

# ICARUS

Industrial Design





**Product** Analysis



**Concept** Generation



**CAD** Development



**Design** Development



**Ergonomic** Analysis



**Marketing** Models



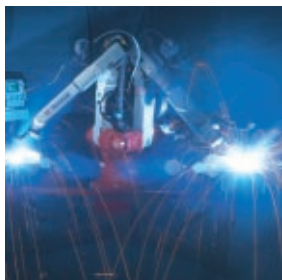
**Prototypes**



**Product** Graphics



**Documentation**



**Production** Management



**Instruction** Manuals



**Marketing** Support

**Complete services for successful product commercialisation**

Icarus Design provides services to take a product from an idea to a fully supported commercial reality. Services include analysis and research to determine product features; the full development process from concept to organisation of manufacture; pre-production marketing support via models, computer generated product renderings and digital presentations; and sales support materials including manuals, point of sale displays, brochures and packaging.

Successful products are a skilful blend of marketing and technical requirements. Our design services will assist you to develop products that have the functional, manufacturing and visual features required for market success.



### **Brikscape Bricksaw**

The Brikscape brings unparalleled portability to a hire market bricksaw. Able to be assembled and disassembled by a single person, the saw breaks down into four compact components that can be packed into the boot or back seat of a car. The saw is dedicated to the task of cutting paving bricks and 300mm paving blocks. It features a brick carriage with a unique multi-position back-stop to facilitate the positioning and cutting of differing materials and angles. The inclusion of an emergency stop button and solenoid-locked on switch enhances operator safety as the saw cannot unintentionally start when plugged in.



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**Client :** Dembicon

**Services :** Industrial Design, Sheet Metal Design.



### Vulcan Wall Furnace

A stylish replacement for the old louvred gas wall furnace. This product developed in conjunction with Southcorp Heating and Cooling features an elegant punched metal sheath and complex functional injection moulded components. Particular attention was paid to developing a logical, simplified control interface and designing unobtrusive graphic and finish elements that would allow the integration of the furnace into a wide range of interiors.





### Ultracooler Evaporative Cooler

This project in product redesign was initiated both to improve the manufacturability of the product and offer a differentiated version of the cooler to a new international market. Working within existing product assembly constraints we designed a new fascia that eliminated the historical tooling problems and then developed restrained control and branding graphics to complement the new styling.



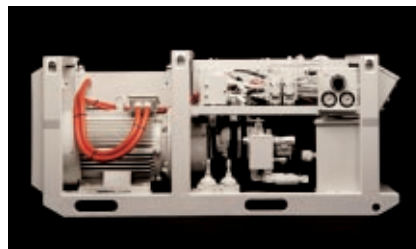


### Diamond Core Drill Powerpacks

Our original design for the LM range of Diamond Core Drill powerpacks (shown right) focused on compact, high strength construction, ease of transport, layout for manufacture and maintenance, operator ergonomics and marketing presentation.

The next generation powerpack shell delivers manufacturing cost savings by substituting fabrication and painting costs for integrally coloured, rotationally moulded components.

These parts don't rust, resist impact damage and allow a more sophisticated product appearance that includes complex curves and functional details.





### Diamond Core Drill Control Panels

Our initial redesign of the LM45 Diamond Core Drill control panel (shown right) improved ergonomics, simplified operation and reduced operator fatigue. The unit was light, compact, robust, featured a tight control envelope and clear control labelling. The new generation panel above significantly reduces the assembly complexity by using a sandwich manifold with direct hose connections and a stainless steel spine. The panel is finished with a rotationally cast shell that reduces weight, fabrication cost, does not rust and requires no painting.





### **High Speed Engineering Vehicle**

Designed to accompany military convoys this combination loader and back-hoe must be able to travel at convoy speed both forwards and backwards without the pitching and lack of stability seen in general earthmoving equipment. These styling exercises are part of a programme to develop cab requirements and body panelling for the non-armoured version of the vehicle.





### Laser Airborne Depth Sounder MkI and MkII

Icarus Design developed the internal and external finish specification for the \$40 million MkI LADS project. The system uses laser beams to rapidly record depth readings in coastal waters. LADS required a distinctive identity and professional finish for the international marketing of the system and the survey service. The project included internal and external finishes of the refurbished Fokker F27 aircraft and ground support equipment, control fascia design, project identity and promotional requirements. We subsequently provided a range of similar services for the finish of LADS MkII in a much smaller Dash 8 aircraft (bottom right).





**Austral Pacific CitiBus**

Strict dimensional constraints, vehicle design rules and highly competitive tendering procedures make designing buses for city service a demanding discipline. Buses are a complex assembly of international components, local batch production purpose designed parts and 'traditional' coach building skills.





**Austral Pacific Bus Interior**

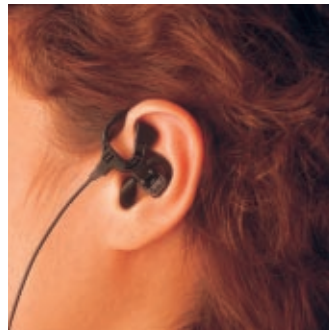
This interior cladding system for metropolitan buses applies the same design principals as the interior cladding systems for aircraft. Unlike the standard body building approach to interior finishing with localised mechanisms to cater for each requirement this continuous cladding system integrates functions such as lighting, air-conditioning, passenger grab-handle track systems and roof lining.





**Stress Man Personal Electronic Acupuncture**

Kingfisher International are active in the development and marketing of electronic acupuncture products. The Stress Man stimulates an acupuncture point in the ear associated with stress reduction. The pocket-sized control unit consists of five snap together components. Detailed ergonomic studies were used to determine an earpiece geometry that would consistently locate the required point in either ear. The earpiece delivers its electrical stimulation through conductive injection moulded components. We carried out all project stages from the establishment of a product specification to the selection of and liaison with tooling and manufacturing sources.





### Anaesthetist's Tablet

This compact notebook sized computer provides medical staff with a hand-held patient management device for use in operating theatres and on ward rounds. It integrates all the operability of an IBM compatible computer with a dedicated touchscreen software application. The computer links to the hospital network via a radio network adaptor but also features infrared and cabled communication. The built in camera and microphone permit video conferencing.

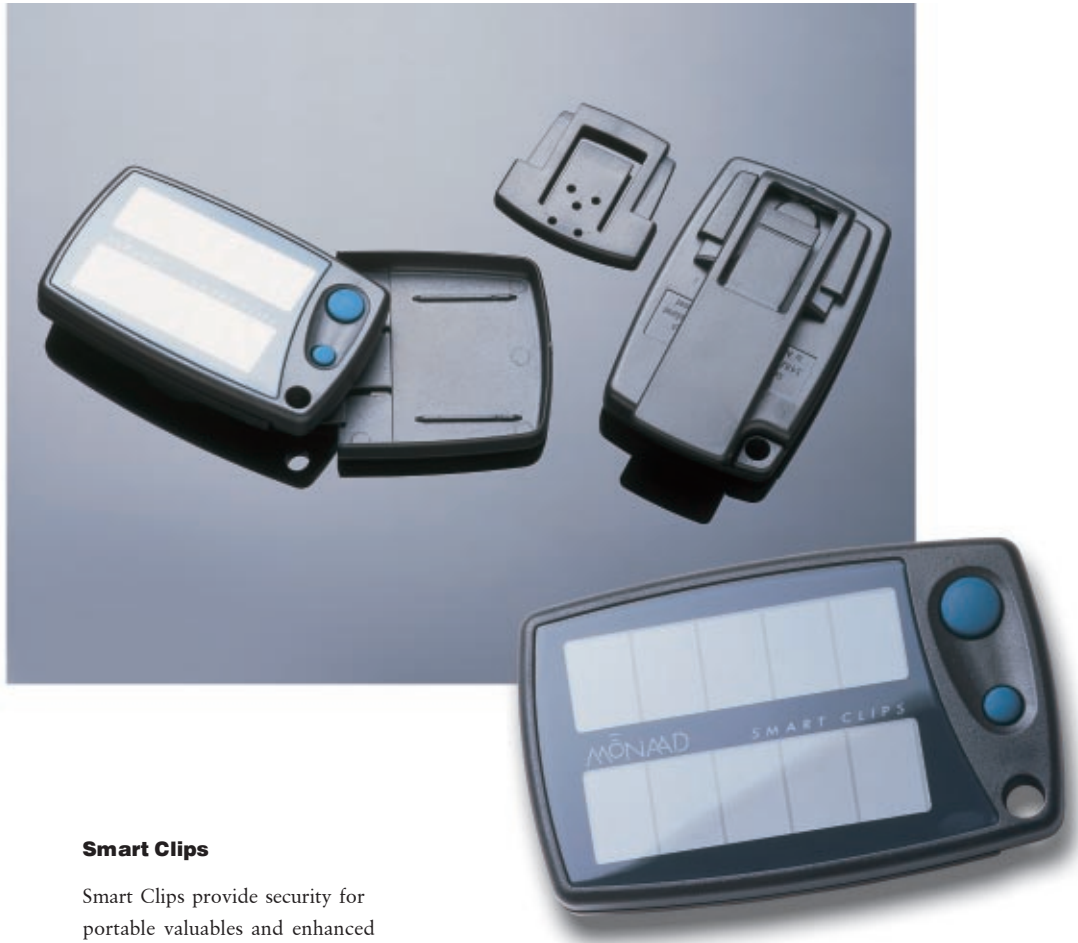




### Newcom Funge

The Funge is a compact device that replaces the standard battery housing on a mobile phone converting it to a device that can perform financial and information transactions and select between multiple service providers. The snap together plastics case houses a very high density of electronic componentry, receptacles for three sim cards and the interface for connecting to the circuitry and power supply of the phone.





### Smart Clips

Smart Clips provide security for portable valuables and enhanced features for keyless locking systems on cars. Keep one Smart Clip on your belt or key ring and attach one or more to portable items of value. When you become separated from an item the Clips provide an audible warning. They also provide a convenient way of locating misplaced items. Used in conjunction with a electronic locking system they can provide proximity locking and unlocking and electronic ignition disabling features. The Clips have integral solar charging panels and come with an extensive set of attachment adaptors.





**Newcom Funge Foundation,  
Nokia 3210 & Motorola L**

The second generation Newcom Funge is designed as an off-the-shelf component suitable for integration by third party phone designers. The Funge Foundation includes all card and sim interfaces ready to snap into an enlarged battery back shell. An accessory back for the Nokia 3210 was one of the first phones we adapted using this modular approach. Also shown (at right) is the Motorola L.





### Child Alert

The Child Alert consists of two interactive modules, one worn by the parent and the other by a child. If the child wanders more than a specific distance from the adult an alarm sounds. The parent can also manually trigger the alarm to locate a child who is hiding or out of sight. The strong snap-together mouldings are the minimum size required to house the electronics, a heavy duty 12V battery and a loud piezo speaker with resonating chamber.

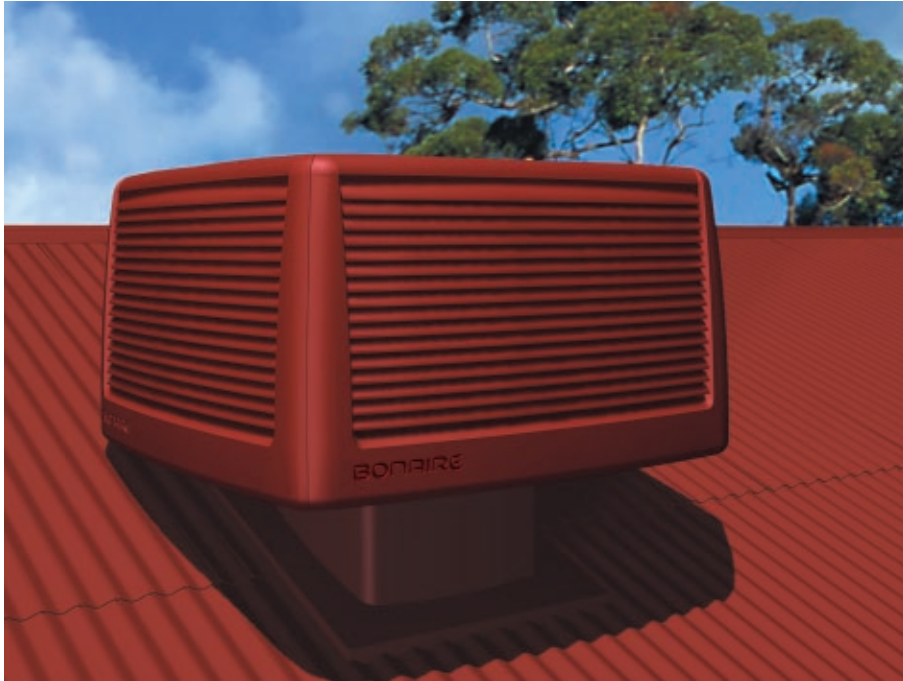




### **Shark Repelling Unit and Charger Kit**

The Sharksafe is a personal shark repelling device that operates by emitting electrical pulses that cause discomfort to sharks. The unit is worn on a belt with cables linking two electrodes positioned some distance apart on the body. The main housing with its snap-in replaceable battery module has water seals that have been tested to 20 metres depth. The unit is operated by two silicone buttons that are integral with the main housing seal. The clip-in rechargeable battery has a dedicated recharging module for use in cars or from a 240V supply.





### **Bonaire Evaporative Air Conditioners**

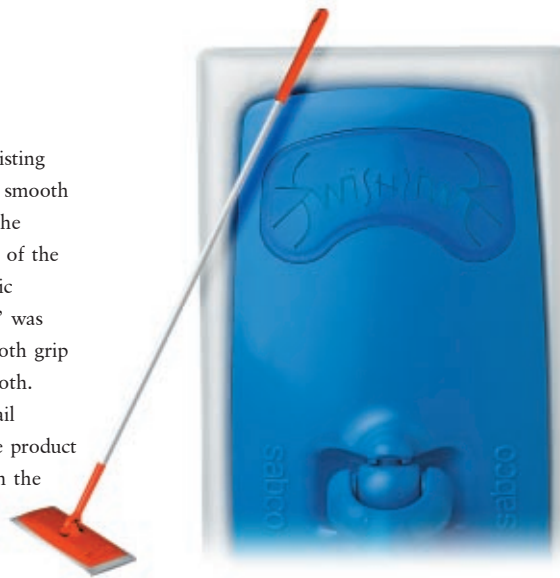
Our 1980s redesign (right) of the Bonaire Designer Series evaporative air conditioner introduced a (then) lower profile and corner to corner pad style to cover the natural anodised aluminium chassis. This product sold strongly all through the 90s. For the new millennium we proposed the sleeker fully moulded product shown above.





### Swish Floor Cleaner

For this new entry into an existing product category for cleaning smooth floor surfaces we developed the brand into a functional aspect of the product's features. The graphic treatment of the name 'Swish' was designed to function as the cloth grip for the disposable cleaning cloth. Apart from being a smart detail element this helped to link the product name with the product type in the market place.





### **GEC Marconi Adaptive Radio Modem**

The ARM-9401 High Frequency Adaptive Radio Modem is designed for military, aircraft and marine applications. Its ruggedised construction of machined and fabricated aluminium is designed to deliver reliable operation in defence environments. The crisp, simplified graphic presentation of the control interface enhances the perception of quality and reliability.

### **Fleetcom 2000 Electronic Vehicle Management System**

The housings of the Fleetcom 2000 are constructed from a mixture of heat and UV resistant injection mouldings and powder coated sheet metal parts to withstand the harsh operating conditions in heavy transport vehicles. Product labelling, identity items and finish elements, including control panel details, were all specified in the design to ensure a consistent quality of presentation.

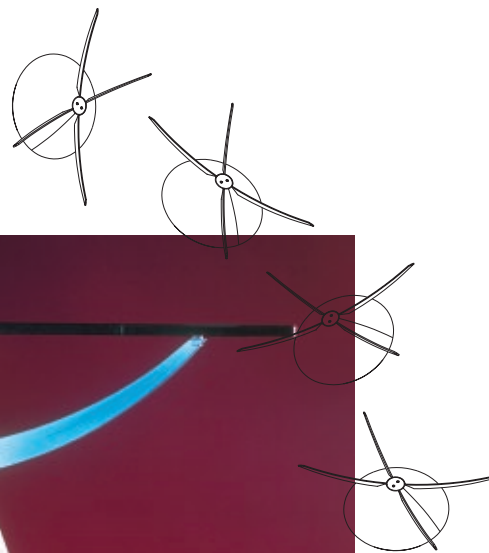
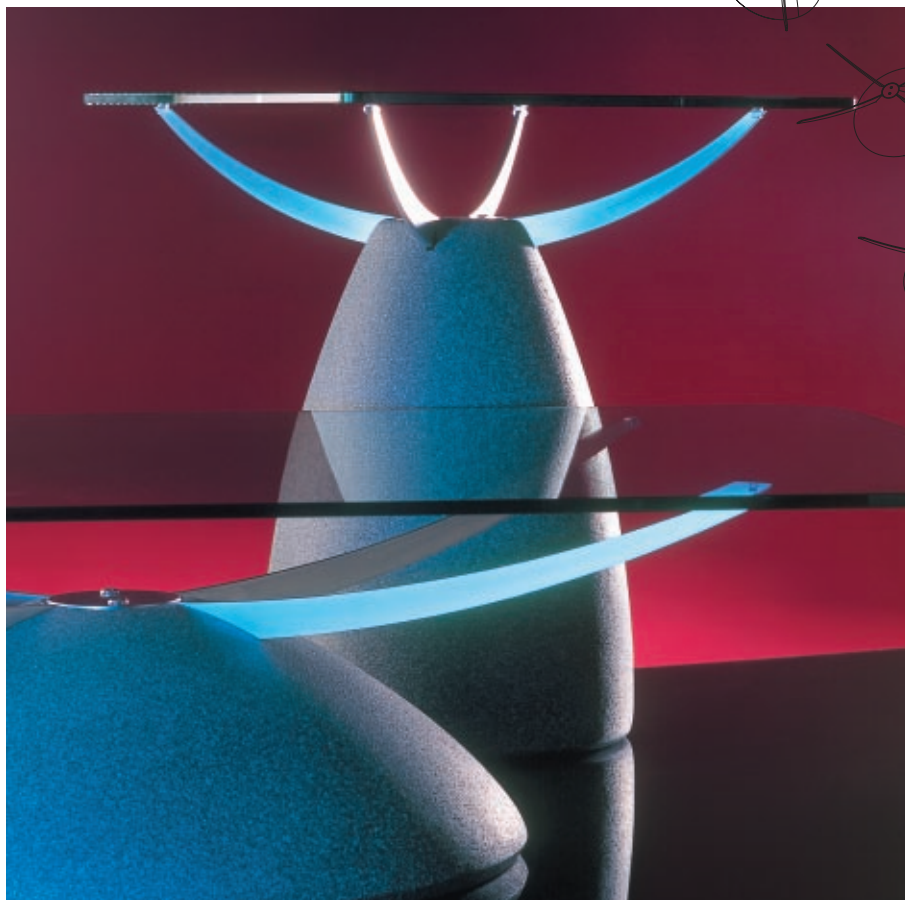


**Client :** GEC Marconi

**Services :** Industrial Design, Graphic Design.

**Client :** Computing Instruments

**Services :** Industrial Design, Plastics Design, Sheet Metal Design, Control Interface, Graphic Design.



**Creative Castings  
Apollo Range**

The Creative Castings Apollo coffee and occasional table range embodies harmonious, contemporary form with striking material contrasts. The satin chrome steel crescents emerge from their sheath of stone to sweep gracefully up and blend with the reflective glass surface. The tables' forms are evocative of lunar bodies, space hardware and the crescents of light formed on the edges of stellar bodies. These tables have been designed to maximise the benefits of the unique processes the company specialises in.





### **New South Wales National Parks Interpretation Shelter**

This shelter was designed to present the new orientation and interpretation panels that we designed for the Eden Districts of New South Wales.

Provided in kit form for erection by park rangers the bolt together frame is constructed from galvanised steel.

### **Detco Power Generation Enclosure**

A scalable enclosure designed for noise reduction and equipment protection. Options include different sound attenuation levels and types of corrosion resistance.



**Client :** NSW National Parks & Wildlife Service

**Services :** Industrial Design, Steel Fabrication.

**Client :** Detco

**Services :** Industrial Design.



## **Icarus**

Icarus is both a cautionary tale and a tale of supreme achievement. A tale of man's temperament and man's creativity.

Sporting wings fashioned by Daedalus his father, Icarus discovered the exhilaration of flight.

Daedalus had crafted the wings to his best ability and warned Icarus of their design limits, but Icarus became intoxicated with his freedom, forgot all caution and fell to his death.

We have adopted Icarus as the patron saint of designers. A reminder that our work is about people and their physical and psychological needs.

Design need not be earthbound but it must be rooted in humanity.

The challenge of design is to encompass the aspirations, motivations and limitations of those whom it must serve.

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