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FRENCO

VRL 21

Environmental management

1. Environmental policy

Frenco GmbH undertakes to avoid all environmental pollution caused by its activities or to keep it to a minimum. If environmental pollution occurs, the applicable legal regulations must be complied with and this pollution must be reduced as far as possible in future. Wherever applicable measures to avoid pollution exist, these will be implemented.

2. Environmental management system

The managing directors are responsible for environmental management. All environmentally relevant tasks are discussed with the employees concerned, solutions are developed and documented. This guideline VRL 21 is made available to all employees and the public and can be viewed on our homepage in German and English.

3. Implementation of environmental protection

3.1 Energy efficiency

3.1.1 Building energy heating

Heating is provided by natural gas, either by means of gas heating (old building) or by a CHP unit (new building since 2024).

A modern CHP unit has been installed to heat the new building and dehumidify the climate control cabinets. This unit uses combined heat and power to generate both the necessary heat and additional electricity (15kWh) for the building's own use. The proper functioning of the entire heating system is continuously monitored by software. Any faults are automatically reported to the responsible persons. All important parameters are continuously recorded. To minimise heat requirements, the entire office building has been additionally insulated. The new building, which houses production, equipment assembly and the calibration and measurement laboratory, complies with the EN 55 environmental standard in terms of energy efficiency. The windows of air-conditioned rooms are triple-glazed to prevent heat and cold loss.

3.1.2 Energy-efficient building air conditioning

An energy-efficient turbine system („Turbocor“) is used to generate cooling in summer. During the cold season, the required cooling is obtained exclusively from the outside air via a heat exchanger. The windows of air-conditioned rooms are triple-glazed to prevent heat and cold loss.

3.2 Renewable energies

3.2.1 Electricity

To reduce electricity consumption, the company generates its own electricity, which is used entirely by FRESCO. This is achieved by means of a PV system (63 kWp) on the new building and a CHP unit (15 kWh) with combined heat and power. This means that approximately 10% of FRESCO's total electricity requirements can be generated from renewable sources or by means of CHP.

3.2.2 Air conditioning

Since cold is also required for certain processes in production during the cold season, it is obtained exclusively from the outside air via a heat exchanger when the outside temperature is below 6°C..

4 Emissions

4.1 Noise

Great importance is attached to minimising noise emissions. The production and assembly facilities are equipped with sound-absorbing material. To prevent noise from escaping to the outside, the gates are kept closed as far as possible.

4.2 Dust

Dust is mainly generated during dry grinding and brushing of gear teeth. Filter systems for grinding dust are installed on all machines. The grinding dust is filtered out of the air and disposed of.

4.3 Fumes

A state-of-the-art boiler with a modern burner is installed as the gas heating system. The heating system is serviced regularly and the exhaust gases are set to the lowest possible level.

Air conditioning is provided by heat exchangers. The air conditioning system is regularly serviced and checked for coolant leaks. Leaks are monitored by a gas warning system. The proper functioning of the entire air conditioning system is continuously monitored by software. Faults are automatically reported to the responsible persons. All important parameters are continuously recorded.

4.4 Discharge into water bodies

Only uncontaminated liquids are discharged into the sewer system. All other liquids, or those whose contamination status is unknown, are disposed of as hazardous waste. They are collected in special containers and taken to a certified hazardous waste disposal facility.

5 Waste disposal

5.1 Paper

All paper waste is disposed of in the paper container for recycling.

5.2 Residual waste

All non-toxic waste is disposed of in the residual waste container. Waste of dubious origin is collected and periodically disposed of in a specially requested container.

5.3 Metals

The eroding wire is handed over to a recycling company. Scrap iron and non-ferrous metals are collected in a locked outdoor storage area and picked up for recycling by a certified scrap disposal company.

5.4 Electronic waste

Electronic waste is collected for recycling by a certified specialist company from a locked outdoor storage facility. Batteries and rechargeable batteries are collected separately and disposed of properly as hazardous waste.

5.5 Cooling lubricants and oils

Containers are available for cooling lubricants and oils, which are disposed of by specialist companies. The contact person for this is Mr Thomas Peter.

5.6 Packaging

Packaging from customers who send us test equipment as part of test equipment monitoring is reused in its entirety. A system has been installed for this purpose to assign the packaging to the corresponding return shipment. In general, packaging material is collected and reused.

Reusable packaging is used for gauges, which our customers can then use for storage and transport. Large devices are packaged by a certified service provider.

6 Sustainable resource management

Defective assembled circuit boards are, where possible, completely overhauled and sold to our customers at a reduced price.

Delivered measuring devices are refurbished in our retrofit facility on behalf of the customer and returned to use in mint condition.

Damaged gauges are repaired as long as this is economically and technically feasible.

Gauge wheels are reground on behalf of the customer, if technically possible, and reused by the customer.

Worn gauges are accepted in payment for a bonus, provided there is an agreement with the customer.

HX material for particularly wear-resistant gauges, which had to be hardened in a high-temperature salt bath, has been replaced by SX and PX, which can be hardened in vacuum furnaces. Since 2023, the plastic caps for gauge rings have been manufactured using injection moulding, resulting in material savings of at least 50%.

Where possible, batteries are replaced by rechargeable batteries.

All flat roofs have been greened to retain surface water, improve building insulation and improve air quality.

Chemical cleaning agents for cleaning buildings and parts have been replaced by biological ones.

Printer cartridges are sourced from a supplier in Germany who has set up a recycling system for them.

7 Waste prevention

Packaging material is recycled wherever possible (see 5.6).

FRENCO provides all employees with crockery and cutlery. Disposable cups and crockery are not permitted.

Cloth towel holders are installed in the toilets; paper towels are only used in exceptional cases. The introduction of a new ERP system (2024) will drive forward digitalisation and avoid unnecessary paper printouts (e.g. digital processing of invoices). If printing is still necessary, the default setting for all printers is double-sided.

8 Improvement and expansion

Any possible improvements to environmental protection will be implemented, provided they do not prove to be economically or logically unreasonable. When introducing new technologies or processes, particular attention will be paid to environmental aspects and these will be incorporated into the concept.

The following further measures are planned:

- Time- and presence-dependent control of air conditioning in production and measuring rooms
- Installation of additional PV systems on existing buildings
- Waste heat from compressed air compressors to be used to support heating
- We are campaigning in the standards committee for an increase in the standard temperature for length measurement technology to 22°C
- The vehicle fleet is being gradually electrified and the corresponding charging infrastructure installed on the company premises (conduit pipes have already been laid as part of the new building construction)

9 Hazardous substances

The following hazardous substances are used by the company. Data sheets for all hazardous substances (in which their handling is described) are available.

No.	Manufacturer/Agent	Usage	Form	Place of use	
1	Hebro Uni-Lub	corrosion prevention	aerosol	small device assembly	✓
2	Hebro Cut 2000	lubricant	aerosol	small device assembly	✓
3	HebroResost 85-128	corrosion prevention	aerosol	small device assembly	✓
4	Titzmann LUB Cleaner	cleaning	canister	small device assembly	✓
5	Loctite Super Lub	Teflon oil	aerosol	machine assembly	✓
6	Loclite 243	screw-locking adhesiv	tube	machine assembly	✓
7	Loclite Flüssigmetall	metal deposition	double tube	machine assembly	✓
8	Hebro mMulti-Plus	rust remover + lubrication	aerosol	grinding	✓
9	Hebro Grylsol	coolant bucket	tin barrel	grinding	✓
		rust inhibitor			
10	Technolit Industrie-Spezial-Reiniger	solvent	canister	grinding	✓
11	Heun Virasol	EDM recast layer solvent	canister	EDM	✓
12	E-Coll Spiritus Virasol	clean contacts	bottle	EDM	✓
13	Esso Febis K220	lubricant for slideways	canister	EDM	✓
14	Schuler MOS 20 EL	rust inhibitor	aerosol	grinding	✓
15	Joh. Hoffmann Diaclean	granite cleaner	bottle	grinding, measuring, assembly	✓
16	Och WO 40	grinding lubricant	canister	grinding	✓
17	WD 40	rust remover	aerosol	machine assembly	✓
18	Shell Retinax A	machine grease	tin bucket	grinding	✓
19	Mobil Vakouline 1405	hydraulic oil	tin barrel	grinding	✓
20	Mobil DTE 26	machine oil	tin canister	grinding	✓
21	Stasek HD 40	compressor oil	plastic canister	grinding	✓
22	Bender V2000	oil separator	aerosol	machine assembly	✓
23	van Laas GmbH Molyduval Fluid 15	synthetic oil	tin	machine assembly	✓
24	Klüber Quitsch EX	screw remover	aerosol	machine assembly	✓
25	Schick + Co Antifrogen	heat carrier, air con	plastic canister	air con	✓
26	Fischar Reinigungsbenzin	cleaning solvent	tin	inspection room	✓
27	Titzmann Optimal 2000	cold degreaser	plastic canister	small device assembly	✓
28	Chemoplast NV Hart-Glanz 1Z Wachs		tin	machine assembly	
29	Dinusol Zubra 30H Plus	lubricant	barrel		✓
30	Schlitt NU-BIAK	burnishing cream	pl. container	small device assembly	✓
31	Stuart Excelence 416	coolant oil		supply system Kapp	
				NC grinding machine	
32	Shell Tellus 46	hydraulic oil	canister	hydraulic system Kapp	
33	Shell Morlina 22	lubricant	canister	maintenance compressed-air system Kapp	
34	Shell Tonna S68	lubricant	canister	central lubrication system Kapp	
35	Holts Professional	brake cleaner	aerosol	parts cleaning Kapp	

✓ Datasheet