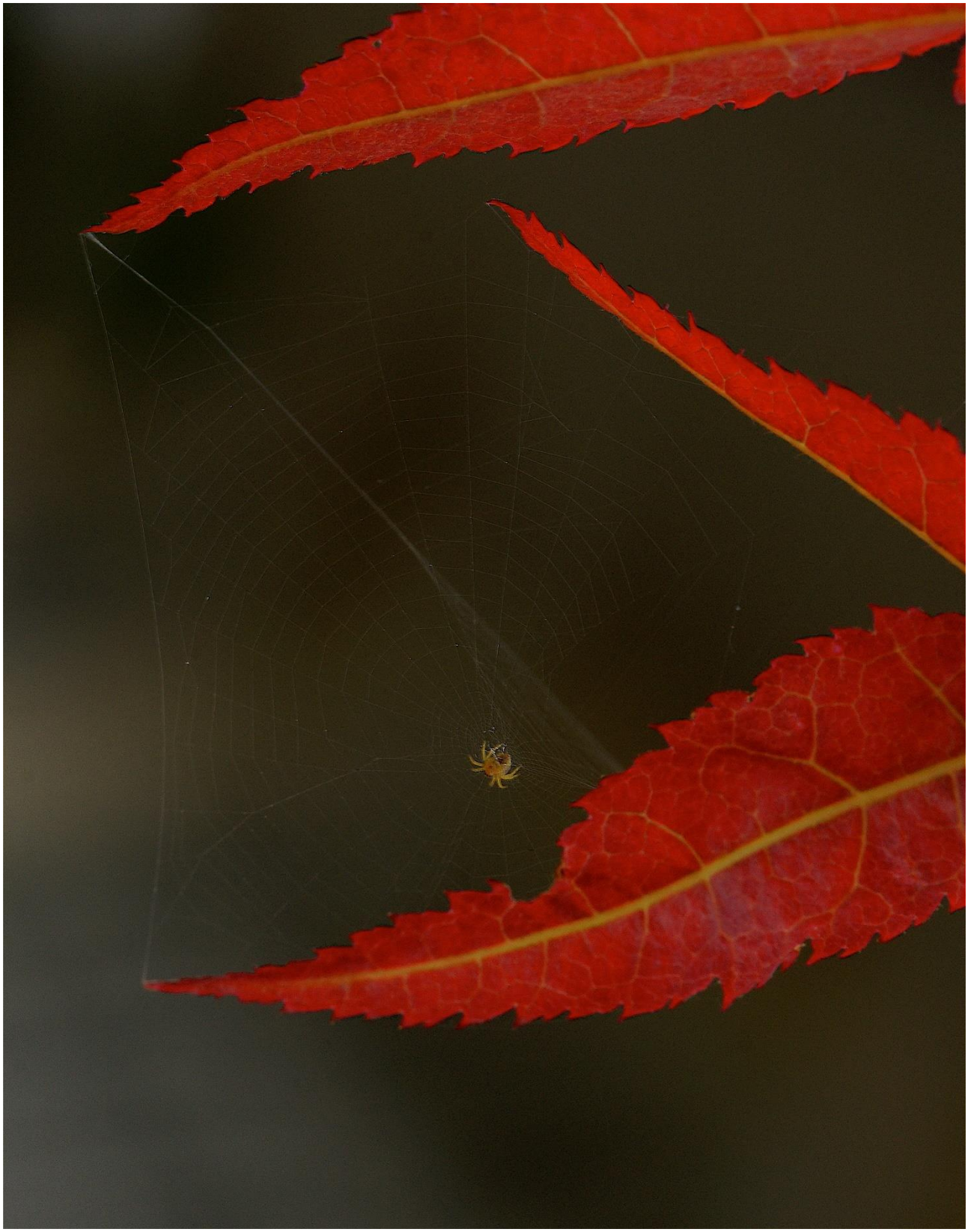


Sustainability & Corporate Responsibility Report 2022

dottikon

Content



1 Core Mission

1.1 Responsibility and Sustainability

The overarching responsibility mission of DOTTIKON ES Group with regard to its main operational company Dottikon Exclusive Synthesis AG (hereinafter "DOTTIKON") includes the following business priorities: (1) Health: to secure drug substance supply to support human and animal health; (2) Compliance: to comply with the laws, regulatory requirements, and industry standards applicable to the site and business activity; (3) Value: to create long-term value for customers, employees, suppliers, and shareholders; and (4) Efficiency: to be entropy efficient, this means, entropy increase shall be minimized and structures and orders containing negentropy (past entropy increase for build-up) shall be preserved and efficiently used.
DOTTIKON's sustainability mission follows the concept of preservation of information and order. The priorities of sustainability measures derived therefrom are: (1) more efficient and longer use of existing structures; (2) recycling and reuse of existing structures at high value levels; and (3) focus on more sustainable approaches when expanding or replacing existing structures with new ones. DOTTIKON's safety culture created over more than 110 years guides the innovative use of hazardous reactions, low-temperature and high-pressure chemistry, as well as continuous processing in order to challenge, tighten, or shorten conventional chemical synthesis routes to improve selectivities, yields, and purities and thereby avoid and reduce energy use, waste, and CO_2 emissions sustainably. The sustainability priorities with respect to material use and processes are to avoid, reduce, treat, recycle, reuse, and lastly destroy. The versatile technology and equipment portfolio is used, maintained, and continuously expanded to design, develop, and optimize chemical processes and technical manufacturing procedures for the rapid scale-up from kilograms to multi-tons in order to produce and deliver the respective market volumes and make drug substances and their respective drug products available and affordable as medicines for humans and animals to improve their health-related quality of life.

1.2 Diversity

DOTTIKON promotes and values a culture of sincere openness, understanding for others' legitime needs, constructive criticism, direct disclosure, and an effective addressing of problems. DOTTIKON respects and tolerates different fact-based opinions and views. DOTTIKON is convinced that this diversity allows and favors best engagement in a joint and constructive discourse for the best target-oriented and consensus-based solution. Next to social skills, capability and willingness to perform by self-responsibility, self-initiative, discipline, and flexibility, the view on diversity to cover the full solution space in constant search for the best solution drives DOTTIKON's evaluation and decision process when selecting employees, suppliers, and partners.

2 Facility Background Information

2.1 Incorporation

Dottikon Exclusive Synthesis AG is a Swiss corporation that was founded and is conducted according to the Laws of the Swiss Confederation and the Canton of Aargau. Consequentially, DOTTIKON observes and complies with applicable Swiss laws, including international laws if required by local laws. Clear and accurate information about DOTTIKON's performance, practices, and expectations are communicated to the employees, suppliers, and customers. DOTTIKON requires all its employees, customers, and suppliers to comply with applicable laws. DOTTIKON commits to social and environmental corporate responsibility as well as to continuous

improvement. DOTTIKON is committed to operations and practices which prevent harm or damage to people, the environment, or property with regard to its products, processes, and facilities. DOTTIKON procures on a globalized market, however with regional and diverse focus. In terms of volume and expenses, most of DOTTIKON's procurement is from Europe.

2.2 Historical Background

The origins of DOTTIKON go back to 1913, when it was founded as Schweizerische Sprengstoff-Fabrik (SSF). From the 1930s through the 1970s, the focus of activities shifted away from explosives and toward the development of processes such as nitration, hydrogenation, and oxidation, which evolved into today's chemical intermediates and active pharmaceutical ingredients (APIs) business and production using hazardous chemical reactions, high-pressure chemistry, low-temperature chemistry, and continuous processing. SSF was purchased by EMS-Chemie Holding AG in 1987, changed its name to EMS-DOTTIKON AG in 1990, and finally to Dottikon Exclusive Synthesis AG in a spin-off transaction from EMS-Chemie Holding AG with subsequent IPO in 2005. DOTTIKON was listed on the SIX Swiss Exchange under the new parental company Dottikon ES Holding AG on March 31, 2005. Today, it is listed in the Swiss share segment under the Swiss Reporting Standard.

2.3 Present

DOTTIKON's history in handling explosives makes DOTTIKON one of the most experienced partners in the industry for safety-critical exothermal reactions such as nitrations, oxidations, and azide chemistry, to name but a few. Today, DOTTIKON is a CDMO with additional specialization in hazardous, safety-critical chemical reactions focused on the exclusive synthesis of fine chemicals. The core technologies of DOTTIKON include hazardous reactions, low-temperature, high-pressure, and continuous processing such as catalytic hydrogenations, alkylations, halogenations, Grignard, and other metalorganic reactions. The type of activity currently performed at the production facility is the manufacturing of chemical substances and APIs as well as advanced intermediates for pharmaceutical and industrial companies around the world. For this purpose, DOTTIKON operates several 100–1'000 liter reactors in the pilot plant and large-scale manufacture reactors of up to 12'000 liters in its multipurpose production plants. Furthermore, DOTTIKON operates special waste treatment in a high-temperature thermal waste recovery plant at incineration temperatures of over 1'100°C (> 2s).
The company is located near the village of Dottikon, about 6 kilometers south-east from Lenzburg, close to a small river called Bünz, and covers an area of more than 600'000 m^2. The site is owned by DOTTIKON. Approximately 250'000 m^2 of the area is currently used for manufacturing purposes, with more than 100'000 m^2 in addition ready for expansion to meet future market needs. An area of 40'000 m^2 is reserved and used as ecological compensation area.
DOTTIKON holds a high educational standard among the employees and in in-house trainings and has wide personnel capacities in research and development, production, as well as quality management and quality control. The primary corporate language on the site for all employees and local suppliers is German.

3 Management System

3.1 DOTTIKON's Legal and Customer Requirements

DOTTIKON assesses ongoing compliance with Health, Safety and Environment (HSE), business ethics, and labor regulations. Furthermore, DOTTIKON has processes in place to enforce responsible business practices related to labor, ethics, environmental protection, health, and safety, also with its supplier base. Legal and customer requirements and requests are examined in good faith by competent personnel in order to ensure the best possible fit and satisfaction for demand, particular use, needs, and requirements. Methods and instructions for standard operation procedures (SOP) and specifications are installed to ensure that only current and released versions are used in the implementation.

3.2 DOTTIKON's Commitment

DOTTIKON participates voluntarily in the Responsible Care program. Roles and responsibilities of employees are clearly defined and documented in detailed job descriptions. Furthermore, DOTTIKON has an integrated quality management system based on ISO 9001:2015, which also covers HSE aspects, and DOTTIKON complies with the Customs-Trade Partnership Against Terrorism (C-TPAT) program. HSE-related functions are the Safety Department, the fire brigade, and an environmental group including a Dangerous Goods Safety Advisor, all of whom report to the Head of Production. In addition, DOTTIKON has a safety lab that reports to Research & Development and a Product Safety Officer who reports to the Head of Quality Management. All functions provide monthly and annual reports to Senior Management. All departments appoint an HSE Officer as the first point of contact for employees. Periodical meetings with the HSE Officers take place, e.g. to review past incidents and take corrective and preventive measures. Lessons learned from accidents and incidents are brought to the attention of employees through periodic reports. DOTTIKON has developed a set of key benchmarks to allow Senior Management to focus on a proactive approach. Common key operational indicators include the number and nature of incidents or accidents, the number of audits or risk assessments, the number of measures implemented or to be implemented, and the number of trainings conducted and respective attendees.

DOTTIKON uses the casual factor tree analysis for investigating major deviations. Minor deviations and near misses are investigated in a less formal way. These investigations aim, by a root cause analysis, to identify the most likely root cause(s) in order to define sustainable measures that correct and prevent potential deviations, incidents, or accidents. These root cause analyses are well documented and forwarded to Senior Management. Remedial actions are identified and incidents as well as near-accidents are reported to all involved departments. All of these events and corresponding corrective actions are discussed with the respective Safety Officers.

Senior Management is provided with monthly reports. Every trimester a brief security and safety release is issued to Senior Management, followed by a comprehensive report at the end of the business year.

4 Labor and Ethics

4.1 Commitment to Business Ethics and Corporate Social Responsibility

Business activities, structure, financial situation, and performance are disclosed in accordance with applicable laws and regulations. Fair business standards in advertising, sales, and competition are upheld to safeguard customer information. DOTTIKON does not condone illegal or unethical behavior by its suppliers, contractors, and alliance partners. DOTTIKON selects suppliers through fair procurement processes. All employees are encouraged to report concerns or suspicion of illegal activities in the workplace in a way that is free of threats of retaliation, intimidation, or harassment. Confidentiality and anonymity are guaranteed in accordance with applicable laws and regulations. Intellectual property rights are respected, and the transfer of technology and expertise takes place in a way that protects intellectual property rights.

4.2 Egalitarian Social Structure

DOTTIKON ensures that all its employees are compensated fairly. Employees are compensated for overtime hours in accordance with local laws. DOTTIKON also requires its customers and suppliers to adhere to international standards regarding equitable compensation for work performed. Wage deductions are not used as a disciplinary measure. Employees are not required to pay any fees to secure employment. All use of temporary, dispatch, and outsourced labor is within the limits of local laws. Additionally, DOTTIKON bases its compensation model on objective criteria such as performance, education, work experience, and market demand. Supervisors regularly assess their employees in the performance review process, and Senior Management audits and reviews all wages annually. In overall terms, workweeks do not exceed the permitted number of hours as laid out in applicable laws and regulations. DOTTIKON offers vacation time, leave periods, and holidays at least consistent with local laws.
DOTTIKON encourages and values a diverse mix of people, viewpoints, talents, and experiences. Employees shall not be exposed to any discrimination based on race, color, age, gender, sexual orientation, ethnicity, disability, religion, political affiliation, labor union membership, national origin, or spousal or marital status in the hiring process and employment procedures. DOTTIKON fosters a culture and working environment where people are treated with respect, courtesy, and fairness, promoting equal opportunity for all. DOTTIKON tolerates no kind of harassment or discrimination in the working environment. Employees are entitled to freely move about in any part of the site at any time during their working hours, except in restricted areas that require special access, security or safety clearance, and provided that such activity does not interfere with other workers' productivity. DOTTIKON respects the employees' right to freely associate with, form, and join workers' organizations, to seek representation, to engage in bargaining, and to assemble peacefully to the degree permitted by and in accordance with the applicable laws and regulations. Employees are encouraged to seek and engage in an open dialogue with Senior Management about employment terms and working conditions with no fear of reprisals, intimidation, or harassment.

4.3 Measures Against Child Labor

Child labor is not used. Workplace apprenticeship programs comply with applicable laws and regulations. Consistent therewith, employees younger than eighteen (18) years ("Young Adults") are hired for education reasons only. DOTTIKON ensures, with the exception of vacation internships, that all Young Adult employees completed the minimal scholar education (i.e. eleven [11] years) as required by local laws and the applicable UN conventions prior to their employment. Any apprenticeship employment contract between DOTTIKON and a Young Adult requires the

approval of both the legal guardian(s) and the competent Department of Labor to become binding for the parties. Furthermore, DOTTIKON requires all of its suppliers, subcontractors, agents, and affiliates not to hire employees younger than eighteen (18) years, except for educational purposes, in accordance with international treaties. In order to enforce the protection of children, DOTTIKON regularly audits its main suppliers, subcontractors, agents, and affiliates. In case of substantial violations of DOTTIKON's ethical standards, those standards shall be enforced or the cooperation with suppliers, subcontractors, or agents shall be suspended or terminated.

4.4 Measures Against Corruption and Bribery

DOTTIKON condemns corruption and neither makes bribes nor accepts them, nor induce or permit any other party to make or receive bribes on DOTTIKON's behalf. Other means of obtaining undue or improper advantage are not offered or accepted either. All DOTTIKON employees are bound by contractual duty neither to bribe third parties or their representatives nor to accept money or valuable presents from third parties or their representatives in exchange for inadequate advantages. Additionally, all DOTTIKON employees are required to announce any suspicion or effective case of corruption or bribery to a designated institution within DOTTIKON (i.e. Legal Department). Corruption, extortion, and embezzlement in any form are strictly prohibited and may result in immediate termination as a DOTTIKON supplier as well as in legal action.

5 Safety and Security

5.1 Safety Management

The prevention of accidents is of utmost importance to DOTTIKON. DOTTIKON promotes a safety culture. Self-discipline, individual responsibility, and everyone's own initiative form the foundation of DOTTIKON's safety culture. By thoroughly searching for and identifying dangers and implementing efficient preventive measures, DOTTIKON constantly reduces any residual risk and probability of occurrence. Furthermore, the principle of double safety is implemented throughout the organization. This means a single mistake or deviation shall not lead to a critical incident.

5.2 Compliance

DOTTIKON complies with the relevant local laws regarding workplace safety. The most pertinent are Article 6 Section 1 of the Swiss labor law (SR 822.11) and Article 82 Section 1 of the Swiss federal law on accident insurance (SR 832.20). Both articles state that the employer is obliged to adopt all measures considered necessary by experience, feasible with the state of the art, and suitable for the conditions of the business to protect the health of the employees. Furthermore, it is the employer's responsibility to take required measures to protect the employees' personal integrity.

5.3 Safety Within the Organization

Safety functions are embedded in all departments of DOTTIKON. The most important safety functions are briefly described below.

5.3.1 Safety Department

The Safety Department of DOTTIKON is part of the Production Department and consists of personnel trained and certified as occupational health and safety specialists according to the statutory ordinance regarding the suitability of labor safety specialists "Verordnung über die Eignung der Spezialistinnen und Spezialisten der Arbeitssicherheit" (SR 822.116). The specialists regularly attend internal and external training courses. The tasks of the Safety Department include

- Managing occupational health and safety
- Managing the HSE handbook (Safety SOPs)
- Managing site security
- Managing emergency services (paramedics, fire department)
- Managing alarm systems
- Contact with authorities, e.g. regarding the statutory ordinance on hazardous incidents "Verordnung über den Schutz vor Störfällen" (SR 814.012)
- Responsibility for fire protection requirements (notified representative)
- Risk analyses (HAZOPs)
- Occupational exposure measurements

5.3.2 Safety Laboratory

The safety laboratory of DOTTIKON is part of the Processes & Technologies Department. The safety laboratory provides the required basic safety data in order to conduct process risk analyses

of new processes or to classify new substances. The methods the safety laboratory may use include, but are not limited to

- Differential Scanning Calorimetry (DSC)
- Radex
- Sedex
- Reaction Calorimetry
- Friction Sensitivity
- Impact Sensitivity
- Koenen Test
- Flammability

5.3.3 Product Safety

Product safety at DOTTIKON is in the responsibility of a Quality Assurance team with members that hold a Ph.D. Quality Assurance is part of the Quality Management Department. The team ensures compliance with the Federal Act on Protection against Dangerous Substances and Preparations ("Bundesgesetz über den Schutz vor gefährlichen Stoffen und Zubereitungen" [SR 813]), maintains the Safety Data Sheets of all chemicals in use, and classifies new products.

5.3.4 Dangerous Goods Safety

The Dangerous Goods Safety Advisor is in charge of correct procedures for dangerous goods. The Advisor is responsible for managing the checklists for the handling of dangerous goods at DOTTIKON and supports the logistics department team, which is in charge of handling the carriers and reports to the Purchasing Department. The employees of the storage facility check the cargo vehicle against a checklist. All checklists regarding secure dangerous goods guarantee the observance of ADR/RID. The Dangerous Goods Safety Advisor ensures the proper handling of dangerous goods through periodic inspections and audits.

5.3.5 Safety Officers

A Safety Officer (KOPAS) is assigned to each plant and laboratory. The Safety Officer is trained by the Safety Department and acts as the first contact person on site for the employees of a department in all matters related to occupational safety and health protection.

5.3.6 Site Security

The premises of DOTTIKON are fenced and monitored. During workdays, Security staff checks incoming and exiting people. Security staff is on site 24/7. They also control sensitive areas of the premises by tour and with CCTV surveillance. In the Security Office, the central Security Management System groups all fire and technical alarms. Standard measures are defined for each specific alarm and in case of emergency. Staff is trained and always aware of the action to be taken.

5.4 Regulations

The regulation and documentation of the work performed is an important part of occupational safety. As such, all SOPs are part of the ISO 9001:2015 quality management standard used by DOTTIKON. The system ensures that up to date SOPs are in use within DOTTIKON and that all

SOPs are revised at least every four years. As soon as a new or updated SOP is published, all relevant parties are informed whether and by when training of the content is required. Safety-relevant SOPs are collected in a separate HSE manual. In departments with workplaces without access to a personal computer, a folder with the latest hard copies of the safety SOPs is available.

5.5 Managing Risks

Risks are assessed and measures for risk mitigation are identified. If intended activities or operations still contain risks that remain in an unacceptable range, they are not executed at DOTTIKON. The various risk assessment tools used by DOTTIKON are listed below.

5.5.1 HAZOP

For all production lines and new production plants, DOTTIKON conducts a risk analysis in form of a hazard and operability study (HAZOP Anlage).
Before production, the process chemist together with the project manager and a member of the plant management conduct a risk analysis of all chemical processes. If major hazards are identified during the risk analysis, a similar type of HAZOP (HAZOP Anlage/Prozess) is initiated for the process on a dedicated production line.
For each HAZOP Anlage, the team comprises a member of the Safety Department, a member of the plant management, a supervisor, and a plant engineer. In the case of a HAZOP Anlage/Prozess, the respective process chemist is also part of the team.

5.5.2 Safety Assessment

New chemicals with new characteristics to be handled at DOTTIKON are subject to a safety assessment by the Safety Department. During this assessment the Safety Department determines whether, and how, this new chemical can be handled at DOTTIKON. In the safety assessment, the Safety Department considers the toxicological, physical, and chemical properties of the compounds.

5.5.3 Occupational Hygiene

Regarding specific steps in handling critical chemicals with low permissible exposure limits at the workplace, the Safety Department conducts occupational hygiene measurements to ensure that employees are not exposed to hazardous chemicals.

5.5.4 Toxic Gas Dispersion Modeling

For highly toxic chemicals (e.g. chlorine gas), the gas dispersion is modeled for the unlikely event of an incident. A case simulation is generally performed with the incident scenario of the largest unit failing. The modeling is performed by a computer program (Model for effects with toxic gases, MET) to evaluate the dispersion zones and expected local concentrations and impact.

5.6 Ensuring Safety

5.6.1 Annual Training Program

Every year trainings for employees are published on DOTTIKON's intranet. Topics for such trainings include

- How to use a fall protection
- How to use fire extinguishers
- How to grant drilling and welding permits

Each year the plant supervisors set up a training plan for their employees and schedule the necessary trainings. All trainings are documented in attendance lists as well as in the employees' individual training booklets.

5.6.2 PEP Program

DOTTIKON has a Prevent injury, Enhance Performance (PEP) program managed by the Safety Department. If there is a topic that requires a short training session, the Safety Department organizes mandatory 15-minute training sessions for all staff. Examples for PEP trainings are

- How to open pressure vessels
- Eye-protection awareness
- Containment
- Recent near misses
- Earthing of equipment

5.6.3 SiWaKo Program

SiWaKo is a safety maintenance program that stands for **Si**cherheit (Safety), **Wa**rtung (Maintenance), and **Ko**ntrolle (Control).
There are two SiWaKo programs: One on a yearly basis and one on a monthly basis that is combined with the safety audits. The annual SiWaKo is a checklist on which different aspects have to be verified in a defined time period (weekly, monthly, yearly). The tasks may include

- Inspection of all personal full face masks of the department
- Inspection of all elevators of the plant
- Inspection of all equipment earthings
- Inspection of all first aid kits

In the monthly SiWaKo, all departments receive a sheet from the Safety Department listing the items to be checked within the next one-month period. Both types of SiWaKo are monitored by the Safety Department.

5.6.4 Training for Safety SOPs

The regular training of employees in the relevant safety SOPs is triggered by the monthly SiWaKo sheet that is provided by the Safety Department and lists all safety SOPs that need to be trained. The plant supervisors are in charge of training all their employees. Upon completion of the training, the supervisor files the training documentation and signs the SiWaKo sheet.

5.7 Inspections and Audits

DOTTIKON conducts a variety of audits and unannounced inspections relevant to safety in the workplace. The various types of inspections and audits are shown in the following.

5.7.1 Full Safety Audit

In line with ISO quality standards, a safety audit of a plant is triggered every three years. The audit is then conducted by two members of the Safety Department and one member of the Environmental Department. The plant manager, the plant engineer, and the plant supervisor are present during the audit. During each audit, the employee training documentation is inspected. Inspections are carried out to ensure that the SiWaKo program is followed and documented properly. In addition, the respective plant is examined during a tour. All safety deviations are filed in a report and followed up by the Safety Department to ensure the implementation of Corrective and Preventive Actions (CAPA).

5.7.2 External Safety Audit

An external safety consultant conducts one safety audit per year. This prevents safety deviations caused by operational blindness from being missed. All safety deviations are recorded in a report and followed up by the Safety Department.

5.7.3 Insurance Inspections

DOTTIKON has a number of insurance plans. The insurance agencies conduct regular inspections at DOTTIKON to review appropriate measures in place to mitigate unacceptable risks.

5.7.4 Customer HSE Audit

Every year 3–6 HSE customer audits are conducted. The audits at the DOTTIKON site typically last 1 or 2 days.

5.7.5 Annual Internal Safety Audit

The Safety Officer of a department conducts an annual internal safety audit of the respective department together with a Safety Officer of another department. The Safety Department defines the subject of the annual mini audits. The Safety Officers record the results in a report and send it to the Safety Department. The responsibility for correcting all issues or deviations lies with the plant supervisor.

5.8 Reporting System for Near Misses and Suggestions

DOTTIKON has established a reporting system for near misses and improvement suggestions. Employees are encouraged and incentivized to report any unsafe conditions, deviations, and near misses in writing. Additionally, all employees can submit a form to make suggestions for improvements. The plant manager then comments this form, while the Head of Department reviews and submits it to the Safety Department. The Safety Department collects all forms and reviews all reports with the Head of Production on a regular basis. If a report contains a worthwhile suggestion for DOTTIKON, the initiating employee is financially awarded. A summary of the suggestions and derived measures is reported quarterly so that all employees can learn from the experience.

In the case of accidents and spills, the root cause analysis is reported for each case. If a major incident is involved (e.g. major spillage or potential for serious injury), the Safety Department carries out the root cause analysis to define preventive measures to avoid respective risks in the future.

5.9 Technical Safety

5.9.1 Explosion Protection / ATEX

DOTTIKON evaluates all areas (rooms, pipes, tanks, and vessels) where flammable substances are handled for the probability of the formation of a dangerous explosive atmosphere. The space is then classified in the respective EX zone and documented in the explosion protection document. In these EX zones, only CE-certified equipment (for the respective EX zone) is used. All floors in EX zones are anti-static and all employees wear anti-static ATEX shoes. In order to further mitigate any risk, all recently installed tanks and vessels are explosion pressure shock resistant.

5.9.2 Fire Protection Requirements

All main buildings at DOTTIKON are built to meet the standard of the local fire protection requirements such as the Law on Preventive Fire Protection (SR 585.100) and the Fire Protection Ordinance (SR 585.113) as well as the fire protection standards and fire safety directive issued by the association of cantonal fire insurance agencies. DOTTIKON maintains fire protection plans for all buildings, and the buildings are divided into fire sections with fire resistant materials and doors according to the rules and regulations described above.

5.9.3 Fire Detection and Extinguishing Systems

All main buildings at DOTTIKON are equipped with fire detection systems. The alarms are perceivable both locally and in DOTTIKON's alarm center.
All manufacturing plants and some tank storages are equipped with a manually activated spray flood system. The newer tank storages have an automatic spray flood system. Archives are equipped with automatic fire extinguishing systems that operate with inert gas in order not to jeopardize the integrity of the archived documents.

5.9.4 Fire Hydrants

DOTTIKON has around 80 hydrants on site. Most hydrants are connected to the drinking water system. In addition, there are some emergency hydrants connected to the raw water system which is normally used for cooling purposes (approx. 25%). Drinking water is sourced from the three municipal water supply systems that surround the DOTTIKON site. In addition to the fire-fighting water basins within the three supply systems, DOTTIKON maintains another 300 m^3 fire-fighting water basin on site.

5.9.5 Pressure Vessels

All pressure vessels at DOTTIKON are regularly checked by the Swiss Association for Technical Inspections (SVTI) and are equipped with pressure release valves that are regularly maintained.

5.9.6 Maintenance Data Base

All safety-related equipment – such as the ones identified in HAZOPs – is registered in DOTTIKON's maintenance database to ensure maintenance and inspection within the specified period.

5.9.7 Fire Water / Spill Retention

In the event of a fire on site, all sewage water from DOTTIKON can be manually diverted to a fire-fighting water retention basin with a total capacity of 5'000 m^3. All sewage is monitored during regular operation (TOC and pH value). In the event of a deviation, all sewage is redirected automatically into a retention system.

5.10 Chemical Safety

5.10.1 Safety Data Sheets

DOTTIKON keeps updated safety data sheets of all chemicals handled on site. All safety data sheets are available on the DOTTIKON intranet as well as in the form of hardcopies in the plants handling the respective chemicals.

5.10.2 Storage

Bulk storage takes place in tank storages. All tank storage sites are registered at cantonal level for the storage of chemicals. All above-ground tank storages at DOTTIKON are located in concrete retaining structures which are regularly controlled for leaks. All underground tanks at DOTTIKON are double-walled and equipped with leak monitoring systems. All tank farms are equipped with a flooding system.
Separately packed goods are stored in warehouses or on paved surfaces. All warehouses have a fire alarm system. Incompatible chemicals are stored separately according to TRGS 510 and the Guideline regarding the Storage of Hazardous Substances issued by the Environment Commission of North West Switzerland.

5.10.3 Transport

Internal transport of chemicals is carried out using forklift trucks, truck trailers, or tank trailers. All chemicals not transported in bulk are packed in UN-approved packaging. All forklift drivers receive regular training and hold a valid license.
A set of people from the Logistics department manage the freight forwarders' operations. The warehouse employees check the freight vehicle against a checklist. All checklists for secure dangerous goods provide compliance with ADR/RID. The Dangerous Goods Safety Advisor inspects the correct handling of dangerous goods through periodic checks and audits.

5.10.4 Education

All employees that handle chemicals receive regular training in the relevant Safety SOPs such as "Handling of Flammable Liquids", "Handling of Acids", and "Alerting". For every process in manufacturing, employees receive training in both the process and the chemicals handled prior to the manufacturing campaign.

5.11 Permits

DOTTIKON maintains a system of permits required for different tasks. The different kinds of permits are listed and described below.

5.11.1 General Work Permit

Any technical/engineering project manager who hires employees from third parties must notify the Safety Department before the work is carried out. On the day of work, the third-party workers are required to register at the entrance of the site and obtain a work permit. The technical/engineering project manager accompanies the third-party workers to their place of operation. On completion of the work, the technical/engineering project manager signs off the work permit and the third-party employees hand in their signed work permit before logging out at the site entrance.

5.11.2 Construction Work Permit

For major constructions projects, the technical/engineering project manager is required to notify the Safety Department of all third-party construction workers for safety reasons. The Safety Department then conducts a formal safety training with these workers and issues personal construction badges for each approved third-party worker. The third-party construction workers are required to register and sign out at the main entrance upon each arrival and departure.

5.11.3 Hot Work Permit

Hot work permits are required for grinding, drilling, welding, soldering, cutting, brazing, burning, and the use of powder and dust developing tools outside of designated hot work areas for both third-party and internal employees. Hot work permits are granted a so-called "drilling permission" by the plant supervisor once it is established that such work will not result in flying sparks or open flames that might represent a safety risk. If flying sparks or open flames are expected as a result of the work, the hot work permit is granted by plant management in the form of a so-called welding permit. The granting authority must assess the risk of fire in the work area and implement appropriate safety precautions such as

- Removal of all flammable substances within the hot work area
- Handing out and usage of a gas detector (Explosimeter)
- Appointment of a surveillance person
- Instruction of the employees

5.11.4 Maintenance Work

For any maintenance work on potentially contaminated equipment, a maintenance work permit is required for both third-party and internal employees. Maintenance permits are granted by the plant supervisor or foreman. The granting authority must assess the risk of the remaining chemicals and implement appropriate safety precautions such as

- Decontamination or cleaning of the equipment
- Definition of appropriate personal protective equipment to be worn during maintenance
- Instruction of the employees

5.11.5 Confined Space Entry Permit

As a general rule, the entrance to closed containers and spaces is forbidden. In order to enter closed containers such as tanks, vessels, or sewers, both third-party and internal employees are required to obtain a confined space entry permit that is subject to strict conditions. The permit is granted by the plant management and the granting authority must assess the risk of asphyxiation and implement appropriate safety precautions such as

- Removal of all nitrogen sources
- Ensuring ventilation
- Precautionary use of a rescue harness
- Appointment of a surveillance person
- Handing out oxygen and gas detectors (Explosimeter)
- Definition of appropriate personal protective equipment
- Instruction of the employees and third parties

5.12 Security

DOTTIKON has implemented several security mechanisms. The mechanisms are briefly described below.

5.12.1 Perimeter Security

The DOTTIKON site is fenced by a wire mesh fence topped with barbed wire. There are only two entrances to the premises. The main entrance is permanently monitored by Security staff. The second entrance is locked, not in regular use and purely serves as a backup in case of emergency.

5.12.2 Surveillance

DOTTIKON monitors key areas such as storage facilities and site entrances with a video surveillance system (CCTV).

5.12.3 Key Access Management

Restricted areas are secured with keys and/or electronic badges. The Safety Department manages the access rights for each employee.

5.12.4 Patrols

The Security staff of DOTTIKON patrols the site at varying times.

5.12.5 Air Freight Security Program

DOTTIKON takes part in the known consignor program of the Federal Office of Civil Aviation (FOCA). As such, DOTTIKON has introduced an air freight security policy and engages air freight security officers. Two members of the Senior Management check that the rules being followed. DOTTIKON is regularly audited to ensure that security measures are up to date.

5.12.6 Sensitive Material

Sensitive materials such as drug precursors, shock- and heat-sensitive materials, highly valuable goods, or confidential documents are locked in high-security storage units such as safes, vaults, or security cabinets.

5.12.7 Security Plan (ADR 1.10)

DOTTIKON has implemented a security plan according to ADR 1.10 Security Provision for the handling of high-consequence dangerous goods such as shock- and heat-sensitive materials, highly toxic substances, or bulk flammable liquids.

5.12.8 Background Checks

DOTTIKON conducts background checks to ensure that employees in key functions such as air cargo handling, sensitive management functions, or security do not have a relevant criminal record. These employees are required to hand in a current extract from the criminal record every five years. The documents are controlled and filed with the Human Resources Department.

5.12.9 Customs-Trade Partnership Against Terrorism (C-TPAT)

DOTTIKON has implemented the measures of the C-TPAT program in checklists and processes.

5.13 Emergency Management

5.13.1 Emergency Utilities

Utilities at DOTTIKON are generally designed with redundant systems or equipped with a backup solution. The relevant utilities are briefly described below.

5.13.2 Emergency Power Supply

All major manufacturing plants, the compressed air supply, the fire-fighting water basin pumps, and the incineration plant are equipped with emergency diesel power generators. The process control systems are connected to uninterruptable power supply units.

5.13.3 Emergency Cooling

DOTTIKON uses pretreated water from the river Bünz as cooling water for some condensers or reactors. Additionally, water from the drinking water system can be used in case of emergency to shut down chemical reactors safely.

5.13.4 Gas Station

DOTTIKON operates a gas station on site which is connected to an emergency diesel power supply. The fuel storage holds up to 800 m^3 of diesel and fuel in order to supply the diesel emergency power generators on site in the event of a prolonged power failure.

5.13.5 Redundant Steam Supply

DOTTIKON is equipped with a redundant steam supply. The base load of steam is generated by the incineration plant on site. The peak steam demand is covered by two steam boilers capable of generating enough steam to satisfy the entire demand. One of the two steam boilers serves as a standby and is usually not in operation.

5.13.6 Emergency Compressed Air

The compressed air supply at DOTTIKON is produced by several compressors which are connected to an emergency diesel power generator. There are buffer vessels distributed across the site to hold enough compressed air for up to 15 minutes.

5.13.7 Emergency Nitrogen Supply

DOTTIKON has two redundant nitrogen supply systems on site. The base load of the nitrogen is generated by a nitrogen generator. The peak demand is managed by a liquid nitrogen evaporation unit. Even if one of the systems fails, core nitrogen supply for the site is still ensured.

5.13.8 Emergency Fire-Extinguishing Water

In case of fire, the drinking water system is used as extinguishing water. In addition to the extinguishing water basins of the surrounding municipalities, DOTTIKON keeps a 300 m^3 fire-extinguishing water basin on site. The drinking water system can be operated without electricity, but uses electric pumps to increase pressure and water flow. The electric pumps are connected to an emergency diesel generator.
There are also emergency fire hydrants connected to the water system used for cooling purposes in non-emergency situations.

5.14 Alerting

5.14.1 Local Alarm Center

All local fire and gas alarms at DOTTIKON are grouped in the alarm center, which is located at the Security Office and is operated 24/7.

5.14.2 Telephones

DOTTIKON maintains a separate, dedicated internal telephone line for emergencies. This line is connected to an uninterruptable power supply. Employees who need emergency services call the dedicated emergency phone number to obtain immediate assistance.

5.14.3 Automatic Fire Alarm Activation

When an automatic fire alarm is activated, both a local alarm and an alert at the alarm center in the Security Office are triggered. The security guard on call awaits a confirmation from the affected plant for a maximum of two minutes. If no "all-clear" is given, the security guard immediately alerts the fire brigade.

5.14.4 Manual Fire Alarm Activation

In line with fire protection requirements, the site is equipped with several manual fire alarm activation buttons distributed across the premises.

5.14.5 Pagers

Each member of the DOTTIKON fire brigade is equipped with a pager. When the fire brigade is called, all members of the fire brigade are alerted and immediately report for duty at the fire fighter station. Members of the fire brigade who are not currently on site are notified as needed by the alarm on their private mobile or landline phones.

5.14.6 Siren

DOTTIKON maintains an alarm siren on site. With the siren, DOTTIKON can

- Alert the members of the fire brigade
- Warn of an imminent explosion
- Warn of an imminent gas leak

for all employees to take the defined actions in each case.

5.15 Emergency Services

DOTTIKON maintains a series of emergency services which are briefly described below.

5.15.1 Fire Department

DOTTIKON maintains its own fire brigade. The members of the fire brigade are trained in various functions

- Search and Rescue (with SCBA)
- Chemical HAZMAT Response
- Biological HAZMAT Response
- Engineering
- Paramedics

In case of major incidents, the fire brigade is supported by an emergency group of key DOTTIKON employees of functions such as Senior Management, Human Resources, Incineration Specialists, and Chemists.
DOTTIKON's fire brigade also responds to all external HAZMAT events in the south-eastern part of the Canton of Aargau. In case of simultaneous internal and external incidents, incidents at DOTTIKON are awarded higher priority.

5.15.2 Firefighting Foam

The fire department holds several tons of firefighting foam ready on water tenders. The foam can be injected in the spray flood systems of the plants and tank storages in order to increase the extinguishing efficiency of the spray flood systems.

5.15.3 Medical Rooms

DOTTIKON maintains a medical room near the Security Office. There, employees with injuries get medical assistance at any time by dedicated staff trained in first-aid measures.
A separate medical room is also available for routine medical exams of employees by a occupational health physician.

5.15.4 Escape Hoods

All buildings inside DOTTIKON that could potentially be affected in case of a release of toxic gas are equipped with escape hoods with combination filters to filter toxic gases. The escape hoods are available on site for visitors in case of emergency, while all employees working in an area that can potentially be affected by toxic gases are provided with a personal full-mask respirator equipped with a combination filter.

6 Health

6.1 Commitment

The health protection of its employees is of highest importance to DOTTIKON. DOTTIKON follows the relevant local legislation on health at work. The most important ones are Article 6, Paragraph 1 of the Federal Law on Work in Industry, Trade and Commerce (SR 822.11) and Article 82, Paragraph 1 of the Federal Law on Accident Insurance (SR 832.20). Both articles state that the "employer is obliged to take all measures which are necessary based on experience, reflect the state of the art and comply with the principle of proportionality in order to protect the health of employees. Employers are also liable to take all measures to protect employees' personal integrity."

6.2 Technical Measures

6.2.1 Building Codes

All buildings at DOTTIKON are built to meet the standard of the local building codes such as the Regulation 4 on the Labor Law (SR 822.114). DOTTIKON is categorized as an industrial company. As such, it is required to submit all plans for buildings to local authorities prior to construction. The authorities check that the plans comply with the regulations in place. Once a new building is completed, the authorities check whether it was built according to the approved plans. Only if a building passes these checks, the authorities allow the use of a building. This ensures among others

- That workplaces are equipped with emergency exits
- That workplaces are safely accessible for employees
- Adequate heating, lighting, and ventilation for workplaces
- Windows to the outside for all permanent workplaces
- Adequate number of restrooms
- Separate restrooms and changing rooms for men and women

6.2.2 Fume Hoods

In order to minimize the exposure of laboratory employees to dangerous chemicals, the laboratories at DOTTIKON are equipped with fume hoods. The fume hoods are regularly maintained and subject to performance inspections.

6.2.3 Containment

In order to minimize the exposure of manufacturing employees to dangerous chemicals, DOTTIKON uses a range of closed transfer systems. Examples of such systems are

- Bag docking stations
- High containment transfer bag systems (such as DoverPac)
- Glove boxes
- Endless liner systems

6.3 Organizational Measures

6.3.1 Occupational Hygiene and OEB

DOTTIKON ensures that employees are not exposed to concentrations of dangerous chemicals that exceed the occupational exposure limit (OEL) defined by the Swiss National Accident Insurance Fund (SUVA). Where no occupational exposure limit is available, DOTTIKON classifies a substance into an Occupational Exposure Band (OEB) according to the available information. The exposure monitoring is checked regularly for gas and dust with dedicated monitoring systems. Exposure is primarily controlled close at the emission source by technical measures (primary containment) and by reduced exposure times. Additional double-safety layers (secondary containment) are the personal protective equipment (PPE) and the separation or enclosure of the working area to protect other products and the environment. Only for defined extraordinary cases the personal protective equipment in combination with organizational measures are used as primary protection. In case of campaigns with very toxic chemicals or off-gases the workers are equipped with appropriate sensors.

6.3.2 Medical Checkups

As defined by SUVA, the health status of the employees working in shift-mode in manufacturing is evaluated every two, the one of employees working in laboratories and maintenance every three years. The exposure or health monitoring is carried out through special monitoring systems for gas and dust. Health and hygiene records are available for all employees. The Safety Department reports its health and hygiene record data assessment to the Senior Management on a monthly basis. SUVA brochures and brochures about nutrition are distributed to ensure that employees are updated and educated on health-related topics.

6.3.3 Hygiene/Cleaning

DOTTIKON employs personnel responsible for cleaning and landscaping. All offices, toilets, and meeting rooms are cleaned regularly. The cleaning of laboratories and manufacturing facilities is conducted by the staff of the respective departments.

6.3.4 Maternity Protection

DOTTIKON assessed all workplaces with regard to risks to expectant mothers and unborn children and has defined protective measures.

6.3.5 Employee Voice

DOTTIKON employees have the right and obligation to raise security concerns free from fear of reprisals. Employees are encouraged to submit written suggestions or complaints. The direct supervisor, the Safety Department, and the Head of Production consider all suggestions. If employees have urgent issues, they can contact a member of the Safety Department directly by telephone at any time. All queries or suggestions not related to health and safety are reported to the Staff Council. The Staff Council holds regular meetings with Management to represent the employees' interests.

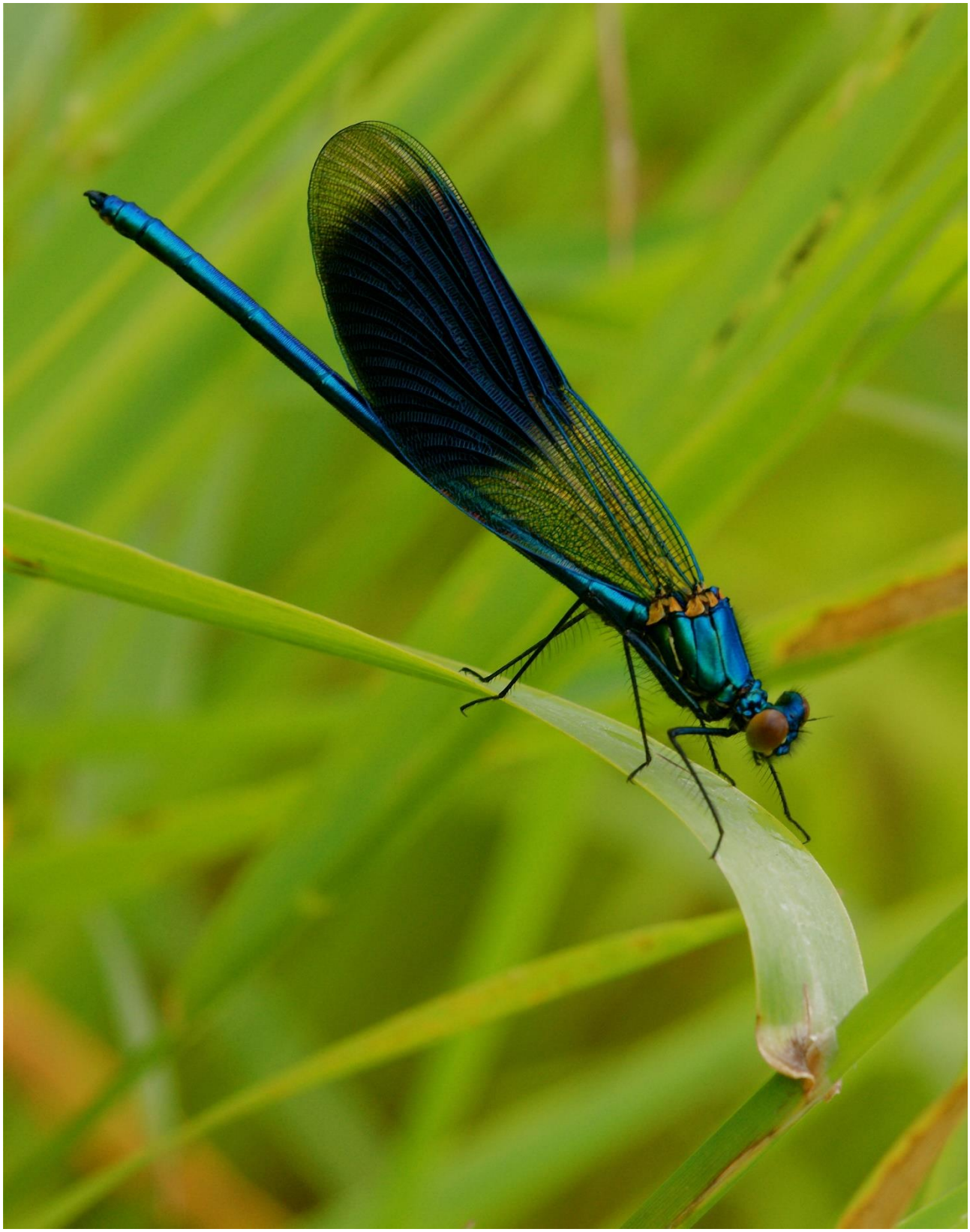
6.4 Personal Measures

6.4.1 Workwear

Employees that work with chemicals or conduct unsanitary work are equipped with respective workwear. DOTTIKON provides workwear for all employees working in manufacturing and in laboratories. Employees can change the clothes in dedicated changing rooms. The changing rooms are separated by gender and are regularly cleaned by cleaning staff. The employees are required to change their protection clothes before entering the dedicated lunchrooms.

6.4.2 Personal Protective Equipment (PPE)

Where risks to the health and safety of employees cannot be reduced by technical or organizational measures, employees are protected by personal protective equipment (PPE). Additional levels of protection are established by the plant manager in the course of operations, particularly when chemicals are handled openly. Employees are trained periodically and their supervisors inspect the correct application. All PPE is stored in a dry place to ensure quality and cleanliness. A maintenance program is carried out to ensure that the PPE is in good operating condition. All PPE is paid by DOTTIKON and employees are at liberty to upgrade their level of protection at any time.



7 Environment

7.1 Commitment to Protect the Environment

DOTTIKON recognizes that its business operations and its provision of services may potentially impact the environment and strives to reduce harmful effects. DOTTIKON develops and operates its facilities in a way that ensures continual improvement of safety, health, and environmental protection. DOTTIKON aspires to develop manufacturing processes for products so that these are produced and handled in a safe and environmentally friendly way. All DOTTIKON employees are instructed to handle the environment with care.
DOTTIKON is a member of and committed to the Responsible Care Program. Responsible Care is the global chemical industry's unifying commitment to the safe management of chemicals throughout their life cycle, while promoting their role in improving quality of life and contributing to sustainable development (www.responsible-care.ch/scienceindustries-responsible-care-grundsaetze).
DOTTIKON's manufacturing site satisfies federal standards of environmental protection. Consequentially, DOTTIKON complies to legal guidelines related to environmental protection, explicitly the Federal Act on the Protection of the Environment (USG), the Federal Act on the Protection of Waters (GSchG) and all other Acts and subsequent Ordinances, as requested by Swiss Law, which are among the strictest environmental protection rules in the world.
The activities to protect the environment are implemented within the ISO 9001:2015 methods.

7.2 Reports for and Communication with Authorities

As a company with a longstanding tradition and a one-site strategy, DOTTIKON cultivates a respectful and honest communication and cooperation with the local, cantonal, and national authorities. Reports and data are submitted at least on an annual basis, and visits and meetings are performed with the authorities regarding topics such as water management, water and air monitoring, energy efficiency, volatile organic compounds and greenhouse gas emissions. The public is informed about the impact on the environment by the publicly available Swiss Pollutant Release and Transfer Register.
Environmental permits are in place for the monitored release of rain and cooling water into the river Bünz, for the use of river water for cooling purposes, for the acceptance of special waste for recycling or incineration in DOTTIKON's special waste incineration plant, and for the discharge of treated wastewater from the incineration plant. Furthermore, a contract between DOTTIKON and the municipal wastewater treatment plant (MWTP) regulates the discharge of wastewater to the MWTP.

7.3 Waste Management and Treatment

The Recycling and Waste Treatment Department of DOTTIKON is in charge of chemical waste treatment. This department operates an on-site high-temperature waste incineration plant with a rotary kiln, which is able to incinerate solid and liquid wastes at a temperature above 1'100°C. Waste treatment depends on the properties of the waste, which is assessed by the Recycling and Waste Treatment department as well as by DOTTIKON's waste laboratory within the environmental group of DOTTIKON. Solid waste from the production plants and from external sources is incinerated on site. Organic solvent waste and contaminated aqueous waste are normally incinerated on site with energy recovery or disposed externally (solvent recycling whenever possible or incineration). Waste from DOTTIKON's incineration plant (ashes, sludge) is disposed in a landfill site in Switzerland or an underground depot in Germany in accordance with

local environmental regulations. Aqueous waste is treated with activated carbon filtration, neutralization, and sedimentation on site and sent to an off-site biological wastewater treatment plant (MWTP). Alternatively, it is incinerated or treated off-site. Empty chemical drums are handled, or disposed of, depending on prior content through high-temperature incineration or a licensed company for steel recycling. DOTTIKON does not dispose or store waste onsite (landfill, lagoon, surface impoundment, land treatment etc.). All waste is labelled indicating the type of waste and associated hazards and treated as soon as possible.
Audits to third-party waste disposal vendor sites where waste is handled are carried out on demand.
A waste material database record tracks the quantities of waste as well as the respective way of treatment performed. The quantity of the waste generated is already monitored at an early stage of process development, and the Research & Development department has the responsibility to develop processes that avoid or reduce waste.

7.4 Wastewater

DOTTIKON has defined four different qualities of wastewater: clean cooling water and meteor water is led into the river Bünz after release by the internal online analysis. With this method, the municipal wastewater treatment plant (MWTP) does not have to handle excess amounts of clean water. Domestic wastewater and wastewater containing only biologically degradable substances from production plants is treated on site by neutralization and sedimentation. Subsequently biological treatment and flocculation takes place in the MWTP. Aqueous waste from production plants containing non-biodegradable substances is treated in two different activated carbon treatment plants on site, one at alkaline and the other at acidic conditions. After activated carbon treatment, the water is neutralized and lead into the MWTP together with the other wastewater from DOTTIKON. The pH value of the wastewater is monitored online before the wastewater is pumped to the MWTP. Other parameters, including parameters indicating the functioning of the activated carbon treatment plant, are analyzed daily by DOTTIKON's wastewater laboratory within the environmental group of DOTTIKON. Water samples are taken at specific measuring points (influent and effluent of activated carbon treatment plant, site effluent, influent and effluent of off-site MWTP). This laboratory also analyzes the samples of aqueous waste from the plants to decide the best disposal path by means of adsorption tests, biological degradability, and other tests.
In case of a contamination of the cooling and/or meteor water, the effluent is automatically redirected into retention basins with a capacity over 5'000 m^3. This capacity can also be used if the wastewater destined for the MWTP is contaminated or for fire-fighting water retention. Retained water is analyzed and disposed according to its quality (activated carbon treatment, biological treatment, incineration, external treatment).

7.5 Spill Control

Several measures are taken to avoid groundwater and soil contamination. Handling of chemicals and unloading of tanks and tank wagons take place in dedicated areas with local retention basins. These measures include tanks with overfill control systems, safety measures against spills in unloading/loading areas, required vapor control system, and off-gas treatment. The underground storage and process tanks as well as the above-ground storage tanks are periodically tested for condition and tightness. The program is adequate for the types of vessels and quantity of materials handled at the facility, and records are maintained onsite in accordance with regulatory requirements. Spill kits, inert absorbing materials, and sealing cushions are provided throughout the site. All recovered spillages are disposed of according to their properties (see 7.3).

The operating staff is trained with regard to the handling of chemicals, filling of tanks, and behavior in case of incidents, and the respective instructions are documented. The fire brigade on site is specifically trained in dealing with chemical incidents. Spills are recorded in an incident report that also lists all measures taken.

7.6 Off-Gas Treatment and Measurement

The facility maintains pollution control equipment to reduce gaseous emissions. Processes are performed in closed systems whenever possible. The production plants are equipped with condensers, gas coolers, scrubbers and – depending on the plant, the project, and expected emissions – dust filters, activated carbon filters, cryotrap, mobile excess gas burners, or permanent connection to the high-temperature incineration plant. Emission control measurements at the production plants are undertaken by DOTTIKON and reported to the authorities on a yearly basis including information concerning the total organic emissions for the whole site.
The incineration plant is equipped with an electric dust filter, air scrubbers, and a DeNOx system. Measurement of the off-gas quality of the incineration steam production plant is performed by an independent external institute on a yearly basis and the results are directly communicated to the authorities.

7.7 Resources, Energy, and Green House Gas Emissions

DOTTIKON is located in an area where water is available. Groundwater (drinking water) can be received from three different municipal water providers. Cooling water is pumped from the nearby river Bünz and treated on site (sand filtration).
Steam (for process heat, heating of buildings) is produced on site in the waste incineration plant and additionally, especially during winter time, in the boiler house. Beside natural gas the boiler house can burn waste solvents of good and controlled quality as energy source to substitute fossil fuels.
DOTTIKON has the goal to increase its energy efficiency. Energy efficiency goals are set and agreed on with the authorities within the framework of the cantonal energy law.
DOTTIKON takes part in the European CO_2 emission trading system and reports its emissions to the national authorities on a yearly basis. Within the trading system a reduction path for the CO_2 emissions is defined.

7.8 Soil and Groundwater

The site is located in a rural region. Only a small part of the site area is located on a groundwater body that is used for drinking water production. No ground water or water source is exploited on site. The groundwater that is used for drinking water purposes was investigated thoroughly and no contamination was found outside the DOTTIKON site. The effluent at DOTTIKON's site boundary is monitored on a four-month basis and data are reported to the authorities.
The site of DOTTIKON has been used for industrial purposes for more than one hundred and ten years. In 2000, a historical investigation report was compiled by an external engineering company. Some soil contamination is known on site. In accordance with the authorities, a program and timeline are in place for the restoration or monitoring of a contaminated area. A systematic evaluation of other areas is ongoing. A contamination level assessment for construction projects is mandatory. During excavation the soil is analyzed, classified, and disposed according to its quality and in line with local legislation.

7.9 Natural Forces

DOTTIKON is located in a moderate climate zone in the northern Swiss plateau. The probability of a significant earthquake is low (lowest possible value hazard zone). Flooding can occur, however, there are basins to retain flood water upstream along the river Bünz. DOTTIKON is surrounded by protection barriers and walls to protect the area from flood water. Rain water on the premises can be pumped to the nearby river by high capacity pumps. Windstorms might occur, but buildings are constructed solidly. When strong winds are expected, organizational measures are taken to secure non-fixed objects. Lightning conductors are installed in all buildings. No hurricanes, avalanches, volcanic activity, or tsunamis can occur at DOTTIKON.

8 IT Security

8.1 Data Integrity

DOTTIKON protects the confidentiality and security of the employees' personal data and the personal and commercial data that DOTTIKON learn of through its work and from its customers. DOTTIKON safeguards these data by ensuring that the applicable Swiss laws and the respective security measures are observed. For this reason, every DOTTIKON employee is accountable for ensuring that any data they generate, acquire, check, evaluate, document, and report comply with these standards. In general, third-party subcontractors are not granted access to clients' products or intellectual property, unless otherwise agreed with customers. Files and documents are archived in compliance with legal and statutory provisions and to ensure that DOTTIKON's requirements and confidentiality requirements regarding privacy are met. DOTTIKON maintains and takes measures to preserve the confidential and personal data it holds, compiles, and handles in accordance with applicable laws, professional standards, and its own data protection policies and practices. DOTTIKON strictly prohibits the disclosure of confidential and personal data entrusted to DOTTIKON, unless authorized or required by law or regulation, or unless there is a legal or other professional right or duty to disclose. DOTTIKON prohibits the use of confidential data of DOTTIKON's customers for the personal benefit or the advantage of third parties. DOTTIKON keeps business records and other documents in its premises locked overnight. Emails which contain confidential and/or sensitive data are sent to an external address using encryption methods. Hardcopies of documents such as process descriptions, analytical methods, specifications, and technical transfer documents are stored in the Research & Development archive, while electronic versions are stored on the local servers. Stability studies performed on site are monitored online with regard to both temperature and moisture. The reliability is ensured 24/7. The LIMS system is validated. The back-up premises are protected by a fire alarm system. Disaster recovery measures are tested periodically and comprise, among other aspects, the separate storing of documents in different buildings and in fire safes. Backup files are kept in a secure place deposit box off site.

The main computing facilities are equipped with uninterruptible power supply systems. DOTTIKON has established procedures to control computer/data access.

8.2 Network Security Aspects

DOTTIKON maintains a secured network architecture designed to protect and maintain the confidentiality, integrity, and accessibility of its company network and its resources. The systems are secured in such a manner that in-house, only authorized communication with the company's systems and its resources can occur. All kinds of remote access to DOTTIKON's internal IT systems are safeguarded (VPN, 2FA) and continuously monitored. Access to the systems is protected in a manner that only authorized devices and services can be connected with the network itself (NAC). An up-to-date directory of all IT devices, including storage and processing capacities, is maintained. Additionally, DOTTIKON maintains a software inventory and a documented hardware type on all servers and end-user devices. The dismantling of devices and equipment carrying data is performed under supervision and the devices and equipment are destroyed externally or in DOTTIKON's own incineration plant. Furthermore, it is assured that sensitive data is encrypted during external transmission. Patch management is designed to proactively administer and monitor security patches to mitigate vulnerabilities and thus reduce the operational impact on the business environment. Anti-malware/anti-virus ("AV") software is configured throughout all endpoints (i.e. servers, workstations, as well as mobile devices where feasible) to update malware and virus signatures automatically and to provide real-time detection

so that malware and compromised files are identified and quarantined as quickly as possible. The AV rules prevent users from disabling or adjusting the rule setting in the AV software. DOTTIKON uses firewalls to ensure the filtering of internet content on endpoints, servers etc. being used to access, save, process, or transfer sensitive data or information. Additionally, different types of logical network components are shielded against each other and limited to the most necessary communication routes. These systems generate log files, used for detection and investigation purposes if needed.

DOTTIKON ES Group

Dottikon, 21.11.2023

Dr. Markus Blocher
Chief Executive Officer (CEO)

Dr. Robert Dahinden
Head Production

Sustainability and Corporate Responsibility Report 2022, DOTTIKON ES – Fact and Figures

	Unit	2021	2022
Financials[1]			
Net sales	CHF Tsd	242'541	278'240
Investments[2]	CHF Tsd	75'807	149'796
Site[3]			
Total area	m^2	600'000	600'000
Area used for production	m^2	240'000	240'000
Area available for expansion	m^2	110'000	110'000
Management systems			
Overall quality system		ISO 9001:2015	
cGMP related quality system		cGMP, Swissmedic, FDA, FMR (PMDA), permits according to Swiss Foodstuffs Act (FSA) and Narcotics Act (NarcA)	
Safety, Health and Environment (SHE)		Integral part of ISO 9001:2015	
Security		Known Consignor, C-TPAT compliant	
Personnel[4]			
Total number of employees	FTE	685	700
Working hours[5]	h	1'192'065	1'189'132
Work-related injuries with lost time >1d	Number	12	17
Employees in Administration[6]	FTE	80	85
Employees in Quality Management	FTE	100	95
Employees in R&D, Pilot Plants	FTE	140	150
Employees in Production[7]	FTE	365	370
▪ Employees in Safety, Health and Environment	FTE	15	20
Share of PhD Scientists[8]	[%]	16	15
Share of scientists and engineers[8]	[%]	30	31
Apprentices (Federal Certificate of Competence)	FTE	35	37
Fire and Hazardous Incident Response			
Members of Search and Rescue Team	number	68	70
Members of Chemical HAZMAT Response Team	number	68	70
Members of Biological HAZMAT Response Team	number	25	23
Members of Paramedic Team	number	18	17
Utilities			
Total electricity consumed	MWh	22'989	23'167
▪ Electricity sourced	MWh	22'967	23'125
▪ Nuclear power	MWh	22'967	23'125
▪ Electricity generated on site	MWh	22	42
▪ With fuel oil	MWh	22	42

[1] January 1 until December 31; business year is April 1 until March 31 of the following calendar year
[2] Asset additions
[3] Rounded numbers
[4] Per December 31, rounded numbers, including apprentices and contract staffing in line function
[5] Productive working hours
[6] Includes business development, purchasing, finance and business administration
[7] Includes production planning and plants, engineering, recycling and waste treatment, safety and security, environment, warehouse and internal logistics and site management
[8] Of headcount without apprentices

	Unit	2021	2022
Utilities (continued)			
Total fuel consumed	MWh	47'059	45'700
▪ Caloric waste	MWh	33'086	33'310
▪ Natural gas[9]	MWh	9'508	3'545
▪ Fuel (oil, diesel and, gasoline)	MWh	3'999	7'670
▪ Residual-derived substitute fuels	MWh	466	1'176
Total steam produced on site for heat[10]	MWh	37'284	35'007
Waste / residual materials from production	t	15'650	13'956
▪ High caloric	t	2'018	2'094
▪ Medium caloric	t	5'273	5'385
▪ Low caloric	t	2'405	2'176
▪ Very low caloric	t	5'954	4'301
Waste materials internally processed[11]	t	8'016	7'947
Industrial water consumed[12]	m^3	206'645	214'556
River water for cooling[13]	m^3	1'260'744	1'166'242
Sewage water treated[14]	m^3	68'380	117'160
Emissions			
Scope 1 CO_2 emissions[15]	t CO_2	16'279	16'154
▪ By source			
▪ Waste	t CO_2	13'306	13'397
▪ Natural gas	t CO_2	1'913	723
▪ Oil, diesel and gasoline	t CO_2	1'060	2'034
▪ By purpose			
▪ Waste incineration	t CO_2	4'429	4'303
▪ Waste incineration with thermal recovery	t CO_2	9'542	9'743
▪ Steam generation with fossil and residual-derived substitute fuels	t CO_2	1'894	1'583
▪ Other (e.g. heating, transportation, emergency power)	t CO_2	414	525
Scope 2 CO_2 emissions[16]	t CO_2	365	368
VOC[17] emissions	t	71	65
NO_x emissions[18]	t	7	6
TOC sewage water[19]	t	36	35

[9] Lower heating value
[10] Produced on-site by high-temperature waste processing plant and boiler house
[11] Waste from internal production and external sources (waste treatment services)
[12] Drinking water consumption
[13] Cooling water taken from and returned to river
[14] Transfer of pretreated wastewater to community sewage treatment plant
[15] Includes CO_2 from on-site high-temperature incineration from external sourced waste
[16] Nuclear power, assuming 0.0159 kg CO_2/kWh
[17] Volatile organic compound
[18] High-temperature waste processing plant and boiler house
[19] Amount of total organic carbon transferred to community sewage treatment plant

Disclaimer

Limited Use

Dottikon ES Holding AG and its affiliates (collectively and individually "DOTTIKON ES Group") hereby grants you the right to display, store and reproduce copies of this report for personal use only, subject to the following conditions: The report may be used at your own risk for internal purposes only and may not be sold, otherwise used or distributed for commercial or political purposes; The report may not be modified, diffused, reposted or transmitted in any respect; The copyright notice must appear on every copy of the work or portion thereof.

No Warranty and No Liability

While DOTTIKON ES Group makes efforts to include accurate and up to date information, it makes no representations or warranties, express or implied, as to the accuracy or completeness of the information and data provided on this report and disclaim any liability for the use of any information and data in this report, this report or any publication linked to it. This report is based upon a number of material assumptions and uncertainties, which may prove to be incorrect. Actual information and data may be significantly different from what was expected in this report. DOTTIKON ES Group accentuates that statements, information or data may contain significant uncertainty, e.g. in the case of generally applied factors, estimates or assumptions. While DOTTIKON ES Group may elect to update this report at some point in the future without notice, DOTTIKON ES Group specifically disclaims any obligation to do so, even if estimates, applied factors or assumptions change, except as required by applicable regulations or law. DOTTIKON ES Group makes no warranties, express or implied, and assumes no liability in connection with any use of any information and data in this report, this report or any publication linked to it. This report represents current DOTTIKON ES Group view and policy and intents not and is not intended to create legal rights or obligations. This report was published in English and may have partially been translated by DOTTIKON ES Group from a German version. In that case the German version is the authoritative version. Every user agrees that all access and use of any information and data in this report, this report or publication linked to it is being made at their own risk. Neither DOTTIKON ES Group (including directors, employees, and agents) nor any other party involved in creating this report is liable for any direct, incidental, special, consequential, indirect or punitive damages or other damages arising out of your access to or use of this report and any damages for lost profits, business interruption, loss of programs or other data on your information handling system or otherwise, even if DOTTIKON ES Group or any other person or entity is advised of the possibility of such damages and irrespective of whether such damages arise in an action of contract, negligence or other tortious or legal action.

Imprint

Dottikon Exclusive Synthesis AG, 2023
Picture Credits: (1) Hollow Root, (2) Japanese Maple, (3) Dana, Business Development, (4) European Honeybee, (5) Adrian and Roman, Fire Fighters, (6) Marc, Production, (7) Banded Demoiselle, (8) Simon, IT, (9) Common Ivy. Nature pictures by Heidi Jost-Stucki (all photographed at DOTTIKON's site); Employee portraits by Jos Schmid, Copyright by Dottikon Exclusive Synthesis AG

Dottikon Exclusive Synthesis AG
P.O. Box, 5605 Dottikon, Switzerland, Tel +41 56 616 81 11, info@dottikon.com, www.dottikon.com