

gonomics and health

Accessories and other items

Models and

Technical det



Wilkhahn

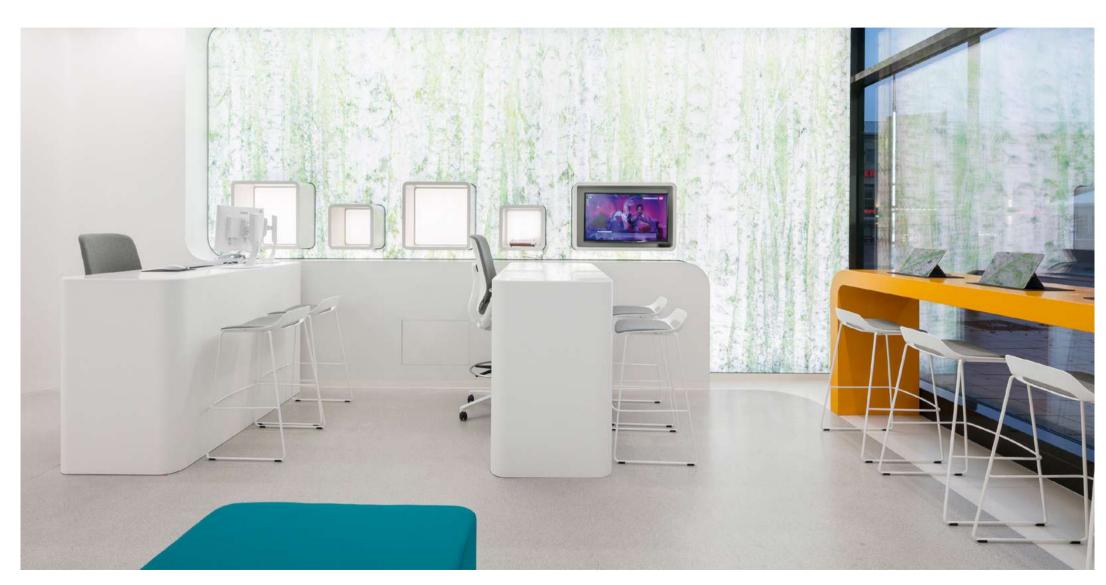
AT.

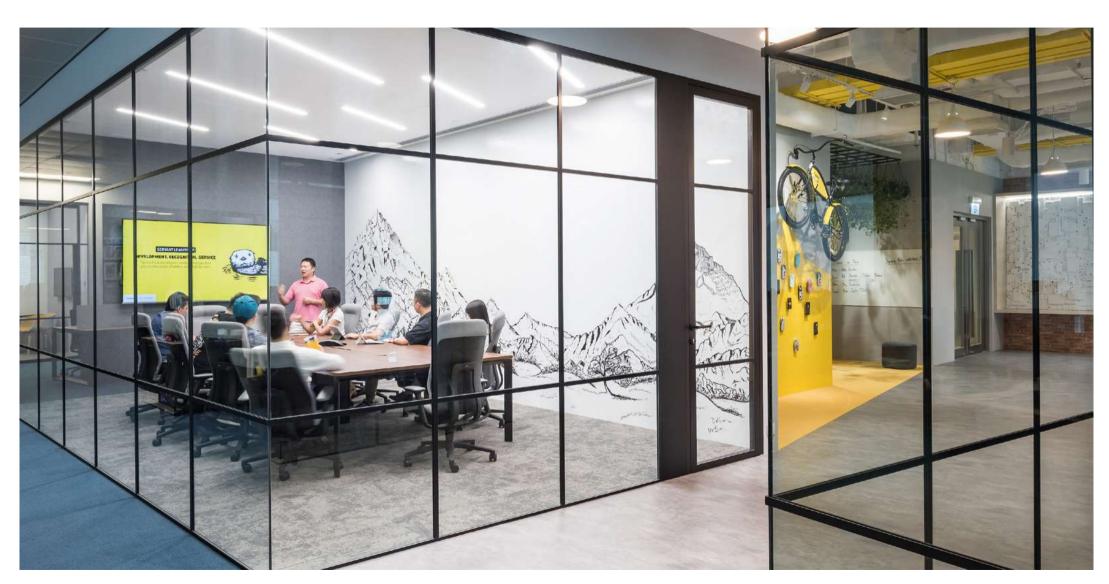
Wilkhahn's free-to-move concept powered by Trimension® is a global benchmark in healthy three-dimensional sitting. The AT family with its integrative, coordinated design, variety of models and customizable features is the smart all-rounder among the free-to-move ranges. The self-centering suspension of the seat shell ensures bodies maintain their center of gravity – whatever the posture adopted or movement made. And because the backrest bearer that can be tilted comes with automatic weight adjustment, AT makes embracing a healthy range of motion while sitting child's play for everyone. Just sit down, adjust the seating height and you're done! The chair and your body will do the rest by themselves ...

Design: Wilkhahn

AT 187/71 office chair, design: Wilkhahn, with Travis 661/41 tables, design: wiege and Foldscreen 609/12 panels, design: Wilkhahn.
Insit 783/51 benches, design: Wolfgang C.R. Mezger, Occo 222/91 table and Stand-up 202/0102 stool, design: Thorsten Franck in the background.

rgonomics and health





gonomics and health







onomics and health

signs

Accessories and other items







"Sitting higher makes standing up easier"

AT with ESP to encourage use of sit-stand options

Electrically height-adjustable desks are increasingly becoming the new standard in offices to encourage people to alternate between sitting and standing. The problem is that most of us don't take up this option because getting up from a normal seating height and adjusting the table height are both too time consuming. Consequently, changing posture always means interrupting what we're doing.

This is why Wilkhahn is offering ESP (elevated sitting position) models in its ON®, IN and AT free-to-move office chair ranges, which include the benefits of patented free-to-move kinematics by prompting a mix of sitting and standing.



Empowering users.

Counter stools for high tables in spaces with counters and project offices

In addition to office chair models with normal height adjustment and an elevated sitting position, AT also has height-adjustable counter stools with adjustable foot rings. These models aren't just used at counters, but also at high tables in contemporary project rooms so that people are at the same level when they're sitting and standing.





AT counter stool 187/1.

AT Mesh counter stool 187/11 with Occo table 222/91 in standing height with an HPL table top, design: jehs+laub

Views and references (9/15)

Ergonomics and health

Designs

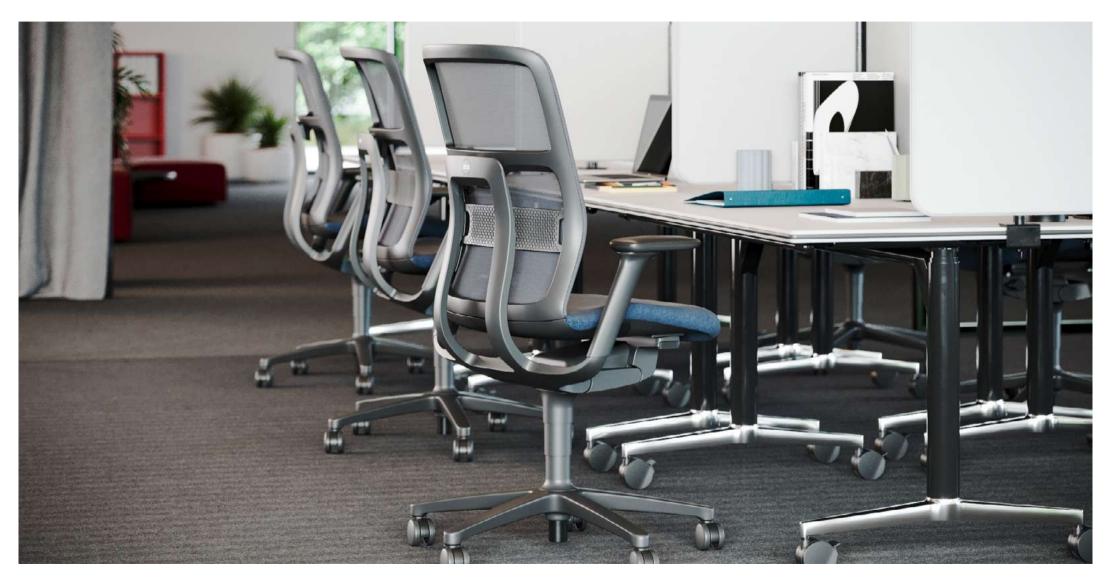
Accessories and other items

Models and dimensions

Technical details

Quality and sustainability

Contact



AT Mesh, 187/71 at a Timetable Lift 615/00, design: Andreas Störiko, with Foldscreen, front and side panels 609/10 and 609/11, design: Wilkhahn. The models with mesh backrests adapt perfectly to different body shapes, lend the chairs a lightweight, transparent look and ensure good airflow.

gonomics and health



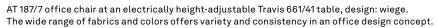
AT 187/7 at height-adjustable Travis 661/41 tables, design: wiege: AT's free-to-move capability stimulates body and mind so that office workers are healthier and more productive.



AT 187/9 at an Occo 222/90 table with a veneered oak table top and Occo 222/31 task chairs, design: jehs+laub.

Combining the chair with table and conference chair ranges based on the same integrative design produces seamless design solutions – such as the Occo range here, designed by jehs+laub.







AT 187/7 office chair at a height-adjustable Travis 661/41 table, design: wiege.

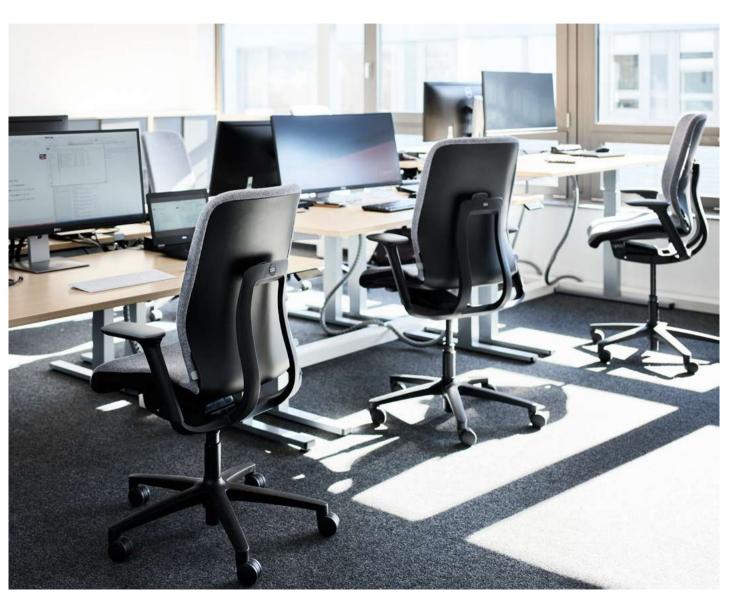
If the office chair has one dedicated user only, the automatic weight adjustment feature comes with a presetting in ten increments to adapt the chair to suit personal preferences.







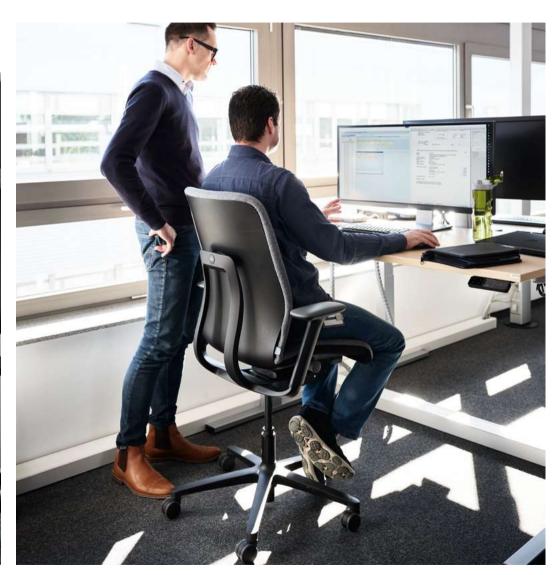
AT Mesh (ESP), 187/73 at a Timetable Lift 615/00, design: Andreas Störiko



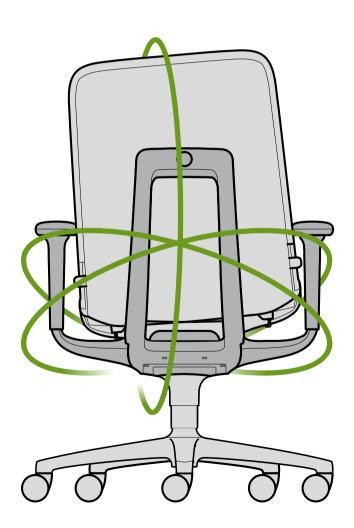
AT ESP 187/72 office chair
AT ESP allows users to incorporate sitting, standing and perching into their workflow.

rgonomics and health





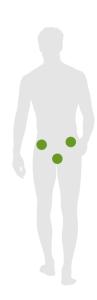
AT ESP 187/72 office chair AT ESP 187/72 office chair



All health experts agree that our muscles, bones, joints, cardiovascular and digestive systems, our ability to combat stress and powers of concentration depend on movement. On the other hand, sitting still for long periods of time makes us lethargic and is harmful in the long term. Primarily, it's the three-dimensional movement of the hips that has the biggest impact on a healthy metabolism. For this reason, Wilkhahn joined forces with the German Sport University Cologne to develop free-tomove kinematics, which prompts people to move their bodies in all directions while sitting down.

Several scientific case studies corroborated the healthy, performance-enhancing effects of the free-to-move office chairs. These chairs encourage users to move more frequently and in different ways, therefore boosting their feeling of wellbeing, powers of concentration and the metabolism of the muscles in the lumbar region (which is very often plagued by backache). The scientists have proved the impact of free-to-move capability in preventing complaints typically caused when people sit down for long periods of time. And over 500,000 users worldwide are already benefiting from Wilkhahn's new office chair generation.

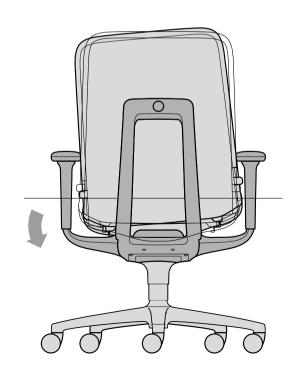
The AT model with ESP makes sitting even healthier by including sit-stand options as well.

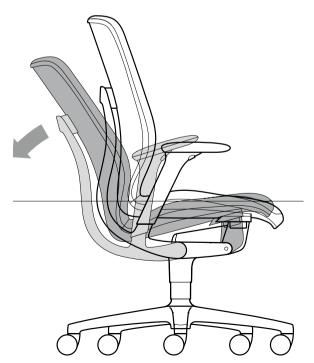


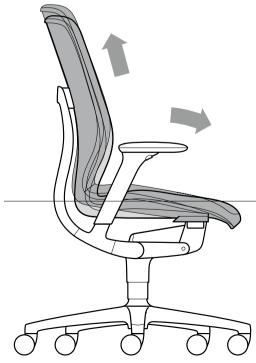
Synchronously supporting 3D kinematics called Trimension® lie at the heart of AT. The self-centring suspension of the seat shell is combined with an automatic weight adjustment mechanism (which is why users don't have to adjust AT to their own weight) and optionally comes with a pre-adjustment feature to suit personal preferences. This

activates the natural range of motion the human pelvis is capable of and includes flexing, extending, tilting or rotating it. Synchronous forwards and backwards movements allow a tilt angle of up to 12° in the seat and up to 26° in the backrest. AT also comes with an optional 3D forward tilt of up to -5° that can be activated, whereby the backrest is

raised synchronously by 25 mm so that the lumbar support always stays in the right position. The seat and back can be tilted sideways from the horizontal by up to 12° . This automatic feature also comes with an optional pre-setting in ten increments to adapt to personal preferences. AT is suitable for people weighing 45-140 kg (99-308 lb).











The self-centering suspension of the seat shell on the backrest bearer and automatic weight adjustment allows bodies to maintain their center of gravity - whatever the posture or movement without the need to adapt the chair to suit different users. The coordinated design of each component creates a sculptural and apparently seamless form. The chair symbolizes the fluid, automatic and intuitive movements the user makes



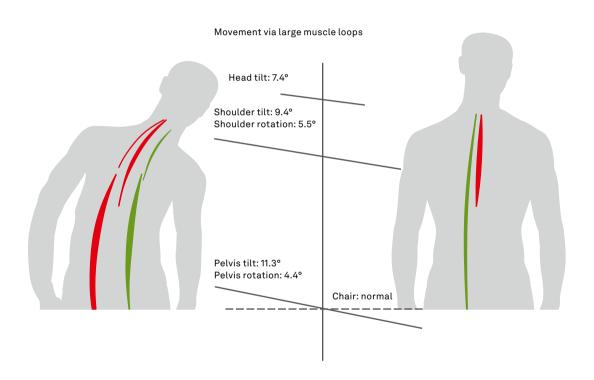
AT - the smart one, with automatic weight adjustment

A whole host of basic models, automatic weight adjustment, a wide range of features and seminal design make AT the top free-to-move office chair for hot desking and the number one choice for changing setups in modern office environments. The ESP version with a medium-height backrest is available with black and white base frames, a backrest shell optionally covered on the rear, or with a covered backrest frame.





AT 187/7 office chair, design: Wilkhahn, with Occo SC 221/32 task chairs at an Occo 222/90 table with an HPL tabletop, design: jehs+laub. AT's design and fluid lines immediately suggest it's a comfortable place for people sit and benefit from a range of motion in all directions.



A new approach to ergonomics in the office

Lab study:

The lab study examined how the concept correlated with our bodies, the biomechanical impact and the subjective feeling of comfort that Trimension® provides in the ON® office chair.

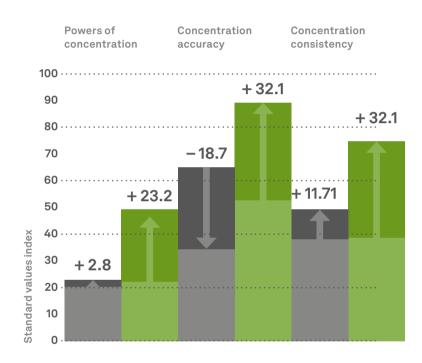
Results:

- Pressure is distributed evenly while people are sitting down and perceived to be very comfortable.
- By motivating people to bend, stretch, lean sideways and rotate their pelvis, Trimension® stimulates the body to engage in a range of natural movements where the head, shoulder and pelvis form a functioning unit when moving with the chair.
- In addition to the large muscle loops, the physiological rotation of the torso activates the muscles deep in the back which are key to stabilizing the spine.
- Some 90% of the test persons would like this sort of sitting concept in their workspace.

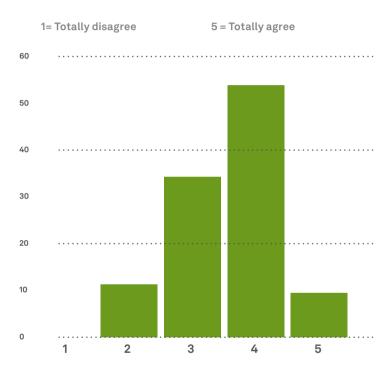
Conclusion drawn by the university:

Free-to-move, powered by Trimension®, coordinates with the body's natural range of motion and stimulates us to try out new dimensions of flexibility. Typical complaints associated with sitting at desks won't arise in this case.

AT. 187 range. Free-to-move. More active, more dynamic, healthier.



The control group (gray) with conventional office chairs and trial group (green) with 3D dynamic ON chairs over a period of three months.



My physical fitness has improved thanks to ON over the past 11 months.

Wilkhahn

Three-dimensional dynamic seating for better performance in offices

Comparative field study:

The researchers then investigated whether, along-side wellbeing, this sitting concept while using ON® also boosted people's performance. The study was carried out with 80 test persons in an insurance company's office complex over a period of 12 weeks. Recognized, standard tests and questionnaires were used to identify powers of concentration.

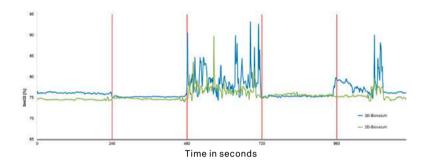
Results:

- Compared with the control group, the metrics used to gauge the free-to-move group's powers of concentration had improved in every respect at the end of the three months. They were faster, made fewer mistakes and worked more consistently.
- After a short space of time, the free-to-move group got used to and were confident about applying the new movement options.
- The free-to-move group's wellbeing didn't just improve in relative but also in absolute terms.

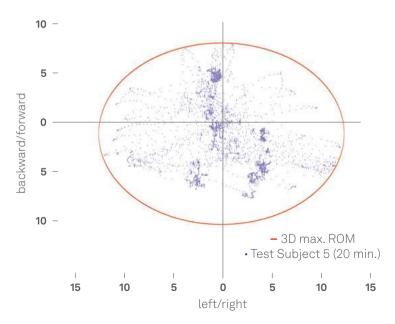
Conclusion drawn by the university:

Free-to-move dynamic sitting is used intuitively, frequently and perceived as being beneficial. And improved powers of concentration means it pays dividends in no time.

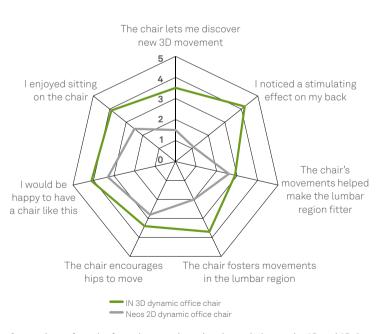




The metabolism of muscles in the lumbar region is much more active when people sit on the 3D dynamic office chair.



3D dynamic chair: Movement frequency pattern and maximum ranges of motion.



Comparison of results from the questionnaire about sitting on the 3D and 2D dynamic office chair

More movement in sedentary workspaces

A study on the impact of Trimension 3D kinematics on dorsal muscles, the range of motion and physiological stimulation

Based on standardized office processes (static and dynamic), new measurement methods were applied to examine metabolic activity in the particularly important muscles in the lumbar region. The results measured while people were sitting on the IN free-to-move office chair were compared with those of people sitting on the very good Neos 2D dynamic office chair.

Results:

- The test persons used the whole three-dimensional range of motion that Trimension® offers.
- When people lean sideways, there are significant differences between a 2D synchro-adjustment mechanism and Trimension.
- Importantly, people sitting on an IN free-to-move chair alternate between tensing and relaxing their muscles to a greater extent than on the chair used as a comparison.
- The test persons rated the free-to-move office chair better on all criteria.

Conclusion drawn by the university:

Dynamic sitting on IN with Trimension® is shown to make muscles in the lumbar region healthier, so we can assume that muscle-based backache can be reduced.

All figures: Center for Health at the German Sport University Cologne

AT. 187 range. Product types.

Wilkhahn



187/71
Task chair, medium-height backrest covered with mesh



187/7Task chair, medium-height backrest



187/8 Task chair, high backrest



187/9Task chair, high backrest with headrest and neck rest

AT. 187 range. Product types.

Wilkhahn



187/71 ESP Mesh task chair

187/72 ESP (elevated seating position) task chair to encourage use of sit-stand options, medium-height backrest



187/11 Mesh counter stool



187/1 Counter stool

AT. 187 range. Product types.

Wilkhahn

Upholstery material for seat and backrest shell



37 Racer | 47 Nova | 54 Pitch | 60 Blend | 66 Lona 68 Kvadrat Remix | 69 Granit | 74 Leather | 91 Kvadrat Steelcut Trio 3 | 92 Credo You can find all upholstery materials and additional colors in our media center. The backrest shell can also optionally be covered on the back.

AT Mesh - 34 Vivid*













 $34/1001\, Digital\, White \mid 34/1201\, Space\, Gray \mid 34/1401\, Black\, Metal \mid 34/1601\, Poppy\, Red \mid 34/1701\, Lemonade \mid 34/1901\, Miami\, Blue$

* The Vivid upholstery material for the AT Mesh is made of PET bottles, 80% recycled and has OEKO-TEX standard 100, cradle-to-cradle (bronze) certification.

Frame surfaces



All plastic components are in black or white (Synchro-adjustment mechanism, backrest bearer, seat and backrest shell as well as the armrests)

Armrest pads, controls



Gray Armrest pads optionally also in black

Star bases









Aluminum coated black or white with a textured matte finish (see price list) or high-luster polished or in black plastic.











Seat-/backrest shells, backrest frame and bearer and base frame
AT's key components are available in black or white, the backrest shell is also optionally covered on the rear. Controls and armrest pads come in gray and the armrest pads in black too. The three backrest heights produce a wide range of models to cover anywhere requiring office chairs and check virtually every box in terms of design.

If a transparent look, good airflow and the ability to adapt to different shapes of back are required, the AT Mesh model with is mesh-covered backrest frame is the right choice. The lumbar support (optional) can be adjusted in height by 6 cm and, if desired, also in depth by up to 1.5 cm by turning a knob.

The AT Mesh models also come with a **height-adjustable headrest that can also tilt** and is in the same color as the frame and cover on the backrest, also optionally with a black cover. With the headrest, the total height changes by 15 cm (57/8") up to 25 cm (97/8").







The intricate stitching on the side facings of the models upholstered with **leather underscores** the elegantly sweeping contour of the seat and backrest.



The height of the **standard 1D-armrests** is adjustable by 100 mm (3%") at the touch of a button. The depth of the armrest pads on 3D armrests can optionally be extended by 50 mm (2") and the width by 25 mm (1"), 4D armrests can also rotate inwards and outwards by 25°.

AT. 187 range. Accessories and other items.

Wilkhahn







Icons on the controls illustrate what they do. The lever on the right adjusts the sitting height precisely and the knob can conveniently alter the seat depth while the user's sitting down.

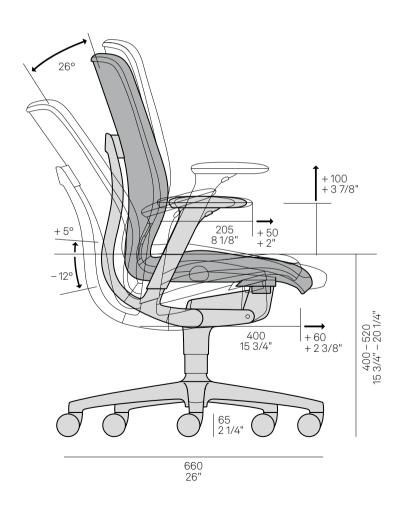


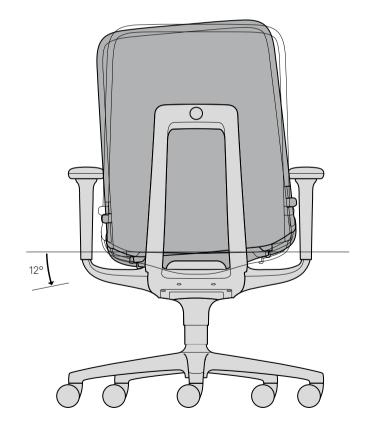
Locking/optional presetting of the automatic weight adjustment feature

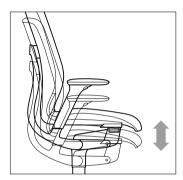
Icons on the controls illustrate what they do. The lever on the right adjusts the sitting height precisely and the knob can conveniently alter the seat depth while the user's sitting down.



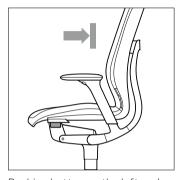
Integrated lumbar support and optional forward tilt All AT models (not AT Mesh) have lumbar support the height of which is also very easy to adjust by 60 mm (2%") (via handles at the sides of the backrest shell). The optional activation of the innovative forward seat tilt raises the backrest and therefore the lumbar support synchronously.



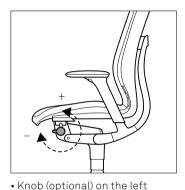




The purpose of lever to the right underneath the front edge of the seat is to precision adjust the seating height from between 400 to 520 mm and from 420 to 600 mm in the model with an elevated seating position (ESP).



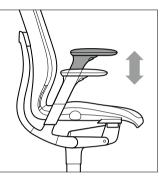
Pushing button on the left underneath the front edge of the seat locks the seat and backrest in a neutral horizontal 0 position.



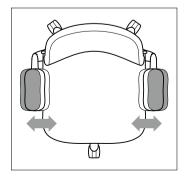
underneath the front edge of the seat allows you to pre-set the automatic weight adjustment feature in ten increments: sit forwards and turn the knob forwards to make the counterforce weaker or turn it backwards to make it stronger.

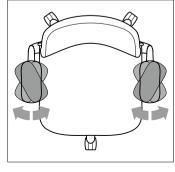


Optional forward seat tilt with synchronised raising of the backrest: shift your weight forwards, grasp the seat shell at the rear on the right and left in the curve and lift it up until it goes no further. Follow the same steps to lower it back into the normal position

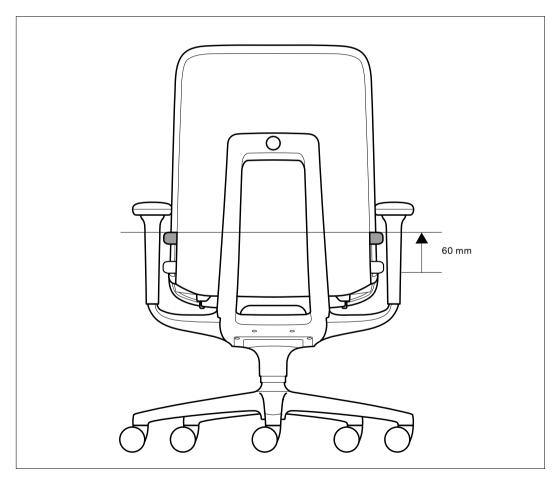


To adjust the height, keep button 1 pressed down and adjust the height of the armrest in ten increments by a total of 100 mm.

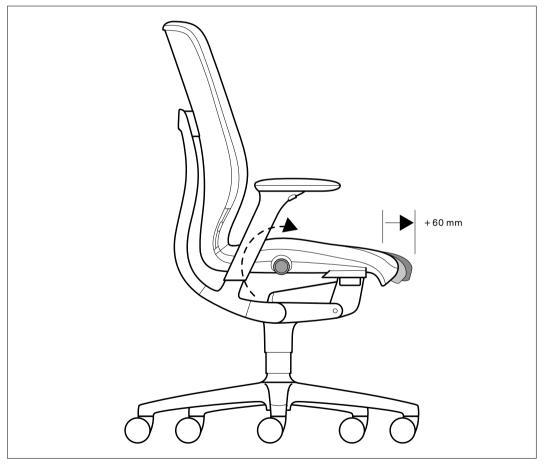




Additional feature for the 3D armrests: the depth of the armrest pad can be adjusted by 50 mm and the width by 25 mm. Additional feature for the 4D armrests: the armrests can be swivelled 25° inwards and outwards.



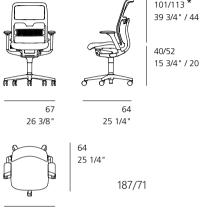
The height of the lumbar support can be adjusted in eight positions by a total of 60 mm. Grab the backrest with both your hands and lock the lumbar support in the position concerned to obtain the height you want.



Optionally integrated seat-depth extension from 390 to 450 mm. To extend/shorten the seat depth precisely to your requirements, pull out the knob on the right underneath the seat and turn it to the front or the rear.

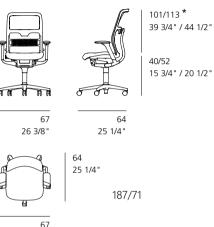
187/71 Task chair





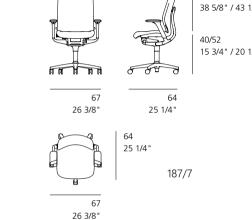
26 3/8"

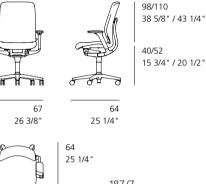
26 3/8"



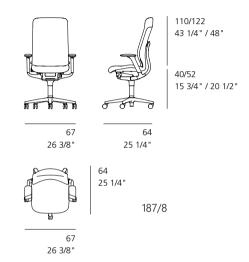






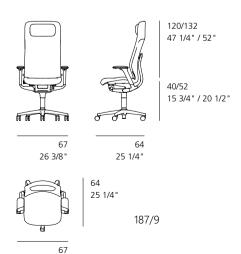








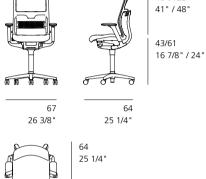




AT. 187 range. Models and dimensions.

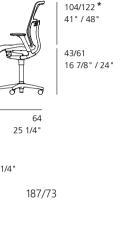
Wilkhahn

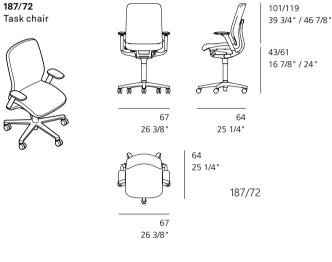




67

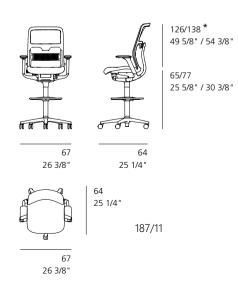
26 3/8"

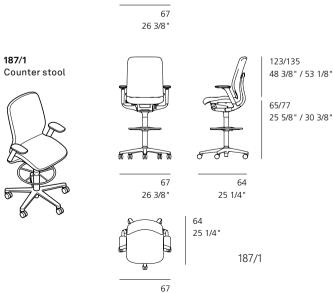












26 3/8"



Function

Free-to-move office task chair with Trimension®, integrated synchronously supporting 3D kinematics. The self-centering suspension of the seat shell is combined with automatic weight adjustment and the chair optionally comes with the ability to preset the automatic weight adjustment in ten increments to suit personal preferences. Trimension® activates the natural range of motion the human pelvis is capable of and which matches the way the joints function, from flexing, extending, leaning sideways or rotating the pelvis. When moving synchronously backwards and forwards, the angle of the tilt ranges from 12° in the seat and up to 26° in the backrest, optionally with a 3D forward tilt of up to 5° that can be activated, during which the backrest is raised synchronously by 25 mm so that the lumbar support is always in the right position. The seat and back can be tilted sideways from the horizontal by up to 12°. At the same time, the counter pressure adjusts automatically to any posture or movement so that the body always maintains its center of gravity.

AT is ideal for people weighing from 45 to 140 kg.

The backrest has height-adjustable lumbar support (in eight lockable positions of up to 60 mm). The backrest and seat can be locked in a neutral horizontal 0-position, the optional 5° 3D forward tilt can be activated by lifting the seat and back. The seating height can be precision adjusted at the touch of a button between 400 mm and 520 mm with a DIN 4550-compliant, precision-adjustable gas lift, optionally with a contact suppression feature, then the seating height is between 420 mm - 530 mm. Seat depth: 430 mm, optionally integrated, users can turn a knob while sitting to precision adjust the seat-depth extension from 390 mm to 450 mm. The height of the elevated sitting position (ESP) models is precision adjustable from between 430 mm and 610 mm and the counter chairs between 650 mm and 770 mm.

Frame

Task chairs

Five-star base made of black through-dyed, fiberglass-reinforced polyamide, optionally of die-cast aluminum, coated, polished or high-luster polished. Twin-wheel swivel casters with load-dependent braking, made of black DIN EN 12529-compliant polypropylene as the standard version for carpets, optionally with grav tire made of polyurethane for hard flooring. Casters optionally electrically conduc-

The gas lift is covered by a telescopic protective tube made of black or white through-dyed polypropylene (does not apply to the ESP version). The mechanism shell is made of black or white through-dved, fiberglass-reinforced polyamide with a cover made of black or white throughdved polypropylene.

The backrest bearer to accommodate the seat and backrest is made of black or white throughdyed, fiberglass-reinforced polyamide with a central steel joint.

Counter stool

With extra height-adjustable foot ring, bright chrome-plated, with lock screw to affix it and twinwheel swivel casters with loaddependent braking.

Seat and back

Models 187/7, 187/8, 187/9, 187/72.187/1

Unitary and highly elastic selfcentering seat and backrest shell suspended on the backrest bearer made of black or white through-dyed glass-bead reinforced polypropylene. Three backrest heights (medium height, advanced height. advanced height with headrest and neck rest), backrest shell optionally covered in fabric or leather, neck rest made of polyurethane foam, covered in black or grav leather. When leather 74 is chosen, in the same material and color as the backrest cover. Seat and back cushioning made of polyurethane with CFC-free foam, as replaceable upholstery element with covers from the Wilkhahn fabric and leather collection. Ergonomic, with seat cushioning with higher edges at the sides, made of molded foam, covers without side facings. When optional soft padding is chosen, more defined edges because of the higher quantity of foam and all fabric covers with facings at the side are in the same material and color. With optional seat-depth extension from 39 to 45 cm that is precision adjustable by turning a knob. Then standard and soft padding with side facings in Racer, colormatched when the fabric cover is Racer, optionally in black (37/99), anthracite (37/25) and light gray

AT Mesh models 187/71, 187/73, 187/11

The seat and backrest element is suspended in a self-centering manner on the backrest bearer and the back is a mesh-covered frame. The mesh is made of 80% post-consumer-recycled polyester and 20% elastomer. The backrest frame is made of black or white, through-dyed, fiberglass-reinforced polyamide. which is screwed to the seat shell made of black or white through-dved, glass-bead reinforced polypropylene, with a seat shell and backrest frame made of black or white through-dved plastic with a polypropylene seat upholstery panel. Seat cushioning made of polyurethane with CFC-free foam, as replaceable upholstery element with covers from the Wilkhahn fabric and leather collection. Ergonomic, with seat cushioning with higher edges at the sides, made of molded foam, covers without side facings When optional soft padding is chosen, more defined edges because of the higher quantity of foam and all fabric covers with facings at the side are in the same material and color. With optional seat-depth extension from 39 to 45 cm that is precision adjustable by turning a knob.

Then standard and soft padding with side facings in Racer, colormatched when the fabric cover is Racer, optionally in black (37/99), anthracite (37/25) and light gray (37/95) for all other fabrics. Leather for all types of upholstery with facings all the way round in the same material and color.

Optionally with a polypropylene

lumbar support, which is in black or white to match the color of the frame and height-adjustable by 6 cm in six lockable positions. optionally additionally adjustable in depth by up to 1.5 cm by turning a knob made of fiberglassreinforced polyamide that is retrofittable at any time. Optional backrest frame with an upholstered headrest in the same color as the frame in through-dyed, fiberglass-reinforced polyamide, height-adjustable by 6 cm in 6 lockable positions and can be tilted forward in 4 lockable positions by up to 125° (depth adjustable by up to 5 cm). Cover in the same material and color as the backrest or in black.

Optional armrests

Armrests made of fiberglassreinforced, black or white through-dved polvamide with armrest pads made of gray or black through-dyed polypropylene, optionally with armrest pads made of gray or black throughdyed polyurethane foam. The height of 1D armrests can be adjusted in ten lockable positions by 100 mm, the depth of the armrest pads on 3D armrests can be adjusted by 50 mm and the width by 25 mm in each case, 4D armrests can also be pivoted inward and outward by 25°.

All components used to adjust the chair (slide buttons and levers to adjust and lock the height, components for adjusting the lumbar support and pull-out knob for optional seat-depth extension) are made of gray through-dyed plastic.

Standards

The AT task chairs comply with the type A DIN EN 1335 office-chair, ANSI/BIFMA X5.1 and IGR standards.





www.tuv.com ID 1000000000





Current information Cleaning and Disinfecting Wilkhahn Furniture

Awards, standards and certificates (1/11)

AT. Environment and product.



Awards

















AT Office Chair.

Healthy, versatile and service-friendly seating.

The AT line's free-to-move sitting concept boosts our bodies' metabolism. This is a key factor in terms of staying mentally and physically fit and all the social, business and economic benefits this entails. Durability in terms of the form, function and materials are the foundation for sustainability. The modular, retrofittable adjustment options, service-friendly design and the ability to replace covered seat upholstery panels and backrest upholstery, as well as expendable parts, make the range a sound ecological choice. The automatic weight adjustment feature means AT is ideal for hot desking, so that fewer workspaces and chairs are needed overall. From the outset, the chair's developers used the maximum amount of recycled materials possible from a technical and aesthetic standpoint. After the end of its useful life, 93% of AT can be recycled.

· The materials marry extreme precision with robust stability. The star bases are optionally made of throughdyed, fiberglass-reinforced polyamide, or die-cast aluminum, the backrest bearer, mechanism and armrests are made of through-dyed. glass-bead reinforced polyamide with the central joint made of steel, the unitary, flexible seat-backrest shell (the backrest frame in the case of

the AT Mesh) is made of glass-bead reinforced polypropylene and the seat upholstery panel of polypropylene, the armrest pads are made optionally in polypropylene or polyurethane foam. All aluminium and polypropylene components comprise a maximum of recycled materials and can be fully recycled.

- The replaceable seat and back cushioning are made of CFC-free foam, covered polyurethane, and any soft padding with extra cut foam fleece made of polypropylene. AT Mesh's backrest is made of 80% post-consumer, recycled polyester and 20% elastomer.
- · The adjustment and movement functions are clearly marked, intuitive to use and very simple. Should the chair show signs of the wear and tear, it can easily be repaired or retrofitted to extend its useful life again and again.

AT is an innovative, long-lasting office chair, versatile in terms of form and function, and based on Wilkhahn's ecodriven design principles. It's also ideal for modern, space-saving office layouts as it allows significant cost efficiencies and is kind to the environment.

Milestones of socio-ecological development at Wilkhahn

2019 and 2020

Presented with the Architects' Darling Award as a winner of the cradle-to-cradle challenge

Wilkhahn

- 2018 Wilkhahn receives the B.A.U.M. environmental prize and an award from the Lower Saxony Alliance for Sustainability.
- 2013 The company is connected to the district heating grid of a biogas plant nearby
- 2012 The ON office chair is presented with the Federal Ecodesign Award
- 2009 Wilkhahn signs a framework agreement with German trade union BHI (Building and Woodworkers International) on worldwide compliance with core ILO labor standards at Wilkhahn and its suppliers via in-house controls and external monitoring by German trade union IG Metall.
- 2008 A combined heat and power plant based on renewables is commissioned.
- 2001 First company in the state of Lower Saxony with EMAS 2 European environmental standard certification.
- 2000 Publishes one of the first medium-sized business reports on sustainability
- 1997 Corporate Conscience Award from the Council on Economic Priorities, New York
- 1996 German Environmental Prize from the German Environmental Foundation
- 1992 The first ecologically designed production facilities with a photovoltaic roof and launch of the first office chair range to be developed based on the ecological design
- 1989 Mission statement on ecological changes at Wilkhahn: "The administrative and management board have jointly decided to take ecological concerns seriously and to place greater emphasis on them than a quick profit".

Our antidote to the throw-away society is to provide products where form, function and materials have a purpose and are long lasting. Our product responsibility concept therefore follows well-defined guiding principles.



1. Avoid waste - "the longer and better" is the remit to our product development team. We achieve this thanks to:

- useful innovations that make life easier and more pleasant in the long term;
- · durable quality of materials, surfaces and technical solutions, which guarantees quality, even years later;
- distinctive, timeless and appealing designs with the potential to become classics;



2. Reduce - "less is more" is more than just a design principle to us. it means:

- we cut down on the materials used in order to make handling easier and to preserve resources;
- · we use energy in manufacturing efficiently, for example by drawing on district heating and heat recovery in manufacturing;
- · we reduce emissions, by utilizing solar power and climate-neutral energy sources (cutting CO₂).



3. Recover - "Reuse + Recycle"

In this case, the goal is to continue to use the whole product or parts of it and recycle it at the end:

- Because the products are modular, expendable parts can be exchanged and features added or retrofitted (e.g. armrest types, covers, cushions, surfaces).
- · Connecting points in the product can be dismantled for easy repair.
- Where possible, we use pure materials that are marked as such, making them ideal for recycling.



4. Fairness - responsibility all along the line

At Wilkhahn, environmental and social responsibility have an equal weighting. Health and safety, training, active participation by and fair pay for employees are integral to our corporate culture. As a result, we actively encourage our suppliers and customers worldwide to improve working conditions. Which is why Wilkhahn joined Global Compact and signed an international framework agreement with the International Labor Organization (ILO) on global recognition and fostering of employee interests.

AT. Environmental product information.

Guiding principles.

Honest product design

We strive to develop durable products, increase their utility value and reduce waste. "Less is more" or "reduce to the max" are principles that Wilkhahn constantly reinterprets for the future. Ecological design guidelines are integral components of Wilkhahn product development.

A spirit of fairness

We focus on people. This implies a collaborative 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.

Responsibility from the very start - Wilkhahn's environmental product information.

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 life-cycle analysis (LCA).



Wilkhahn



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 social-audit systems.



Product use

Socio-ecological assessment of the product utility phase regarding: Design, ergonomics, durability, customer service, availability of spare parts.



End of the product life-cycle

Socio-ecological assessment of the product after the end of its useful life: Disassembly and recycling capabilities, disposal and product take-back.







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 as suitable for interiors as specified by Greenguard™. The materials Wilkhahn uses such as fabrics, leather, wood, plastics or metals are primarily made by highly specialized suppliers. Our product-development department specifies the technical and aesthetic characteristics that these materials have to fulfil. Our specifications on for example strength, color-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 fiber;
- 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
 safety 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 safety regulations.
- The powder-coated metal finishes of the table and chair frames are hard-wearing and made without any solvents or heavy metal.
- 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 scrutinized and the finished results checked again by trained staff before forwarding to the next department.





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 is certified to ISO 9001. In selecting suppliers, comprehensive and proper quality management are very important to Wilkhahn.

Water conservation, material management and sustainable energy production

Water is becoming an increasingly important resource. Wilkhahn is pulling out all the stops to minimize 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 labor and social responsibility standards, as required by the ILO (International Labor Organization). Our partnership with suppliers is based on compliance with this agreement.

Sustainability in the supply chain.

Our environmental and social responsibility doesn't stop at the gates to our own factories.

If within its power, Wilkhahn requires and promotes 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:
- Organizing and defining responsibilities;
- Informing people about the risks the workspace entails and taking 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.

AT. Environmental product information.





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 replaceable 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. In the US, Wilkhahn products have GREENGUARD Indoor Air Quality™ certification.
GREENGUARD™ is a certification program 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 given to companies that offer a healthy environment, save water and energy and comply with stringent environmental criteria. More LEED information about our products is available on request.





End of the product life cycle.

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 takeback 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, energyguzzling (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 labeled. 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 choose 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 to 78% of Wilkhahn's cardboard packaging consists of recycled material. And Wilkhahn regularly uses blankets and other returnable packaging.

ews and ferences Ergonomics and health Designs Accessories and other items dimensions Technical details Awards, standards and certificates (8/11)

AT. Environmental product information.



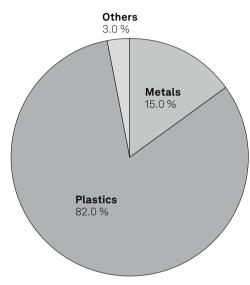
Materials.

Material composition for model 187/7 AT task chair [kg] [%] 15.0 Metals 2.70 2.60 15.0 Steel 0.10 Aluminum 0.0 14.20 **Plastics** 82.0 Polypropylene (PP) 9.07 52.0 Polyamide (PA) 3.79 22.0 Polyurethane (PUR/TPU) 0.96 6.0 Polyester 0.37 2.0 Others 0.50 3.0 Upholstery materials (e. g. wool) 0.50 3.0 Total weight 17.30 100.0 **Recycling proportion** 3.80 22.0 Recycling capability 15.40 89.0

Not recyclable: Powder varnish

Materials are subject to stringent checks. 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 feedstock is listed in a register of hazardous substances. This helps to minimize the use or allow the substitution of any potentially harmful materials.





iews and ferences Ergonomics and health Designs Accessories and dimensions Ergonomics and health Designs Other items Other ite

AT. Environmental product information.



Materials.

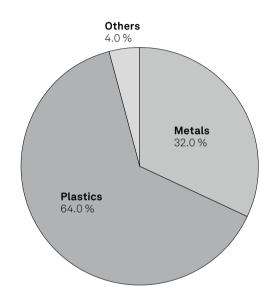
Material composition for model 187/71 AT Mesh task chair (Aluminum star base, leather seat)

	[kg]	[%]
Metals	5.70	32.0
Steel	2.60	15.0
Aluminum	3.00	17.0
Plastics	11.10	64.0
Polypropylene (PP)	4.80	28.0
Polyamide (PA)	5.60	32.0
Polyurethane (PUR/TPU)	0.60	3.0
Polyester	0.20	4.0
Others	0.60	4.0
Upholstery materials (e. g. wool)		
Powder coating	0.60	4.0
Total weight	17.40	100.0
Recycling proportion Recycling capability	4.30 16.80	25.0 97.0

Not recyclable: Powder varnish

Materials are subject to stringent checks. 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 feedstock is listed in a register of hazardous substances. This helps to minimize the use or allow the substitution of any potentially harmful materials.

Wilkhahn



Views and Ergonomics and health Designs Accessories and other items Models and dimensions Technical details Awards, standards and certificates (10/11)

AT. Environmental product information.

Wilkhahn

Certificates product/standards









The AT task chairs comply with the DIN EN 1335, ANSI/BIFMA X 5.1., GS, IGR and AGR standards.

Company's certificates, memberships













ews and ferences Ergonomics and health Designs Accessories and dimensions Technical details Awards, standards and certificates (11/11)

Wilkhahn and sustainability

Wilkhahn



In over 100 years of its corporate history, Wilkhahn can look back on a sustainability philosophy that has grown over decades. Aspects such as durability, social fairness, environmental responsibility and cultural orientation have been evolving as corporate principles since the 1950s. Wilkhahn today is regarded internationally as a model of excellence, not only on account of its products but also because of its modern corporate philosophy. This is because the company realized early on that sustainable design should embrace environmental aspects, improve social relationships and define the cultural role of a company. This approach to the way we do business creates a bond between us and our customers throughout the world. There is surely no more rewarding task than working together for a successful future that is worth living in.

Current sustainability report with environmental statement









For further information please contact us!



Wilkhahn

Wilkening + Hahne GmbH+Co.KG Fritz-Hahne-Str. 8 31848 Bad Münder Germany Tel.: +49 5042 999 100 contact@wilkhahn.de www.wilkhahn.com









Roof of one of the four pavilions, which were designed by architect Frei Otto, on the Wilkhahn site. Photo: Klemens Ortmeyer