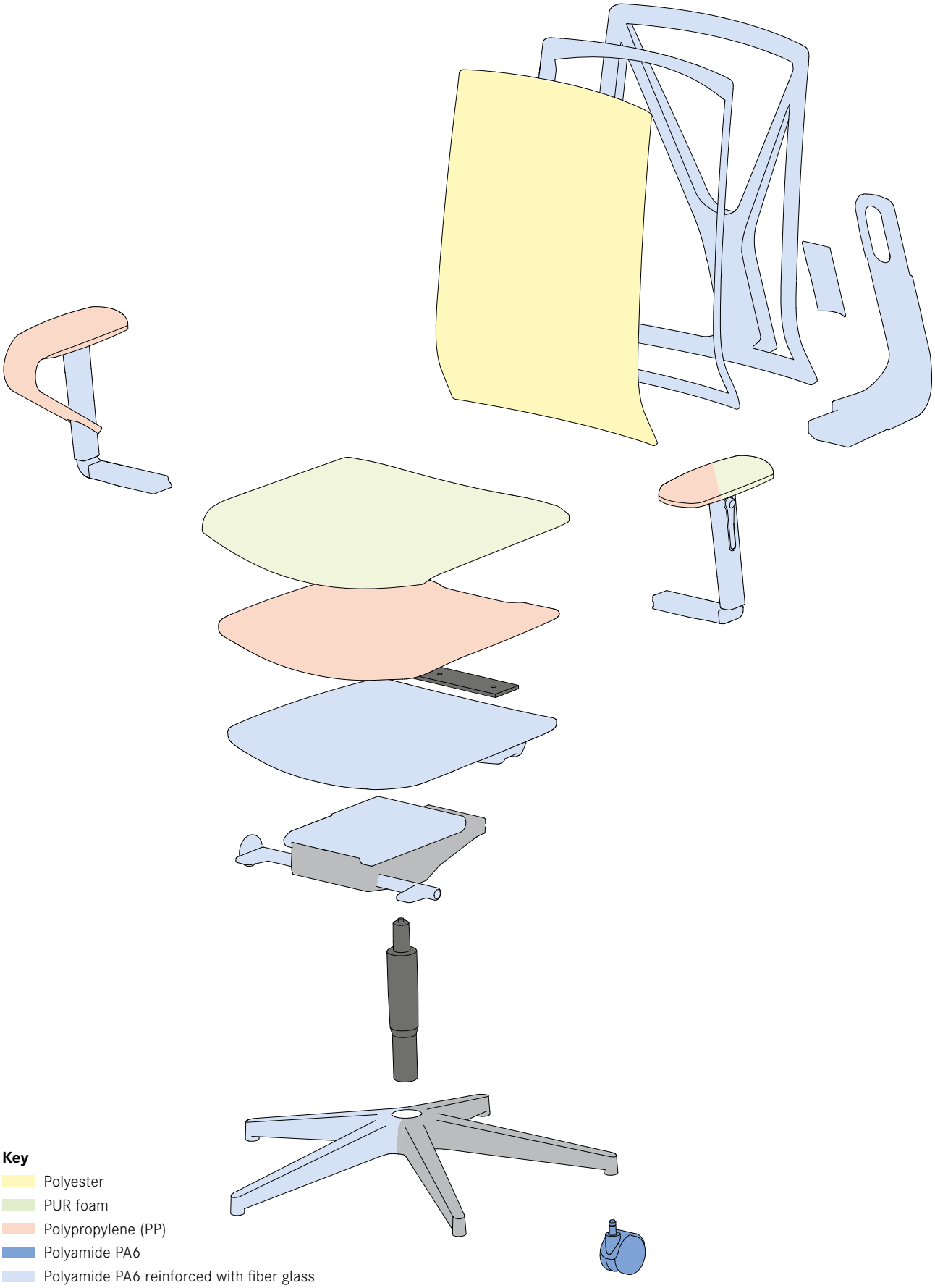
Material



Key

- Polyester
- PUR foam
- Polypropylene (PP)
- Polyamide PA6
- Polyamide PA6 reinforced with fiber glass
- Aluminium
- Steel parts – coated

Materials

The way in which Yanos is constructed allows the chair to be dismantled at the end of its working life in order to recycle most of the parts. A detailed list of the materials used follows:

Polyamide PA6 reinforced with 10 – 50 % fiber glass

Properties: The flash point of the material lies at 400°C. The ignition temperature lies at 450°C. Thermal decomposition occurs when the part is subjected to a temperature of 350°C.

Recycling: Yes – the parts can be recycled.

System parts: mechanism interior, sliding seat, 5-prong-base, support frame, upholstery frame, control button, lumbar section, J-bar, backrest support extension, upholstery support extension, upholstery frame extension, handwheel holder, armrest support

Polyamide (PA6/PA6.6)

Properties: The flash point of the material lies at 400°C. The ignition temperature lies at 450°C. Thermal decomposition occurs when the part is subjected to a temperature of 350°C.

Recycling: Yes – the parts can be recycled.

System parts: castors, glides, pads, inset

Steel parts

Properties: The parts are of very high strength with regard to breakage, traction, torsion and bending. The level of strength is higher or lower, depending on the quality grade. The parts are corrosion-resistant after electroplating. Thermal decomposition occurs when the part is subjected to a temperature of 1100°C.

Recycling: Yes – the parts can be recycled.

System parts: bolts, springs, wire cable, washers, screws, limit plate

Steel parts – coated (resin)

Properties: The parts are of very high strength with regard to breakage, traction, torsion and bending. The level of strength is higher or lower, depending on the quality grade. The parts are corrosion-resistant after electroplating. Epoxy resin powder is used to coat the parts. Thermal decomposition occurs when the part is subjected to a temperature of 1100°C.

Recycling: Yes – the parts can be recycled.

System parts: coat hanger, screws, washers, column

Aluminium (pressure die casting) coated and polished

Properties: The alloy corresponds to the DIN 1725 standard. Aluminium die casting has a high level of strength, is easily shaped and offers several finishing methods. There are different polishing levels as well as different epoxy resin powder coatings in an extensive range of colours.

Recycling: Yes – the parts can be recycled.

System parts: mechanism, 5-prong-base

PUR foam

Properties: All PUR foam parts (polyurethane) in versions made of cold cured foam or integral foam are produced without any CFCs and are created by means of a polyaddition reaction of isocyanate and polyether polyol. This results in cellular material with elastic properties. Thermal decomposition takes place at a temperature of over 180°C, and the ignition temperature is between 315°C and 370°C.

Recycling: Yes, the parts can be sent for either materials or thermal recycling.

System parts: armrest cap, padding foam, seat foam, lumbar support foam, foam extension

Polyoxymethylene (POM)

Properties: The flash point of the material lies at 370°C. The ignition temperature lies at 400°C. Thermal decomposition occurs when the part is subjected to a temperature of 220°C.

Recycling: Yes – the parts can be recycled.

System parts: spindle, handwheel

Acrylonitrile-Butadiene-Styrene (ABS)

Properties: The flash point is not applicable. The ignition temperature lies at 330°C. Thermal decomposition occurs when the part is subjected to a temperature of 300 – 320°C.

Recycling: Yes – the parts can be recycled.

System parts: support for armrest pad

Polypropylene (PP)

Properties: The flash point is not applicable. The ignition temperature lies at 330°C. Thermal decomposition occurs when the part is subjected to a temperature of 300 – 320°C.

Recycling: Yes – the parts can be recycled.

System parts: stoppers, seat upholstery support, upholstery clip, sliding part, ring cap

Polyester (PES)

Properties: Polyester fibers are flame-retardant. The mesh fibers used for Reflex have been tested according to the BS 5852 Burning Behaviour and EN DIN 1021 standards, both of which are part of the EN12182 standard, and Burning Test / Flammability according to FMVSS 302 / DIN 75200 and NF P 92 503 class M2. They are well tolerated by skin.

Recycling: Yes – the parts can be recycled.

System parts: Mesh

Cover materials

Properties: Detailed information on the composition of materials can be found on the respective fabric and leather cards.

Recycling: Yes – some of the unblended cover fabrics made from natural fibers can be returned to the suppliers. There, the covers are shredded and reused to produce new fabric. Cover fabrics made from synthetic materials can be recycled. The methods used to tan and dye the leather covers allow them to be composted without problem.

System parts: Cloth and leather covers, woven polyester

Additional information – connections

Yanos is made from a large number of single parts. The parts are all mechanically joined (= can be dismounted, detached). These plug-in and screw connections allow the different types of material to be separated when the chair is dismantled.

Exception: The PU soft foam padding of the armrests is foamed together with its shell.

Additional information – material identification

The larger parts made of Polypropylene (PP), Polyamide (PA), Polyoxymethylene (POM) and Acrylonitrile-Butadiene-Styrene (ABS) are marked with the respective material identification code for recycling.

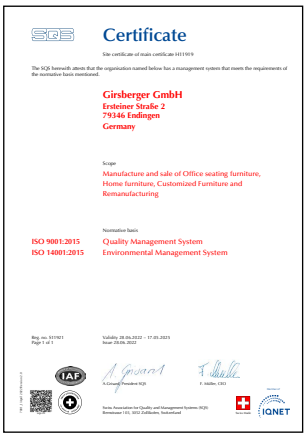
Certificates

Quality

Girsberger has extremely high quality assurance standards and is certified according to DIN EN ISO 9001.

Environment

Since 2007, Girsberger has operated an environmental management system certified to the EN ISO 14001 standard, which obliges us to continually improve our environmental performance. All materials used for the Yanos model series can be sorted into material types and recycled.



Functionality and safety

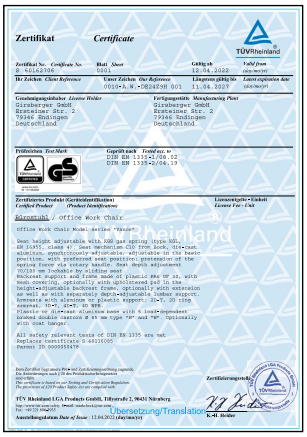
The design of the products in the Yanos model series conforms with the following standards:

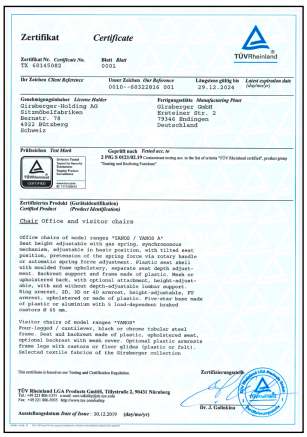
EN 1335
BS 5459
NPR 1813

The safety of the Yanos product series has been tested and confirmed by TÜV LGA with the issue of the GS («safety approved») certificate.

Moreover, TÜV LGA has issued its «ergonomics approved» and LGA «tested for hazardous substances» certificates for the Yanos.

The «Quality Office» certificate from the BSO Verband (German association of office, seating and commercial furniture companies) and the Verwaltungs-Berufsgenossenschaft (German provider of Statutory accident insurance) attests to the above-average quality of the Yanos model series.





Design

In 2011, Girsberger won the «if product design award» for the design of the Yanos chair.

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