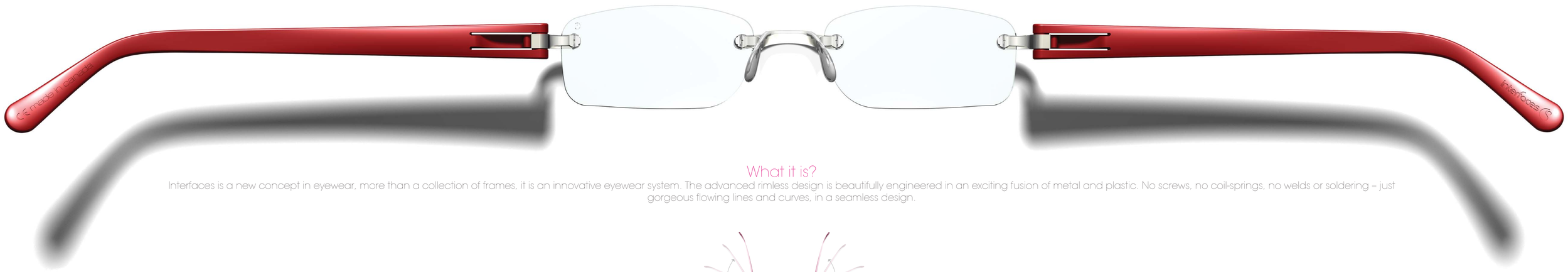
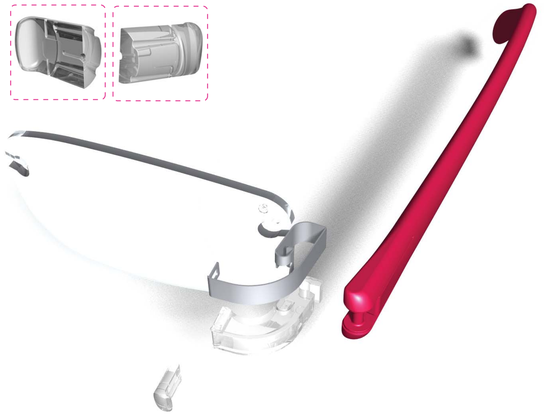


What it is?

Interfaces is a new concept in eyewear, more than a collection of frames, it is an innovative eyewear system. The advanced rimless design is beautifully engineered in an exciting fusion of metal and plastic. No screws, no coil-springs, no welds or soldering – just gorgeous flowing lines and curves, in a seamless design.



Non-compressive lens fastening system

The patent pending system consists of several small details that work together to secure the lenses in the frame.
A clear, non-compressive locking pin is a key feature. This pin is a set length and never requires cutting. This ensures a consistently aesthetic finish. As the pin is inserted, a micro snap is engaged which secures its position.
Several grooves in the pin facilitate the penetration of UV-activated light-weld adhesive. This reduces any mess caused by over-application or dripping. Similar grooves are present on the bridge and end-pieces.
UV adhesive maintains crystal-clarity, and is readily disassembled when necessary by applying heat to the bonded parts.

What was the challenge?

Prescription neutrality & Lens shape neutrality
To design an eyewear system that features prescription and base-curve neutrality, so that face form angle and tilt are not influenced by the optical lenses.
To design a frame that provides a consistent fit independent of lens power or curves.
To eliminate adjustment surprises when high minus, plus or astigmatic prescription lenses are mounted.
To design a frame that allows for the mounting of a large variety of lens shapes and sizes.

Strength, Flexibility & Lightness
To develop a frameless eyewear system that is strong yet light.
To prevent stress cracking, creep and deformation.
To eliminate screws, soldering or welding from the assembly.
To prevent loosening temples.
To design a frame that has enough flexibility so when the frame is subjected to excessive forces it is not damaged.

Cost
To develop an eyewear system with minimal manufacturing costs.

Environmental impact
To reduce the environmental impacts associated with the lifecycle of the product.

Form & Function
To develop an eyewear system with maximum adjustability. To fit the largest demographic of users comfortably, with the 1st set of production tooling.
To secure any prescription lens to the frame reliably.

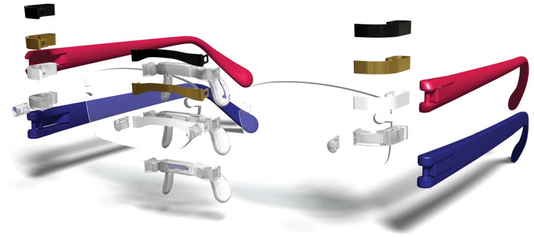
Lens mounting
To develop a low cost solution for retailers to perform the lens drilling process in house.

Flexible

The patent-pending double-action leaf-spring temple hyper extends to almost 180 degrees from the normal wearing position, and then pops back into place, with no damage to the frame

Double-action leaf-spring temples

The patent pending coil-free spring temple operates when the temples are extended beyond the open position.
Secondary action engages when the temples are hyper extended beyond 45 degrees from the open position. The leaf spring "pops" into a release mode ensuring the frame is not subjected to excessive forces that can damage it. Simply rotating the temples back to the open position resets the normal operating mode.



Customizable

The Interfaces system is easily assembled, allowing for customization of the frame, the customers can participate in the design of their eyewear by choosing from a verity of plastic component sizes and colors, metal finish, as well as lens shapes and sizes.

Prescription Neutral

The frame features prescription and base-curve neutrality; so that face form and tilt angles are not influenced by the optical lenses. Lenses are always drilled parallel to the blocking axis no tilt required, the frame is designed to provide a consistent fit independent of lens power or curve. This eliminates adjustment surprises when high minus, plus or astigmatic lenses are mounted.

interfaces

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What makes this an excellent design solution?

Prescription Neutral & Lens shape neutrality

Composite construction
To achieve strength and flexibility we combined two dissimilar materials - without screws - in a solder/weld-free assembly. 0.2 mm bands of specially-engineered hardened stainless steel reinforce the nylon bridge and end-pieces to prevent stress cracking, creep and deformation. The steel bands are inserted into corresponding grooves in the plastic parts, and also serve to lock the temples in place seamlessly. The steel also provides a unique aesthetic to the frame, and imparts a quality that plastic alone cannot.

Flexible

Double-action leaf-spring temples

Lightness
Ultra light 5.6 gram frame

Cost
To reduce manufacturing costs the design utilizes only mass production technologies and minimizes operator handling in the production.

Environmental impacts
Designed specifically to outlast changing fashion trends, our rimless collection has a longer lifecycle than conventional eyewear. Our products utilize minimal packaging and are developed with cradle-to-cradle design philosophy; every part is recyclable or reusable.

Form & Adjustability

Distribution Locations:
Interfaces eyewear was launched on Oct 30th 2008 at SILMO Paris. Today it is being distributed in Canada, France, Switzerland, UK, Israel and Kuwait and is under negotiation for distribution in USA, Austria, Germany, Italy, UAE and many other countries.

Manufacturing
The frame is made form Grilamid TR90 and Hardened Stainless steel
The frame is manufactured using injection moulding and progressive forming technologies.

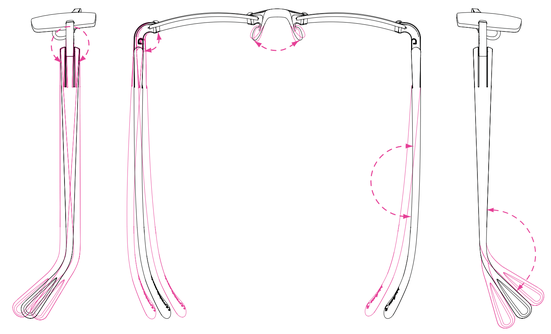
Customizable

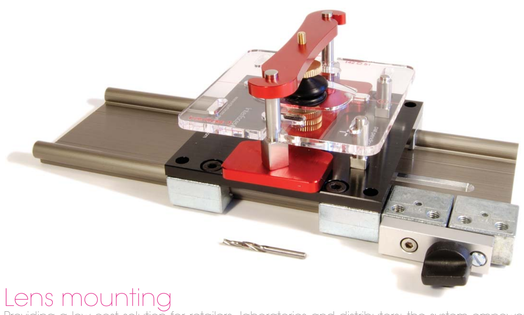
Non-compressive lens fastening system

Lens mounting

Form & Adjustability

Geometric - Organic form is derived from the function, the thin sections allow the polymer to be flexible and adjustable, were as in some sections more massive details accommodate additional functionality such as the spring leaf temples. The frame can be easily adjusted with gentle local heating of the nose pads, end pieces, temples and temple tips. The nose pads can be pinched to a narrower fit or spread wider which allows for proper fitting on a wide range of faces.





Lens mounting

Providing a low cost solution for retailers, laboratories and distributors; the system empowers them to perform the lens drilling & milling operations in house. The system is designed to allow users to mount the structure onto any standard drill bench, this ensures the connecting detail on the lens is milled & drilled perfectly symmetrical and accurate every time.
The system allows the user to secure and process a lens with very high precision using only one knob. As a part of this offering a carbide combination milling and drilling tool was designed and developed specially for this application, allowing the lens processing to be preformed without any tool changes, improving both precision and speed of the operation.

Designed by Ramak Radmard