

### Background

Kentwood Office Furniture has been recovering office furniture in the USA for over 30 years. They follow the company motto of 'Go Green, Save Green' by offering customers reused or remanufactured products at a discount rate, with the option of new if the former two are not suitable.

Based in Michigan, with a further showroom in Chicago, Illinois, Kentwood was one of the first major office furniture dealers operating in both remanufactured and new wholesale. This allowed for optimum choice for customers, giving them options of both more economical pieces, as well as reducing negative effects to the environment.



# GO GREEN. SAVE GREEN.

### The *green eco* incentive!

Kentwood offers a choice of reused or remanufactured office furniture, providing environmental benefits, with up to 95% of natural resources and energy conserved during remanufacture over new production. Remanufacturing differs from other end-of-life management options in that it results in a product which is at the same quality as, or better than, a new product. It should not be confused with refurbishment, a purely cosmetic approach that improves the surface appearance of a product without having any influence on the functionality. The Centre for Remanufacturing and Reuse (CRR) definition of remanufacturing is as follows:

'A series of manufacturing steps acting on an end-of-life part or product in order to return it to like-new or better performance, with warranty to match'

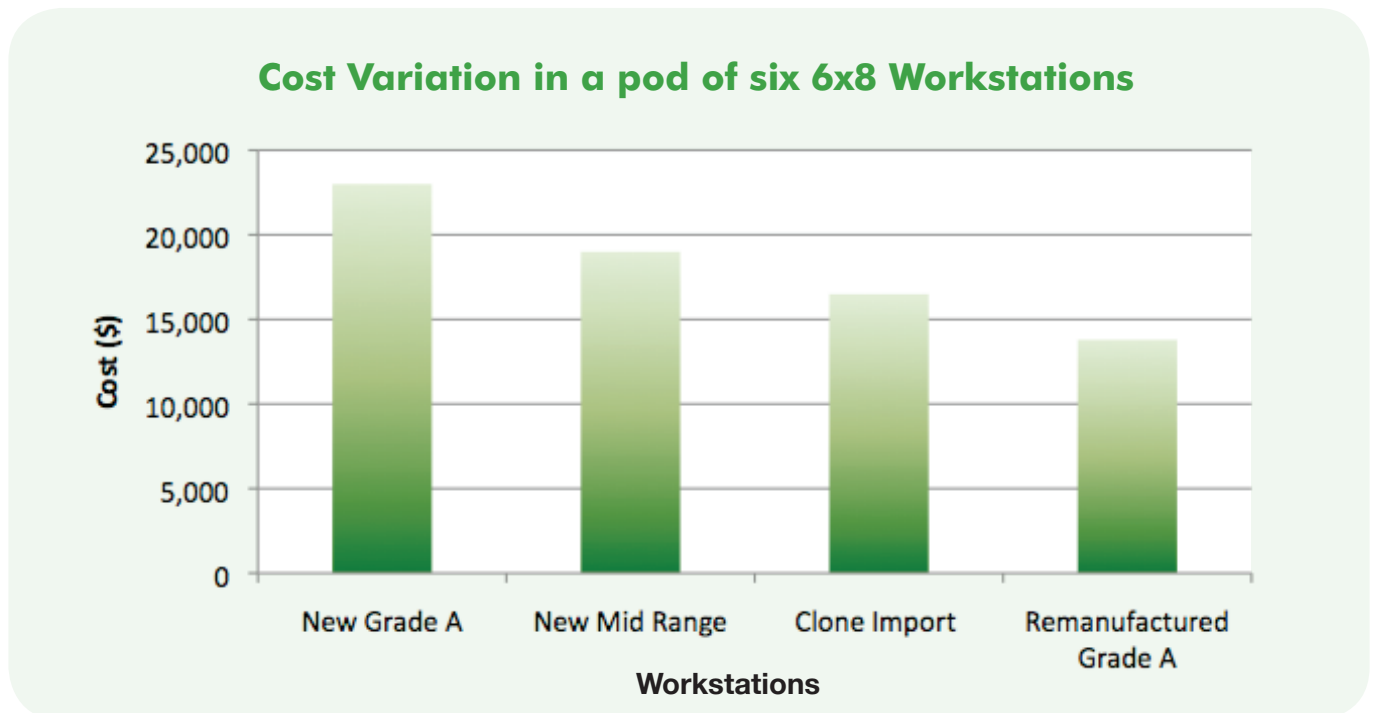
This means the furniture retains the functional ability of a new product, and meets the original equipment manufacturer (OEM) specifications.

Unlike recycling, the embodied energy is retained. Remanufacture diverts waste from landfill, and with rising landfill tax and limited space, this is in itself incredibly important. In America, the Environmental Protection Agency (EPA) estimates the disposal of furniture and furnishings to landfill from businesses alone to amount to 3 million tonnes, at a cost of \$100 million. Just a single Kentwood remanufactured workstation diverts over 450kg.



## The green \$ incentive!

Remanufactured furniture can offer substantial cost savings in comparison to new – with around 30-50% savings depending on the size and scope of the project! Using actual Kentwood prices – correct at the time of publication – the following comparison can be made using a Herman Miller 6x8 workstation AO2<sup>1</sup>:



The chart shows that, even in comparison to a cheaper brand imported workstation, savings can be significant

## Design

Kentwood ensure that the furniture they use for remanufacture is of the highest quality, and use products from some of the industry's top manufacturers, including Steelcase, Haworth, Knoll, Allsteel and Herman Miller. These products are designed with durability in mind, and often have ease of disassembly built into their frame, allowing for a more efficient remanufacturing process.

An unintentional benefit that Kentwood have found from remanufacture, is the freedom that is given to office designers. Limitations of current fashion are not applicable, and Kentwood can work with individual companies, at the time of decision to replace furniture, to take back pieces and re-work to customer specifications. They will paint, laminate or re-cover pieces as necessary, giving a wide range of final image options. Any new fabrics are still responsibly sourced, with most having Terratex® branding, and made from 100% recycled or renewable material.



<sup>1</sup> Comprised of 67" h panels, powered on spline, 1xBBF pedestal, 1xFF pedestal and 1x 48" flipper unit with tasklight. Offered with a choice of fabric, laminate, paint and trim colours – see <http://www.kentwoodoffice.com/bus.html> for more detail

## How it's done

Every aspect of the process is managed by Kentwood, from sourcing, designing, installation and removal. 'Brokers' work to identify new opportunities for procurement of furniture across the whole of North America, collecting items of various grades suitable for either re-sell as is, core product for remanufacture, or as a last option, for recycling of parts and pieces if there is no value in the product itself.

Most of these pieces come from businesses that are replacing furniture, moving offices, or some from companies which are closing down. Kentwood can either remove the items completely, or can work with the company directly and remanufacture the pieces to company specification for continued use in house.

If removing for recovery elsewhere, brokers hire local contractors to de-install, stage, package and ship the product to its final destination.



### The full process of remanufacture can be covered in the following steps:

1. Frames are sanded and repainted for a new finish with long-term performance. Colours can be selected or matched to current furniture.
2. Panels are totally stripped and then re-covered in a variety of fabrics. Fabric machines are used to ensure no sagging or bubbling occurs. A wide choice of fabrics is available, many of which have recycled content or are sustainably produced.
3. Work surfaces are replaced—lamination and custom-cut are carried out in house, to allow greatest choice of finish.
4. Overhead storage units are stripped, re-covered or repainted, and reassembled.
5. Files can be re-used or replaced with new in many styles, colors, and hardware options.
6. Electrical components are UL (Underwriters Laboratories) approved and configured to customer requirements. Products retain the original manufacturer UL listing.
7. Task lighting can be re-used or replaced with new.





## Barriers and opportunities

The main barrier faced by Kentwood, is the availability of suitable standard of furniture moving into the secondary market. In order to ensure longevity in remanufactured products, and also to keep stocks consistent, only select, high quality brands such as Herman Miller and Steelcase, are sourced. Kentwood operations are large, and therefore they have more flexibility with storage of furniture when collections are recovered.

The reputation of remanufactured furniture has been harmed in the past, by inability of small companies to meet demand, and low quality work. However, it seems the previous poor perception of the industry seems to be being shaken, with anecdotal evidence suggesting an increase in sales of remanufactured furniture in the USA, with customers becoming more aware of environmentally sound products.

## The future

The USA appears to be more receptive to remanufacturing office furniture than the UK, with a far more advanced infrastructure and greater sales in this area because of this. Many businesses either purchasing or disposing of furniture are more conscientious in the manner in which they operate, and this is gaining more focus as sustainability becomes a larger priority across the globe. This not only saves resources and energy, but is potentially driving manufacturers to put more consideration into product longevity and ease of disassembly, resulting in further savings. By mimicking the USA model, larger remanufacturing organisations (such as Kentwood) can be developed, and higher standards of input furniture become available, resulting in greater product choice, quality and financial feasibility.

