



## Guidelines.

### Truthfulness in product design

We strive to develop lasting products, increase their utility value and reduce waste. "Less is more" or "reduce to the max" are the guiding principles that Wilkhahn continually translates into future contexts. Ecologically oriented design principles are a natural, integral part of product development.

### Fairness in cooperation

We focus on people. This implies a cooperative style of management that recognizes employees' representatives as being co-managers who share in shaping the company. Profit-sharing for employees, the development of new forms of work with partly autonomous group and project work, as well as a firmly established health management scheme mark Wilkhahn's social orientation.

### Ecological responsibility

Wilkhahn pursues the goal of sustainable development. Wilkhahn corporate culture is shaped by the balance that we strive to achieve between economic, ecological, social and cultural objectives for safeguarding the independence of the company. Adherence to environmentally relevant criteria throughout the entire product life cycle forms the basis of the way in which we judge our success.

## Wilkhahn at a glance – commitment statements, certification, awards.

UN-Global Compact, ISO 9001/14001, EMAS

Sustainability:



UN Global Compact

Processes:



ISO 9001  
ISO 14001



EMAS

Graph  
Setting benchmarks.  
Design: Jehs+Laub

With the Graph range (2012), Stuttgart designers Jehs+Laub have created a conference chair that sets benchmarks in form and function. The graphical appeal of the chair stands out for its fascinating interaction of a fluid and streamlined form, closed and transparent surfaces, harmony and contrast. The pioneering visual quality is reiterated by the extremely comfortable slim upholstery. The steel frames feature wave springs, padding and additional cushioning that fulfil the highest of demands in terms of usage. Quite exceptional in a conference chair of this class is a leaf spring in the seat's three-point support that ensures innovative, three-dimensional flexibility to keep body and mind alert. So it virtually goes without saying that no nuts and bolts are visible on the armrests. Or that frame-forms and frame-surfaces have been superbly well moulded and crafted. And that the seams on the exchangeable covers precisely follow the elegant streamlined shape.

### Milestones of socio-ecological development at Wilkhahn

**2009** Wilkhahn signed an international framework agreement to assure and extend exemplary social standards on a global scale. Regular internal checks and external monitoring carried out by the workers union IG Metall guarantee that Wilkhahn and its suppliers meet fundamental standards of the International Labour Organization (ILO).

**2008** The newly erected co-generator for combining power and heat at the Bad Münder site is powered by renewable raw materials and since 2008 it has ensured virtually CO<sub>2</sub>-neutral production

**2001** First company in Lower Saxony, Germany, to be certified in accordance with the European Environmental Standard of EMAS 2

**2000** Publication of the first sustainability report in the sector of medium-sized companies: Wilkhahn Added Values

**1997** Corporate Conscience Award of Council on Economic Priorities, New York

**1996** German Ecology Prize of the Deutsche Bundesstiftung Umwelt

**1995** Development and introduction of transport packaging; changeover in table lacquering to low-solvent, water-based lacquer

**1994** Preparation and implementation of a waste management concept according to the premises of recycling management

**1992** Introduction of the Picto swivel chair range as the first office chair in the world with a design concept integrating consistently ecological criteria

**1989** Start of "Wilkhahn Green" with a policy statement on ecology: "The Administrative Board and Management have decided jointly to take ecological matters seriously and, in case of doubt, to give priority to such over and above quick profit"

# Environmental Product Information.

Timeless aesthetics, added value regarding usage and constant quality.

Durability is Graph's number one priority. The iconographic form has what it takes for the chair to become a classic. The combination of sophisticated upholstery and innovative flexibility guarantees consistently superb comfort. The chair's materials and craftsmanship are designed to last and last. The materials comply with Wilkhahn's product development requirements:

- armrests, seat bearers and star bases are made of die-cast aluminium, a large proportion of which can be recycled and can also be returned without any loss in quality in closed material cycles;
- leaf springs, wave springs and seat and backrest frame are made of steel; the material is precise to process, stays stable, is easily available and equally possible to return to material cycles;
- the polyurethane padding is made with a CFC-free process, is breathable and is also suitable for thermal recovery;
- the covers are produced in leather or high-quality textiles made of renewable feedstock, or materials that can also be returned to material cycles.



### Materials

Socio-ecological assessment of the extraction of raw materials, the procurement process, of usage of materials as well as material properties.



### Production

Socio-ecological assessment of production and assembly by means of environmental management and social audit systems.



### Utilization

Socio-ecological assessment of production utilization phases with the requirements: design, ergonomics, longevity, customer service, availability of spare parts.



### End of product life cycle

Socio-ecological assessment of the product after the utilization phase has ended: dismantability, recycling, waste disposal and return of used products for recycling.

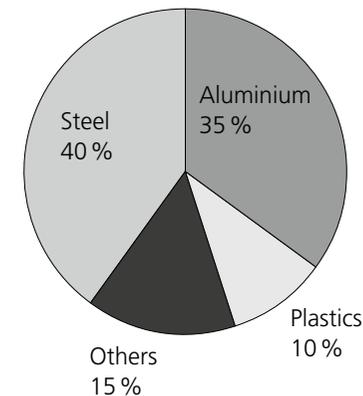


### Materials.

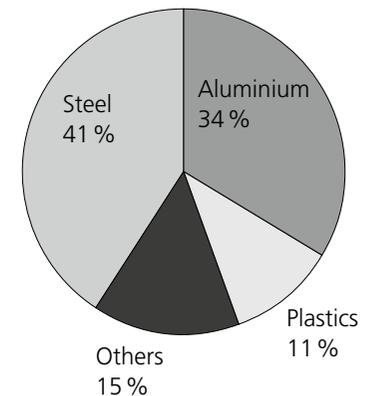
#### Composition.

	301/5		302/5	
	kg	in %	kg	in %
Metals				
Steel	6.9	40	7.4	41
Aluminium	6.0	35	6.0	34
Other	0.6	3	0.6	3
Plastics				
Polyamide (PA)	0.3	2	0.3	2
Polyurethane (PUR)	1.5	8	1.6	9
Others				
Leather	1.9	11	1.9	11
Wood	0.1	1	0.2	1
Total weight	17.1	100	17.9	100
Recycling proportion	8.6	50	8.8	49
Recycling capability	15.6	91	16.3	91

301/5



302/5



The materials used in Graph chairs are subject to stringent controls. As part of an ABC analysis, the materials are checked to ensure they are environmentally friendly and not harmful to health. Prohibited chemicals are not used in the product at all. All raw materials, consumables and supplies are listed in a hazardous materials register which is the basis for continuing to minimise or substitute potential problem materials.

# Environmental Product Information.

design made in germany

# Wilkhahn



Architectural environment



## Production.

### Water pollution control, waste management and sustainable production of energy

Water is becoming an increasingly important resource. Wilkhahn spares no effort to minimize water consumption in production and to ensure that water quality is not impaired.

The Wilkhahn waste management concept embraces sorting waste according to one-type materials, recycling and disposal of all fractions of waste resulting from production and administration.

The newly erected co-generator for combining power and heat at the Bad Münde site is powered by renewable raw materials and from 2008 onwards it will ensure almost CO<sub>2</sub> neutral production

### Wilkhahn production sites

Graph's conference chairs are produced or assembled at the Bad Münde (Germany), Castellon (Spain) and Sydney (Australia) sites.

### Environmental management system

All Wilkhahn sites work in conformity with a uniform environmental management system that is validated at the Bad Münde site (Germany) and certified in accordance with EMAS ISO 14001.

### Process safety and quality management

Both the main Wilkhahn production site and all European sales offices are certified in accordance with ISO 9001. When selecting suppliers, Wilkhahn assigns great value to a comprehensive and viable quality management system.



Co-generator powered by renewable raw materials

**ILO:** All Wilkhahn production facilities guarantee compliance with labour and social standards as required by the ILO (International Labour Organization). Such compliance also forms the basis of cooperation with suppliers. The ILO is primarily concerned with the formulation and implementation of international labour and social standards, particularly core work standards that ensure social and just interpretation and application of all aspects of globalization, as well as the promotion of decent work.

### Employees as partners

Top performance requires a potential-oriented corporate organization with flexible working hours, a bonus scheme, and group and project work. In turn, all employees share in corporate success in material terms. They have a comprehensive pension scheme; they are at the heart of company health promotion measures and they work in an environment that, by taking groundbreaking steps in industrial architecture, strives to achieve a synthesis of social, ecological, economic and aesthetic needs.



## Usage.

### Aesthetics and design

Sustainable products must be a good idea in the first place. Graph's special, distinctive aesthetics ensure that its form will still be considered timeless and modern for many years to come. It peeps up the traditional range of superbly well designed conference chairs which are used to signify an unerring sense of style for decades to come. Two backrest heights and a choice of exceptionally high-quality leathers and fabrics guarantee integration in terms of function and aesthetics into different usage and design concepts – from traditional and prestigious to casual and avant-garde.

### Durability and guarantee

The Graph chair range was presented for the first time in 2010 as a prototype. The response from customers and the industry was very encouraging. As a result, the simple premise when developing the chair to industrial production stage was to look at all the possible alternatives and leave no stone unturned to find the best quality solution. Therefore, Graph is a benchmark of sustainable product design in the truest sense of the word. The durability of the high-quality materials, the innovative comfort and the clear, distinct design ensure the chair can be used for decades.

Our manufacturer's guarantee is valid for two years, therefore allowing a solid planning horizon. An issue we feel responsible for, regardless of our products' long useful lives. We regard guarantees over and above these periods as an investment in the future. Our services to extend the ecological life of the chair include maintenance as well as an overhaul of older chairs. We guarantee to carry out repairs on discontinued furniture for at least two years after production has ceased. Long market presence, offerings to overhaul products and the excellent durability of the Graph chairs are key aspects of Wilkhahn's product philosophy.

### Air quality and emissions of harmful substances

Wilkhahn promotes good indoor air quality. We verify that our products fulfil top demands by carrying out regular Greenguard™-compliant product testing. This certificate indicates low-emission products that release no gas concentrations that are harmful to the environment or to health. GREENGUARD Indoor Air Quality™ certification is also planned (and has been started) for Graph.

## LEED

Graph supports companies by allowing credit points to be achieved in the case of potential LEED certification (U.S. Green Building Council's Leadership in Energy and Environmental Design). Buildings in the USA are evaluated according to this system in terms of their ecological and social impact.



## End of product life cycle.

### Return of used products and recycling

Our responsibility does not stop at the end of the utilization phase of a product as we offer our customers extensive services for taking back and recycling used products. We guarantee that used products may be returned in their entirety. The tables are dismantled at our plant, all components are sorted according to one-type materials and – if possible – are recycled. Due to the clear marking and identification of all materials, due to their nontoxicity and due to easy dismountability, we can today ensure that the components of a Wilkhahn product are returned to both decentral and local material and production cycles and are properly recycled and, if necessary, disposed of. This serves to reduce energy-intensive (and thus ecologically questionable) return transport over long distances.

### Disassembly and recycling

All Graph components can be dismantled non-destructively. In order to guarantee materials are sorted according to type, all components over 150 g in weight are labelled. No protective agents for materials, or organic halogen compounds are used that prevent recycling at a later date. A total of 91 per cent of the chair can be recycled.

### Returnable transport packaging

Returnable transport packaging made from renewable raw materials is used for Graph chairs that can be reused, recycled or composted.

