Contemporarytaskchairscanbeeither simpleorcomplex.We'vemadeKirn beautifullysimple...







The design of



GREENTHINKINGMADE BLACKANDWHITE 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.

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 everyday. 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. *Kirnis* primarily made from 100% recycled polymer feedstock, a durable, high quality material that produces 97% less CO_2 in its processing than virgin plastics of the same type.



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



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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 of the chair.

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. *Kirnhas 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.

*Kirn*is primarily made from 100% recycled polymer feedstock.



GREENTHINKINGMADE BLACKANDWHITE

Reducing Kirnto the essentials

Kirnis environmentallysmart.

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.



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We recognise that, to a large extent, **Orangebox'ssuccess** andgrowthreliesonthelong-termsustainabilityof materials,sobuildingafuturewhichmoreeffectively balanceseconomicandenvironmentaloutcomesisa keypriorityforourbusiness. 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, *Kirn*'s simple construction and low part count is designed to facilitate part separation, recycling or remanufacturing. *Kirn*'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

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



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

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

fig.2 Kirn's Material Footprint

metal 5.80kg foam 0.01kg fabric 1.10kg plastic 23.72kg Orangebox op's value 18.34kg



Great design is about the journey₁

fig.3 The continuous quest to tread more lightly



Kirnstandard arm



Kirnmulti-adjustable arm



GREENTHINKINGMADE BLACKANDWHITE

*Kirn*is predominantly manufactured using a next generation, low impact 100% recycled polymer material,

sourced entirely from the manufacture of carpet fibres.

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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 Task armchair with headrest 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.

Composition 84%, Polyester, 15% Polyamid, 1% Elastane Standards: passes BS EN 1335-1 & BS EN ISO 9241

Base: Available in textured black.

Mechanism: Synchronous weight balancing movement with up to $20^\circ\,\text{recline}.$

Gas Lift: Task chair (black) – 170 mm travel. Counter height chair (brushed chrome, fitted with footring) – 250 mm travel.

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

Base: Textured white available as an upcharge.

Seat: Injection moulded 30% glass filled nylon 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.

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.

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Orangebox Smartworking[®] London 38 Northampton Road, 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, New York, NY 10001 email. nyc@orangebox.com

www.orangebox.com