

The design of

R

GREEN THINKING MADE

BLACK AND WHITE

The office task chair has a 125-year pedigree, and the design challenge today is to create a chair that provides great comfort as a given, while being truly environmentally smart and meeting the demanding array of international standards. *Kirn's* refreshing, engaging and energetic design reflects our determination to achieve all this while using as few materials and resources as possible.

Contemporary task chairs can be either simple or complex. We've made Kirn beautifully simple for

4 primary reasons.



Kirn was designed by Gerard Taylor (right) and Gareth Banks (left), together with the Orangebox design and engineering team.

To minimise carbon footprint

Natural resources are declining at an untenable rate, with virgin materials using the greatest levels of energy and water, from initial extraction to refining and industrial processing.

The radical rethink required starts with the stuff we use every day. At Orangebox, our aim is to minimise the materials and energy used in the creation of our products, and to design them to have the longest life possible. *Kirn* is primarily made from 100% recycled polymer feedstock, a durable, high quality material that produces 97% less CO₂ in its processing than virgin plastics of the same type.



To achieve a new manufacturing and performance finesse

Kirn's personality is expressed most clearly in its strong visual and material lightness, the result of rethinking the traditional task chair mechanism and developing a fully weight-balancing solution integrated into the framework

This not only delivers a great sitting experience, it's also enabled us to develop our first fully mesh task chair, featuring a more open, light-touch architecture.

To offer an increased sit height range

As the health benefits of being more agile and adopting multiple sitting positions while working is increasing, sit-stand work surfaces are becoming more common, placing new demands on task chairs. Kirn has been designed to offer an increased seat height range, suitable for worksurface heights ranging from 615mm to 785mm.

Kirn produces 97% less CO₂ in its processing than virgin plastics.

To be intuitive to operate and super comfortable

Shared use seating is becoming the norm in our more collaborative workspaces, which is why we've designed and engineered Kirn to be highly intuitive to operate and super comfortable to sit in - for every user. Kirn's open technical mesh provides a refined and subtle balance between support and comfort, including enhanced heat dissipation. The soft touch fibres have been engineered to provide continuous, hard-wearing three-dimensional support for petite users, heavy users and everyone in between. Unlike traditional PU foam cushions, these lightweight materials are easily recycled at end of life.



The design of



Reducing Kirn to the essentials

Kirn is environmentally smart.

The architecture of *Kirn* was developed with product longevity and material efficiency in mind. Rigorous engineering design has resulted in a simpler product, made from fewer parts and using less material.



We recognise that, to a large extent, **Orangebox's success** and growth relies on the long-term sustainability of materials, so building a future which more effectively balances economic and environmental outcomes is a key priority for our business. And, while we understand that the transition to a truly Circular Economy can't happen overnight, we want to set out on the journey, taking steps that will both establish our direction of travel for the next decade and signal our intent to the industry.

At Orangebox, the design and testing of a new task chair is typically a four-year cycle, building on the most successful elements of the chair's predecessors, as well as innovations in manufacturing and material science. *Kirn* follows in the steps of *Joy*, *Ara*, *Do* and *Eva*, meeting our aim of redefining what a great task chair should be, and at the same time exemplifying progressive, 'light touch', environmentally smart manufacturing.

Kirn is made from high quality materials to an inherently resilient design, and we've also made all of its major parts quick and simple to replace or upgrade, giving the chair a long, problem-free working life.

When it does eventually come to the end of its first life, Kim's simple construction and low part count is designed to facilitate part separation, recycling or remanufacturing. Kim's material selection and design for disassembly will allow 99% of the chair to be recycled, and its large parts carry material identifier marks.

fig.1 Intelligent manufacturing

Kirn is designed to use as few materials and resources as possible and with recycled materials wherever feasible.

1kg of *Kirn*'s recycled plastic = 0.2 kg of CO² emissions



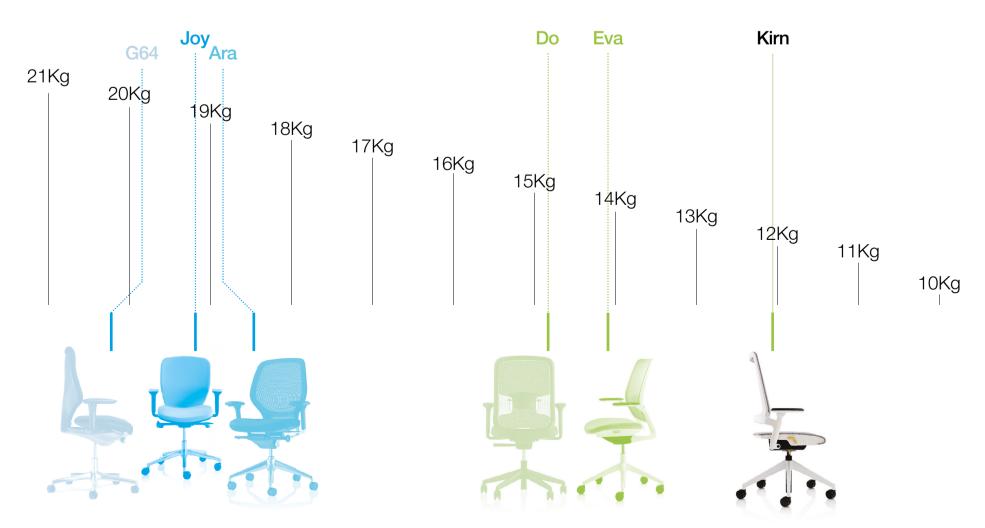
1 kg of virgin plastic = 6 kg's of CO² emissions

fig.2 Kirn's Material Footprint

metal 5.80kg foam 0.01kg fabric 1.10kg plastic 23.72kg Orangebox op's value 18.34kg 46 .95 47 .96 .97 48 .98 Kg Carbon Footprint 48 .99

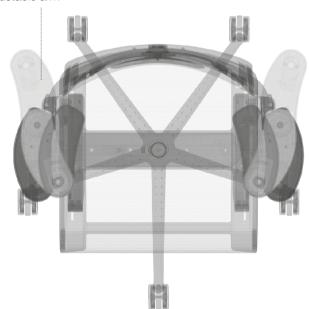
Great design is about the journey →

fig.3 The continuous quest to tread more lightly











sourced entirely from the manufacture of carpet fibres.

Using smart materials in this way is just one example of the Circular Economy thinking Orangebox is putting into practice in our transition away from wasteful resource use; part of the radical rethink required to ensure our collective future prosperity and wellbeing.

Product specification



Kirn-HBA Task armchair



Kirn-HBAH



Kirn-HBCA
Counter height armchair

Standard Product Description

Castors: 65mm black, hard tyre castor as standard.

Plastic Trim Colour: Black or white options available.

Mesh Colour: Charcoal or smoke options available. (passes BS EN 1335-1 & BS EN ISO 9241). Composition 84%, Polyester, 15% Polyamid, 1% Elastane

Base: Available in textured black.

Mechanism: Synchronous weight balancing movement with up to 20° recline

 $\mbox{\bf Gas Lift: Task chair (black)} - 170 \mbox{ mm travel. Counter height chair (brushed chrome, fitted with footring)} - 250 \mbox{ mm travel.}$

Seat: Injection moulded 30% glass filled hylon in grey or white.

Integrated seat height & depth controls. 66mm seat depth adjustment.

Arms: 2D Arm, 30% glass filled nylon injection moulded arms textured black or textured white. Soft-Touch TPU armpads available in black only. 100mm height adjustment & rotating armpads.

Back Frame: Injection moulded 30% glass filled nylon in black or white.

Headrest: Available in black or white to match back frame. The mesh is also matched to the back frame.

Optional Upcharges

Castors: 65mm black, soft tyre castors and 65mm black, soft tyre, break unloaded available as an upcharge.

Glides: 50mm diameter glide available as an upcharge.

Mechanism: Travel limiter (2 position travel limiter & back lock in the upright position).

Base: Textured white available as an upcharge.

Arms: Multi-adjustable arm available as an upcharge.

Lumbar: Adjustable lumbar support. Height 80mm (up & down) and depth 20mm (in & out) with air lumbar pad. Colour matched to back frame.

orangebox



Orangebox Smartworking® London

London EC1R 0HU, United Kingdom.
T. +44(0)20 7837 9922
email. smartworkinglondon@orangebox.com

Orangebox Smartworking® Huddersfield

Bates Mill, Colne Road, Huddersfield HD1 3AG, United Kingdom. T. +44 (0) 1484 536 400 email. smartworkinghuddersfield@orangebox.com

Head Office & Manufacturing

Orangebox Limited, Parc Nantgarw, Cardiff CF15 7QU, United Kingdom. T. +44 (0) 1443 816 604 email. sales@orangebox.com

Orangebox Smartworking® Dubai

Dubai Design District, Building 3 Office 504, PO Box 333016, Dubai, UAE. T: +971 (0)4770 7900 email. smartworkingdubai@orangebox.com

Orangebox Smartworking® New York 320 5th Avenue, Suite 600,

320 5th Avenue, Suite 600, New York, NY 10001 email. nvc@orangebox.com

www.orangebox.com