

Sustainability

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Paul Schärer, chairman of the board

Our Mission

There are objects that are silent. There are those that can speak, and there are those that can sing. Every human being tries in one way or another to have his or her actions result in singing, and each act carries the hope that he or she will be successful. No one stands alone in these efforts – we need signals from outside to initiate movement from within.

This is the creed by which I live my life. For me, my job is not just something by which I make a living; instead, it is really the constant search for this one thing that can make the fruit of these labors begin to sing. I have tried and will continue to try to come closer to this somewhat unattainable goal, to understand the tasks and problems and to find truly fitting solutions. But my actions are also connected to an environment and as such are dependent upon it. In other words, they are dependent on the people who are also laboring to have their actions result in singing.

Our Work Culture

It is that much more difficult to attain above-average performance in the field of industrial products because it involves a whole host of people working on the details of structures, in production and marketing – meaning they are involved in actually making things materialize. With USM Modular Furniture, for example, it was a long journey before all of the technical details – invisible connections that they are – really worked. It is this type of product that could never be put forth into the world by one person alone; it is always the result of a team.

Antoine de Saint-Exupéry once wrote something much the same: ‘If you want to build a ship, don’t drum up people to gather wood, divide the work and give orders. Instead, teach them to yearn for the vast and endless sea.’

In principle, a business reflects those who manage it. As Rudolf Mann says, if managers deal with each other in a normal way, have a healthy mental attitude, are tolerant and treat each other with respect, then a company should be an adventurous playground for adults. And that is precisely our goal.

In keeping with this, I have not attempted to indoctrinate or instruct our employees. I would like to be a role model and guide them without pressure.



Alexander Schärer, CEO

1 USM Value System

Introduction

Our Actions in the Future

The key to success lies in the fact that USM is defined not merely by products but also by the work culture. As a company and as a group of human beings, USM has attempted and still attempts to be and remain a breeding ground for people who are motivated and excited about turning their own aspirations or those of good designers into reality – in other words, a place where people like this can thrive.

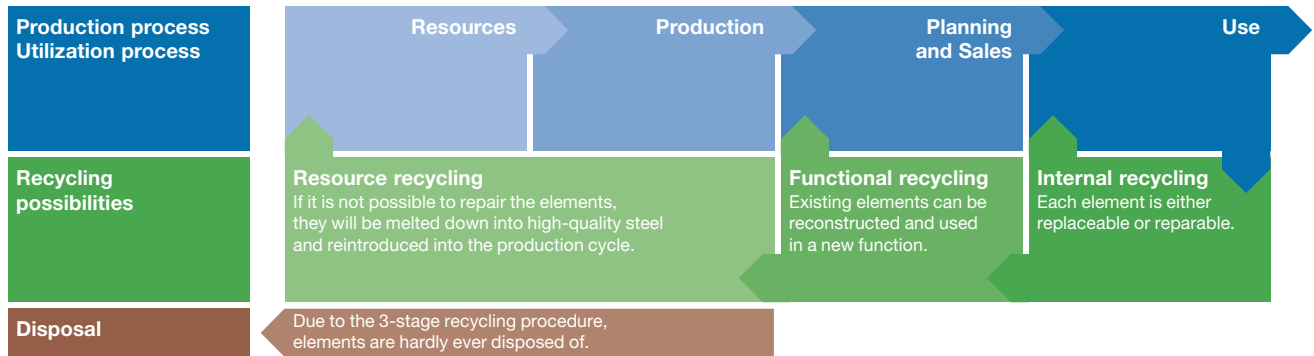
On the one hand, USM as a company flourishes thanks to its ongoing commitment to quality; on the other hand, its survival is also due to change, which it allows for over the course of time. This guarantees continuity and advances the philosophy across generations, although evolution is also sought after.

Our basic principles for the future are:

- Robust structure
- Concentrate, rather than scatter, energy
- Autonomy
- Long-term strategy
- Strategy of durability
- Carry our principles forward
- Ever-fresh enthusiasm
- Constant optimization
- Foster ideas and innovations
- The conceptualization of sustainability arises from pure economical thinking

2 The Life Cycle of USM Products

Life Cycle



The search for solutions against the backdrop of economic necessity shapes the philosophy at USM. In developing USM Modular Furniture, dealing with energy, emissions, raw materials and production methods in a thrifty manner has been a key issue from the very beginning.

In this light, the useful life of USM products is of the utmost importance. It is, after all, inevitable that any energy and resource used in production leads back into an ecological life cycle after a product's lifespan has been exhausted. The longer the product can be used, the more economical it is and, at the same time, the less impact it has on the environment.

2 The Life Cycle of USM Products

Life Cycle

The durability of USM Modular Furniture is determined by:

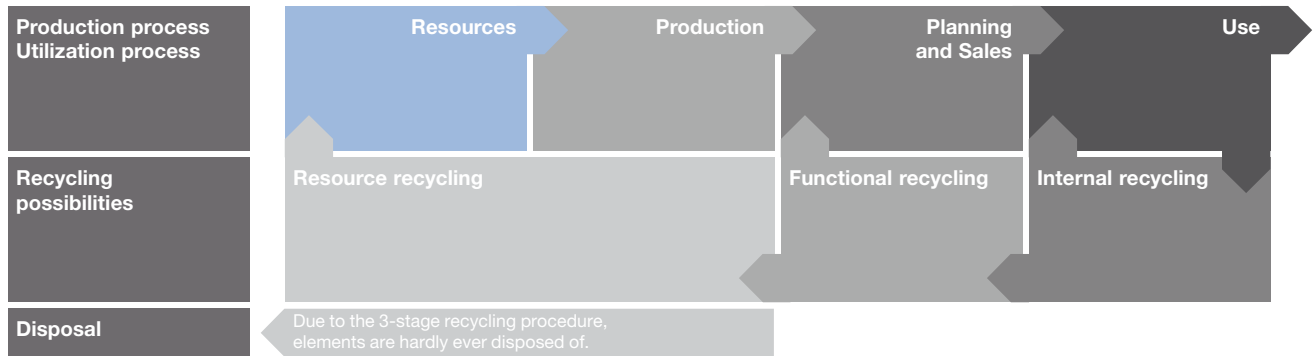
- The quality of the materials
- The versatility of function
- The timelessness of the designs
- The downward compatibility in product development

The result: Pieces of USM Modular Furniture built more than a quarter century ago are being used today because they are timeless and can be adapted easily to the changing needs of their users time and again.

'USM and Sustainability,' a project in cooperation with ETHags Zurich, concluded in the fall of 2004. We would like to tell you about the results of this study, which are oriented toward the phases in a product's life cycle, especially with regard to the inseparable relationship among our value system, our work culture and our products.

2 The Life Cycle of USM Products

Resources



Throughout the life cycle of USM products, raw materials cause more than half of any negative impact on the environment. This is why when materials are selected great value is placed on their lifespan as well as on their ability to be recycled. This is how we ensure that it is worthwhile to use the resources in mass quantities.

2 The Life Cycle of USM Products

Resources



Structural Features

The supporting structure in USM Modular Furniture is made of steel. The properties of this material guarantee long-term sturdiness and stability.

2 The Life Cycle of USM Products

Resources



Finishing Touches

The steel elements are powder-coated in 14 non-fading colors. Materials selection, construction and the precise selection as well as the consistency of the colors are conceived for optimal durability and easy replacement or interchange. Additionally, glass is available as a finish.



Tabletops

The tabletops consist of particle board, (covered in genuine wood veneer, synthetic resin or linoleum), granite or glass. The particle boards are manufactured from European timber. The glue has an extremely low formaldehyde content and meets the requirements for the lowest emissions category.

2 The Life Cycle of USM Products

Resources

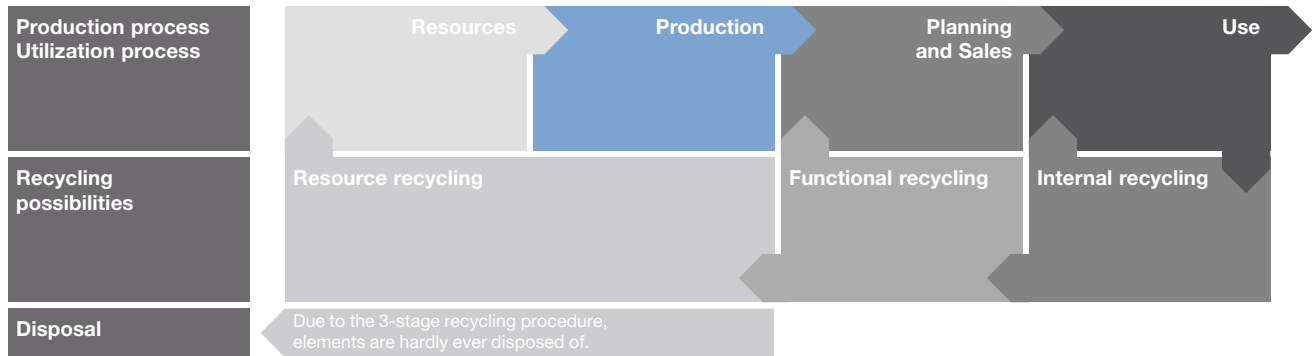


USM Inos

USM Inos (Interior Organization) also consists primarily of powder-coated steel. Recycled plastic is used for added compartmentalization. Both materials have been chosen to ensure optimal durability.

2 The Life Cycle of USM Products

Production



The responsibilities of those in production change constantly. Machines provide support for a large part of the manual work, which is precisely the reason why the human factor is always important. Only competent personnel can guarantee that machines achieve products of consistently high quality. The final assembly is done by hand. Each piece of furniture is a unique item and is planned and assembled individually according to customer requests.

2 The Life Cycle of USM Products

Production



At the **production facility** in Switzerland, we are able to ensure high quality standards, optimal fabrication conditions and flexible processes. Items used in the manufacturing process are purchased from European nations.

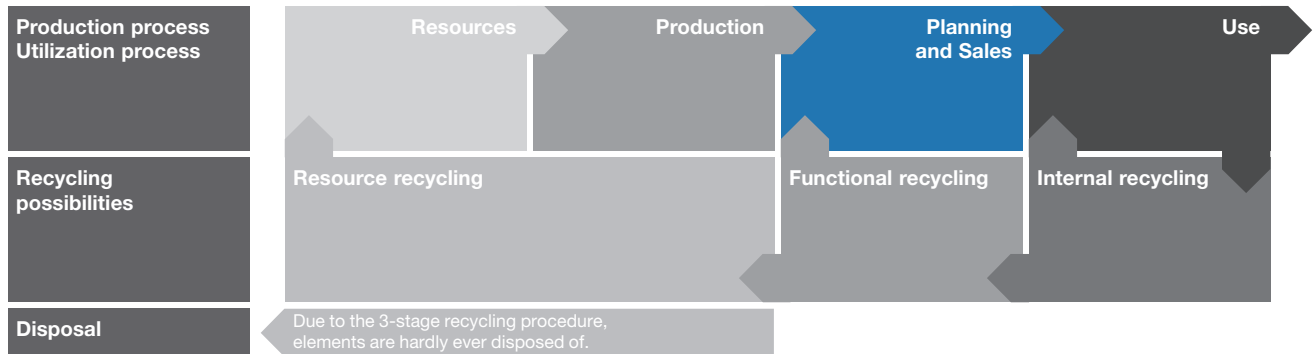
Production technologies are continuously checked and advancements made so that the foundation for sustainable production can be guaranteed for the future as well.

State-of-the-art **production processes** are used in manufacturing USM Modular Furniture. These are energy-efficient and avoid toxic emissions:

- The finishing elements are powder-coated with solvent-free materials. Heat-recovery systems contribute to energy efficiency, and vacuum systems make residual powder reusable.
- The tabletops are sealed with environmentally friendly, radiation curable multilayer lacquers. The lacquers used in this process can be diluted with water and are, therefore, low in solvents and have little odor.
- Particle boards and veneer glue in the tabletops are practically free of formaldehyde, and emissions are below the levels of the lowest emissions category, E1.
- Chrome makes the finishes of the tubes and frames extremely wear-resistant and thus long-lasting. We contract only highly specialized galvanizers who can prove that they provide chrome-plating services at the highest environmental standards, use state-of-the-art technologies, and ensure that their processes are environmentally friendly.

2 The Life Cycle of USM Products

Planning and Sales



Local planning and sales in: Australia, Austria, Belgium, Bulgaria, Canada, China, Croatia, Czech Republic, Denmark, Egypt, Finland, France, Germany, Greece, Hong Kong, Hungary, Ireland, Italy, Japan, Latvia, Lebanon, Liechtenstein, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Russia, Serbia, Singapore, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Taiwan, Turkey, United Arab Emirates, United Kingdom, USA.

2 The Life Cycle of USM Products

Planning and Sales



USM Modular Furniture is distributed in more than 40 countries through more than 400 local sales partners.

Authorized Local Sales Partners

With their regional coverage, our local sales partners are able to work with customers quickly and intensively without high travel expenses. The result: The customers' specific needs are met for the long term with concrete solutions.

2 The Life Cycle of USM Products

Planning and Sales



Logistically Optimized Assembly

Individual pieces are transported from the sole production facility in Switzerland to local assembly locations worldwide using the least expensive and most environmentally friendly method.

At the assembly locations, in Muensingen (Switzerland), Buehl (Germany), Paris (France), New York (USA), Tokyo (Japan) and 40 other locations around the world, the furnishings are preassembled into transportable units and undergo final assembly on site (fitted with slotted tubes for USM Modular Furniture Haller).

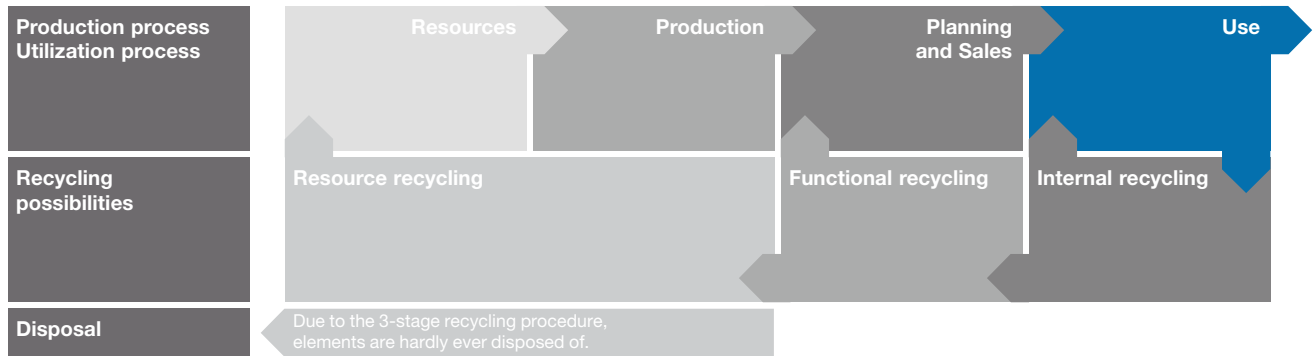
Change and Adaptation Made Easy for the Duration

In order to maximize the resources employed, future changes are taken into consideration not only within the sales process, but also in planning and assembly.

For USM's classic product lines, USM Haller, USM Kitos and USM Display, changes are made with consistent attention to quality and in cooperation with the local sales partner.

2 The Life Cycle of USM Products

Use



From an ecological standpoint, the useful life of a product is of the utmost importance. It is, after all, inevitable that any energy and resource used in manufacturing a product leads back into an ecological life cycle after the product's lifespan has been exhausted. In this situation, the most crucial factor in environmental compatibility is the relationship between the required expenditure for production and waste disposal and the lifespan of the product. The longer a product can be used, the less impact it has on the environment. Timeless design, durable materials, and wear-resistant finishes all contribute to the durability of USM Modular Furniture. These features mean that the materials employed are used intensely, sparing resources.

2 The Life Cycle of USM Products

Use



From a simple bookshelf...



... to an organizing piece...



... to a double workstation.

The Durability of USM Modular Furniture:

The Versatility of the System

USM Modular Furniture is based on the concept of the open system; modular assembly is the basic principle. Since USM Modular Furniture is endlessly modifiable, it can be adapted to specific organizational needs in both the office and home environments. The furniture can also be converted or expanded at any time to meet new spatial requirements or changes in use.

The components can be repurposed in several different ways. Each subsequent use extends the life of the materials.

2 The Life Cycle of USM Products

Use



The Timelessness of the Design
'Form follows function' is the basic principle of USM product design: USM Modular Furniture is reduced to simple, clear solutions whose functions are always apparent in the design. Resisting fashionable trends leads to lasting, classic aesthetics.



The 60's



Today

2 The Life Cycle of USM Products

Use

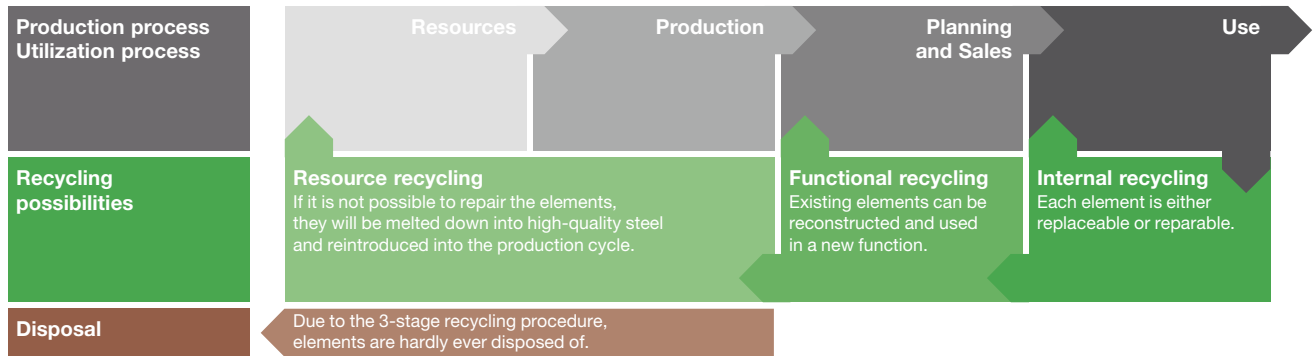
Reverse Compatibility in Product Development

Changing needs require continual adjustments to the product range. USM structural components are constantly being updated to correspond to the latest state-of-the-art. At the same time, both the look and the basic modular principles are consistently upheld. This ensures that each new system piece can be integrated into existing structures.

The advantage: Even USM Modular Furniture pieces built at the beginning of the 60's are still in use today. Their designs are timeless and can be adapted easily to the changing needs of their users time and again.

2 The Life Cycle of USM Products

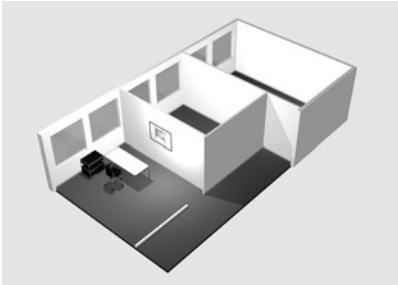
Recycling



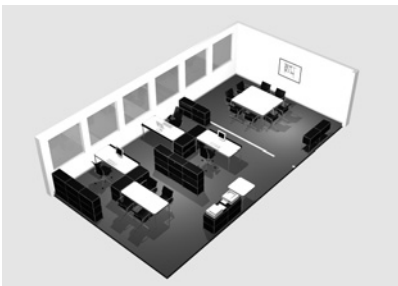
With USM Modular Furniture, recycling isn't actually a factor because the system can be continuously converted, expanded and modified to meet changing needs. In addition, individual pieces can be replaced and interchanged over the years at any time thanks to downward compatibility. The life of the system is constantly extended, which is an important consideration from an ecological standpoint.

2 The Life Cycle of USM Products

Recycling



One example: growth and change in a company.



If individual USM Modular Furniture elements have to be disposed of after several cycles of use, they can be almost completely recycled thanks to the choice of materials and construction:

- Due to the reuse of steel alone, 20% of the entire impact on the environment of a USM Haller workstation can be eliminated.
- Because USM pieces are constructed to be disassembly friendly, glass, aluminum and plastics can also be sorted out according to type and used again.
- The tabletops can be put to use thermally in waste incinerators.

3 Use of materials throughout the entire product line USM Modular Furniture

Material	Preferences	Recyclability	Percentage of material amount per product line (weight allotment)			
			USM Haller	USM Haller tables	USM Kitos	USM Display
Steel	<ul style="list-style-type: none"> – highly stable – extremely durable material – infinite visual design options through variable surface layering – long-lasting because almost infinitely recyclable without loss of quality 	100%	97.03%	55.70%	57.30%	83.50%
Aluminium	<ul style="list-style-type: none"> – low weight at greater stability – durable – inexpensive, precisely fitting components due to reliable casing process – excellent recyclability – recycling saves up to 95% of the energy originally required for aluminum manufacturing 	100%		1.00%	4.80%	5.70%
Zinc	<ul style="list-style-type: none"> – excellent surface quality – allows the creation of thin-walled and thereby resource-saving components with optimal requirements for further surface finishing 	100%	0.43%			
Brass	<ul style="list-style-type: none"> – allows resource-saving processing/finishing 	100%	1.02%	1.20%		
Diverse plastics	<ul style="list-style-type: none"> – excellent stability/weight ratio – good insulation and smooth features for use on mobile parts – for decorative parts, no additional coating necessary – material (polystyrene) partially based on recycled material 	100% thermally utilizable without hesitation	1.30%	7.60%	10.00%	1.20%
Wood	<ul style="list-style-type: none"> – dimensionally stable – raw material that regrows – low formaldehyde; meets lowest E1 emissions class 	thermally utilizable (trash burning plants)		34.50%	27.40%	
Composite materials	<ul style="list-style-type: none"> – composite materials are material combinations that are very difficult to separate using traditional methods – if these cannot be avoided for functional reasons, we prefer materials that can be utilized jointly in their combination form 		0.22%		0.50%	3.70%
Glass	<ul style="list-style-type: none"> – ecologically harmless – excellent recycling properties 	100%				5.90%
			100%	100%	100%	100%

4 **USM achieves GREENGUARD Certification for USM Haller and USM Kitos**



In May 2007 USM has earned the GREENGUARD Indoor Air Quality certificate in the Furniture Systems and Table categories for its USM Haller and USM Kitos furniture systems, the first European products to pass the stringent tests required to achieve certification.

GREENGUARD distinguishes USM Haller and USM Kitos as having low chemical and particle emissions, which helps to significantly reduce indoor air pollution and contribute to healthy indoor environments.

The furniture can carry the GREENGUARD Indoor Air Quality Certified® mark and is listed in the GREENGUARD Product GuideSM (available at www.greenguard.org), a resource that is used by thousands of architects, interior designers, building managers and other specifying professionals. GREENGUARD certified products can be used to achieve points for the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Sustainable Building Rating System. The GREENGUARD Certification Program provides a public and scientifically based third-party environmental certification for indoor materials, furnishings and processes. The program includes rigorous testing, verification and regular monitoring. To ensure continuous low emissions performance, products are retested annually and critical components of these products undergo quarterly monitoring tests.

About GREENGUARD Environmental Institute

The program is governed and administered by the GREENGUARD Environmental Institute (GEI), an independent nonprofit organization founded to create healthier indoor environments, which improve public health and quality of life. As an ANSI Authorized Standards Developer, GEI establishes acceptable indoor-air standards for indoor products, environments, and buildings. GEI's mission is to improve public health and quality of life through programs that improve indoor air. An advisory board consisting of independent volunteers, who are renowned experts in the areas of indoor air quality, public and environmental health, building design and construction, and public policy, provides guidance and leadership to GEI.

If you would like more detailed information on USM and sustainability, as well as the results of the study 'USM and Sustainability,' produced in cooperation with ETH Hags Zurich, please let us know.

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