Environmental guidelines

Review

The company was certified according to the ISO 14001 environmental standard in 2017. Thanks to innovations in our vehicle fleet, CO2 emissions were significantly reduced in 2019. Last year, a modern extension with social rooms was put into operation. This extension has significantly reduced the heat loss of the old buildings. Our old cardboard boxes are used to make shipping pads, which are reused as packaging material (https://karopack-bayreuth.de/).

Environmental guidelines for handling resources and waste

As a company, we interact with our environment and consume resources for our business activities. By introducing a quality and environmental management system in accordance with ISO standards, we have documented our interfaces with suppliers and customers as well as our environmental impact. Our activities focus on energy consumption, packaging and waste.

Energy

Systems, machines and peripheral equipment (e.g. air conditioning and heating systems, compressed air) are operated in such a way that the energy used achieves optimum efficiency (cost/benefit). Energy recovery from systems required for production, such as compressed air generators, is technically realised in order to save primary energy. We calculate the CO2 equivalent by balancing the energy consumption.

Packaging

Our products are ceramic materials that can break due to mechanical shocks during transport. Due to the depth of production, the components represent a high monetary value, which we must protect with suitable packaging.

Environmentally friendly packaging made from recycled materials or renewable raw materials as well as reusable boxes are prioritised over polystyrene and disposable solutions. Our suppliers are also made responsible for avoiding waste through reusable solutions. Waste separation and balancing make it clear where we can realise potential savings for the future. Waste that is eliminated from our value chain is disposed of by certified specialised companies.

Recyclable material and waste

The dust generated during production is a raw material and a starting material for various products (e.g. carburising granules, colourants for rubber tyres, anodes for batteries/accumulators). In principle, graphite components can be ground into granulate at the end of the product life cycle. Specialist companies for graphite processing can be requested from us. Waste from packaging (foils, polystyrene, metal, wood, etc.) is reduced to the minimum possible fraction of landfillable waste through separation.

Measures preview

- Continued sensitisation of all participants (customers, suppliers, employees) for personal responsibility in dealing with energy, water and packaging
- Installation of motion detectors in illuminated rooms to save electrical energy.
- Optimisation of heat recovery from the air compressors for an energy contribution to hot water production (sanitary area showers) and heat contribution for the factory halls in winter.
- Optimum utilisation of the night ventilation system in summer by reversing the flow (from 'out side' to 'inside'): conveying cool night air ('outside') into the hall ('inside'). This eliminates the energy required for air conditioning in production during the day shift.
- Reduction of waste through the following measures:
- Reduction of plastic packaging through:
  The use of plastic film made from recycled plastics
  Use of recycled paper packaging
- Compliance with legislation and regular review of the latest publications.

Oberasbach, 23. April 2021.

Fabian Klein (Representative)

Dr. -Ing. Rolf Terjung (Managing Director)

Contact:

Fabian Klein
Safety, Environmental & Facility Manager
fabian.klein@graphite-materials.com
+49 911 999 01 03-23