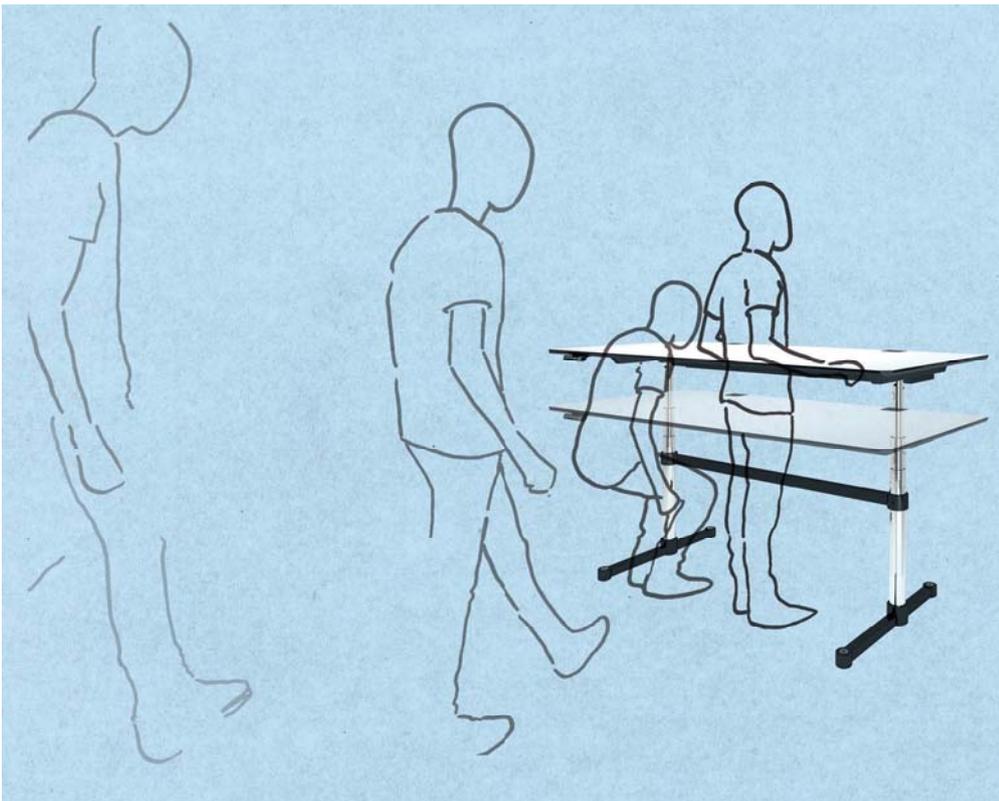


## Ergonomics by USM



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USM offers much more than just storage space or work surfaces – and USM doesn't let others make the first move when it comes to superficial fashions and fast-moving trends. At USM, the design of the furniture is just as timeless as the demand to improve anyone and everyone's working conditions with solid, sustainable furnishing concepts at the workplace. Comfort and functionality in the office, implemented with a holistic approach, are the central themes that form the primary focus at USM. A lot of “hard” and “soft” factors work together here: atmosphere, spatial requirements, materials, acoustics, connections and adaptability.

Our modern working world is shaped much more significantly than ever before by interaction, communication and flexible team structures. This means that

the office furnishings must also be increasingly responsive to change. At the same time, the competition for skilled workers and the necessity of occupational health management is playing an increasingly major role. The wellbeing of each and every person is becoming a greater priority. Because many of us spend a large part of our working hours sitting in front of a computer, more and more people are suffering from resulting back pain, shoulder and neck tension as well as vision problems and other work-related illnesses. This is where ergonomics provides support in a variety of ways, creating conditions for increased identification with as well as motivation, health and wellbeing at the workplace.

But although we often hear about ergonomics, we rarely ever question it. So this brochure summarizes relevant information on ergonomics, answers basic questions and presents ideas and approaches to solutions for a good, inspiring workplace design.

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## **Five basic questions about ergonomics:**

### **What does the term “ergonomics” actually mean?**

We frequently equate ergonomics with soft-shaped objects whose designs conform to the shape of the human body. However, this doesn't represent the heart of the discipline; it's only a small partial aspect. In an overarching sense, ergonomics is defined as the science of the laws of human and automated work. The term 'ergonomics' is comprised of two Greek words: “ergon” means ‘work’ and “nomos” means ‘law’.

Countless aspects of interaction between humans and machines play a crucial role in ergonomics. To put it simply, it addresses designing repetitive work processes and arranging the objects necessary for these in such a way that the human who is working is harmed as little as possible. Expressed in a positive way, this means: We should feel comfortable at work, we should like

spending time there and we should be able to go about our jobs free of pain and full of motivation. Ergonomics affects our physical as well as mental circumstances and influences organizational work processes. The ultimate goal is to adjust the conditions at the workplace to the people, their needs and limitations – not the other way around.



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### **Why is ergonomics an economic factor?**

The quality of work results is inseparably linked to the quality of the working environment. Good ergonomics increases the satisfaction and preserves the health of the employees, which is why this topic is considered so important. However, according to a study by the “Büro-Forum,” only about 1.5% of all office spending is in fact currently allocated for furnishings. Personnel costs make up 80%, the building accounts for 16% and work equipment comprises 2.5%.

If working conditions are poor, the company incurs high costs – due to the limited productivity of employees alone. If work is literally making employees sick, this will result in absences in the long term. So saving money on furnishing workplaces and creating good working conditions pays for itself at first

glance – the consequences down the road are often far more expensive since musculoskeletal disorders have been steadily increasing over the past few years. Back pain is now considered one of the main causes of health-related absences as well as the most frequent cause of disability. In a study on ergonomics at the workplace conducted by Microsoft, 86% of respondents indicated feeling uncomfortable at their desk and experiencing pain in their musculoskeletal systems. Often, vision problems, headaches and difficulties concentrating can be directly traced back to the conditions of the workplace. Here, ergonomics offers effective relief, not only in the context of necessary rehabilitation, but also as an integral component of prevention. Investments in ergonomics pay for themselves many times over.

Ergonomics in the workplace helps avoid accidents at work and reduces work-related illnesses and thus absences. The physical and mental wellbeing of employees can be increased, reducing stress and fatigue, increasing motivation and capacity, and extending the entire working lives of employees.

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That is why there are already legal regulations or guidelines in numerous countries as well as at the EU level that recommend workplace and equipment design according to ergonomic principles. Some – as in Switzerland, for example – even stipulate them.

Ergonomics is an expression of appreciation towards employees. Currently, applicants often indicate that comfort at their workstation plays a role in selecting an employer. In the so-called “War for Talent,” good ergonomic conditions such as the quality of the furniture and their adaptability to individual needs are thus also crucial. They increase the employee’s sense of identification with their employer and contribute to a positive perception of the company.

**How do good ergonomic conditions affect day-to-day work?**

Ergonomic principles affect almost all aspects of our day-to-day work: From the design of working structures and composition of the working hours to physical conditions that prevail around the workplace (lighting, ventilation, acoustics) to the structure of the workplace itself. How are desks and chairs arranged with each other? Do they allow for different types of use? Is there enough legroom? What are the visual conditions for working with computer screens? What types of work aids are available? Are objects that are used every day readily accessible? These are the questions that matter.

In particular, working with computer screens has proven to be an increasingly problematic area over the past few years when it comes to ergonomics. More and more people are working longer and longer hours at their computers, often in sitting positions that are unhealthy – the consequences of this are described above. Good ergonomic conditions enable workers to switch between a sitting and standing position while working thanks to a height-adjustable desk, for example. Regularly changing one's posture – ideally multiple times per hour – has been demonstrated to be particularly beneficial to the musculoskeletal system. Above all, it is important that changing posture can be accomplished as quickly and smoothly as possible without having to unplug the mess of computer cables, etc., because otherwise we will never take advantage of the option. Even the tilt of the work surface or monitor can be easily changed under good ergonomic conditions as a welcome invitation to change positions.



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### **What role does ergonomics play in modern office concepts?**

The flexibility and adaptability of furniture not only affects health and wellbeing; it also affects employees' capacity to respond when confronted with new forms of work. Innovative office concepts and forms of collaboration go hand in hand with increasingly varied requirements for using office furnishings.

Working in changing team structures or without a fixed workstation – whether in your own office or at the customer's place of work – has been a reality for many for a long time now. That's why it's more important than ever that workstations can be adapted to the needs and desires of each user as easily and variably as possible in flexible and non-territorial environments. This ensures that even the so-called "job nomads" are always working under the best conditions and always feel "at home" wherever they are.



In contrast to the static structures of the past, the increasing dynamism of work demands that companies address the new and flexible working structures. Office work sometimes still takes place in traditional locations, but it also takes place in different places and in alternating settings, sometimes alone, sometimes with a team. Studies have shown that in many companies, three generations of employees are currently working under one roof, each with their own customs and requirements. Offices need to adjust to these instead of prescribing structures that are far too rigid and thus force everyone into the same shape. For example, it is important that the functionality of height-adjustable desks is not only designed for individual workplaces but can also be combined for teamwork. This way, a conference that begins formally with all participants sitting down can transition to a standing position and become a creative, dynamic process centered around a large, shared workspace.

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### **What solutions does USM offer?**

USM comprehensively contributes to comfort at the workplace. Ergonomic solutions from USM are modular concepts for acoustic comfort in an open space environment for a workspace with reduced spatial requirements, while

maintaining maximum functionality for adaptability to changing needs, as well as intelligent control systems for height-adjustable desks.

USM desks range from simple and comfortable height-adjustable desk systems with a standard height-adjustable range to particularly flexible configurations with a significantly expanded height-adjustable range, mechanically or electrically movable desk surfaces with innovative motor concepts as well as very good vibration resistance for maximum stability.

This means: USM products harmoniously combine architecture, design, office work and health. USM furniture and desks have proven successful in the most diverse spaces and scenarios, all while fulfilling the maximum design requirements. They blend into every office environment – from the stately and functional to the comfortable and cozy, from quiet individual offices to creative think tanks. They stimulate and inspire change. Concentrated collaboration, a spontaneous conference, a shared look at a plan, a creative workshop: the USM table does it all, enabling meetings at eye level and spurring on new ideas as it moves.

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## **USM Products**

### **The Classic: USM Haller Table in different versions**

This desk can be freely adjusted from 680 mm to 860 mm, thus adapting to the individual needs of its users. This makes it ideally suited for desk sharing. Equipped with two adaptation points for intelligent accessories, the desk works both as a workspace for your home office as well as for large desk configurations for a whole team at the office. In other versions, the desk surface slides to allow easy access to the integrated cable tray – objects on the table do not need to be removed to access the cable tray.



**The USM Kitos table system in the USM Kitos table, USM Kitos E, USM Kitos E Plus and USM Kitos E Advanced versions**

From a simple conference table to a complex workstation, the USM Kitos is a table system that can handle every change. Due to their easy adjustability with three height options, the Kitos tables make it possible to work while standing or sitting – individually or together as part of a team. Widely spaced legs and an intelligent design ensure maximum stability – even at their fully extended height of 1,300 mm, the desks are exceptionally stable and fulfil the current standards for vibration resistance. The USM Kitos table system guarantees the greatest possible amount of leg and knee room according to regulations. Matching accessories for all desks, such as brackets for a flat screen or conventional monitor help in setting up customized workspaces.

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**A USM vision for even easier operation**

A future-oriented concept study on the operation of height-adjustable desks is currently defining the production – USM's vision for the continued development of interaction between humans and their furniture: In the future, a desk will be able to "feel" what it needs to do and into which position at which speed it should move the work surface, without the user having to rely on traditional control elements.

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