### Wilkhahn

## Environmental product information.

#### **Guiding principles.**

#### Honest product design

Our goal is to develop hard-wearing products, to increase their utility value and to reduce waste. "Less is more" or "reduce to the max" are concepts that Wilkhahn repeatedly interprets. Ecological design guidelines are integral components of Wilkhahn product development.

#### A spirit of fairness

We focus on people. This implies a cooperative management style which sees employee representatives as co-managers who help shape the company. The workforce's participation in the company's success, the development of new styles of working with semi-autonomous groups and project work, as well as an established health-management system are expressions of Wilkhahn's social approach.

#### **Ecological responsibility**

Wilkhahn supports sustainable development. The balance we seek to strike between financial, ecological, social and cultural objectives in order to maintain independence defines Wilkhahn's corporate culture. Compliance with ecological quality criteria throughout the product life cycle is one of the ways we gauge our own success.

#### Wilkhahn environmental product information – responsibility from the start.

The environmental impact of all Wilkhahn products throughout their whole product lives, which includes production of the feedstock, manufacture, use and disposal of the products, was assessed based on a lifecycle analysis (LCA).







#### Materials

Socio-ecological assessment of the production of the feedstock, the procurement process, the materials used and their characteristics.

#### Production

Socio-ecological assessment of the production and assembly processes by environmental-management and nomics, durability, customer social-audit systems.

#### **Product utility**

Socio-ecological assessment of the product utility phase regarding: the design, ergoservice; availability of spare parts.

#### End of the product life-cycle

Socio-ecological assessment of the product after the end of its useful life: disassembling capabilities, recycling, disposal and return of product.



#### Materials

#### International product and material standards.

During all phases of a product's development, we're demanding when it comes to the characteristics of our products, the quality of the materials and components, as well as the standard of our craftsmanship. Therefore, Wilkhahn products fulfil all relevant international office-furniture standards in terms of durability, safety and ergonomics. And what's more, many Wilkhahn products have also been awarded the GS symbol which rates them as being safe and suitable for interiors in line with Greenquard™. The materials Wilkhahn uses such as fabrics, leather, wood, plastics or metals are primarily made by highly specialised suppliers. Our product-development department specifies the technical and aesthetic characteristics that these materials have to fulfil. Our specifications on for example strength, colour-fastness, durability and other characteristics that affect the quality of our products are clearly outlined by international material standards. Rules of thumb are as follows:

- the fabrics and leather used by Wilkhahn are low on emissions and help to provide good air quality in buildings and working environments;
- wherever possible, Wilkhahn works with ecological upholstery fabrics, such as wool fleeces, cork and coconut fibre:
- all Wilkhahn polyurethane foam is free of CFCs and has no halogenated flame retardants; this helps protect the climate and is important for recycling capabilities at a later date; nevertheless, Wilkhahn products can also fulfil special requirements as regards fire prevention in public buildings, for example

by applying flame-retardant upholstery fabrics; additional flame-retardant materials are only added if required by our customers' stringent fire-prevention requirements;

- the powder-coated metal finishes of the table and chair frames are hard-wearing and made without any solvents or heavy metals;
- chrome-plated metal finishes have no harmful chrome compounds (as specified in EN 71-3).

Wilkhahn attaches huge importance to the fact that its products and the associated materials, procedures and processes are responsible in social and ecological terms. Therefore, integrated audits help us check that our partners in the Wilkhahn supply chain comply with these aspects too. We check the quality of our products by inspecting incoming goods according to established criteria. Before processing, our materials are scrutinised and the finished results checked again by trained staff before forwarding to the next department.

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#### Production.

#### Integrated management system

Wilkhahn headquarters in Bad Münder (Germany) are EMAS-validated and certified to ISO 14001. Wilkhahn supports relevant certification on the part of its suppliers. Wilkhahn's main production site and all European sales sites are certified to ISO 9001. In selecting suppliers, comprehensive and proper quality management are very important to Wilkhahn.

#### Water conservation, waste management and sustainable energy production

Water is becoming an increasingly important resource. Wilkhahn is pulling out all the stops to minimise water consumption during production and to ensure water quality is not impaired. By treating and recycling process water, the quantities of waste water considered hazardous have been cut by 80 percent. The Wilkhahn waste management concept includes sorting waste selectively, as well as recycling and disposing of all waste fractions resulting from the production and management departments.

All Wilkhahn production facilities ensure compliance with labour and social responsibility standards, as required by the ILO (International Labour Organization).

### Sustainability in the supply chain

Our partnership with suppliers is based on compliance with this agreement. Our environmental and social responsibility doesn't stop at the gates to our own factories. If within its power, Wilkhahn requires and encourages fair and safe working conditions and processes that don't harm the environment. Frequent assessment and on-site visits to top suppliers create trust and sustainability in the supply chain too.

#### **Employees as partners**

Our maxim is fairness and aspects like trust and reliability define Wilkhahn's management culture and the way it involves its own workforce. Active participation by all employees is a driving force in encouraging continual and successful improvements in the environmental sector too. Whether it's a question of avoiding hazards in the workplace, of new manufacturing technologies, or of saving materials and energy – all employees can contribute their ideas for improving Wilkhahn at any time via the company's ideas management process.

#### **Health and safety**

Wilkhahn applies a wide range of measures to ensure that workspaces in the Wilkhahn production department are safe and allow as risk-free an approach as possible. This is achieved by:

- planning safe procedures and workspaces;
- organising and defining responsibilities;
- informing people about the risks the workspace entails and applying measures to avoid these;
- regularly inspecting working environments to maintain safety and cleanliness in all areas:
- using the health and safety committee to frequently discuss risk potentials and systematically avoid accidents.

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#### Usage.

#### Aesthetics and design

Sustainable products must be practical. The timeless aesthetics of Wilkhahn products provide added value, making them options that are set to endure. Office work today requires maximum flexibility in terms of spaces, usage concepts, processes and people. New studies show that aesthetics have a direct impact on health.

#### **Durability and guarantee**

Product design to last is our antidote to the throw-away society. Therefore, Wilkhahn products focus on providing maximum utility value, durability and protecting resources. This means top quality that can be experienced, is consistent and perfect. It delivers timeless, distinctive design that is fascinating due to its simplicity, honesty and appeal to all the senses. Pioneering innovations are included that really give our customers constant added value in terms of ergonomics and handling. The fact that our products are extremely practical, easy to disassemble and components are exchangeable ensures they are resource-efficient.

#### Air quality and emissions of harmful substances

Wilkhahn products don't emit any concentrations of gas that are harmful to the environment or health. Wilkhahn are certified in the US in accordance with GREEN-GUARD Indoor Air Quality $^{\text{TM}}$ . GREENGUARD $^{\text{TM}}$  is a certification programme for products low in emissions.

#### **LEED**

Wilkhahn office chairs and table ranges help companies to achieve credit points during LEED certification (U.S. Green Building Council's Leadership in Energy and Environmental Design). The LEED Green Building Rating System is a voluntary standard that companies can meet by offering a healthy environment, saving water and energy and complying with stringent environmental criteria. Further LEED information on our products is available on request.



#### End of the product lifecycle.

### Product take-back and recycling

Even after the product has reached the end of its life, we still feel responsible and offer our customers extensive take-back and recycling services. We guarantee to take back all products that are no longer in use. Wilkhahn products are dismantled in the factory, all parts are selectively sorted in terms of their inherent materials and then recycled. By labelling the materials, ensuring they're non-toxic and easy to dismantle, we're already making sure today that the components in Wilkhahn products can be incorporated into local material and production cycles and be properly recycled and disposed of. As a result, energy-guzzling (and therefore ecologically unwise transportation) over long distances is avoided.

#### Disassembly and recycling

All Wilkhahn product components are suitable for non-destructive disassembly. In order to guarantee materials are sorted according to type, all components over 150 g in weight are labelled. No agents to protect materials, or organic halogen compounds are used that prevent recycling at a later date.

#### Reusable packaging for transport

Customers in over 90 countries appreciate Wilkhahn office furniture. For years we've only been using as much packaging to transport our products as is required to deliver them in one piece to our customers. Some 60-78% of Wilkhahn's cardboard boxes consist of recycled material. And Wilkhahn regularly uses blankets and other returnable packaging.

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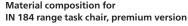
#### IN. 3D seating at its best

Lifestyles at work and at home involving little movement are considered the number one cause of virtually all health complaints in the modern world. So there's one thing that all physiotherapists, ergonomists and orthopaedists agree on: to activate our bodies and minds and combat back ache more effectively it's vital to return a diverse and frequent range of motion to offices. Which is why Wilkhahn taught seating to walk by introducing its patented Trimension®. Office chair IN includes three innovations to achieve this goal. Swivel arms that move separately from one another have a direct impact on the central spring, offering a scope of three-dimensional movement that is activated by the tiniest shifts in weight. The seat and back element is made in one piece using high-tech 2K technology and it allows the body to keep perfect balance thanks to reinforced and elastic zones. The backrest

cover made of 3D Formstrick (form-fit knit) is based on advanced development of trainers and lends support like a second skin. The fluid shape, the distinctive joints and the athletic-young appeal add up to a very attractive design.

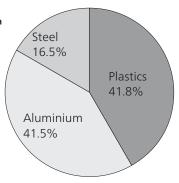
IN is created to be practical and to last for a long period of time due to its health-giving benefits, first-class materials and high-quality crafts-manship. Its service-friendly design makes replacing expendable parts, covers and upholstery easier and extends its useful life. The chair does of course come with CFC-free foam cushions and eco-friendly materials. Wherever technically possible, we've used materials that can be recycled. Each part is labelled so that it can be properly recycled.





Metals	kg	in %
Aluminium	6.750	41.5
Steel	2.677	16.5
Zinc	0.40	0.2
Plastics	6.801	41.8
Total weight	16.268	100

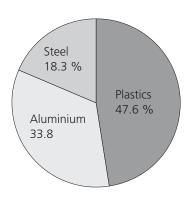
Total recycled material 15% Recycling capability 93%



### Material composition for IN 184 range task chair, standard version

<b>Metals</b> Aluminium Steel Zinc	kg 4.700 2.544 0.40	in % 33.8 18.3 0.3
Plastics	6.622	47.6
Total weight	13.906	100

Proportion of recycled material 13% Recycling capability 94%



#### Certification, commitments and awards.















