



**Advanced Asphalt Repair and Recycling Solutions**

## INTRODUCTION

### *IRMAC would like to present the latest IRMAC AR2 infra-red asphalt heater*

Pot holes have become a serious safety issue on roads across the World. Poor traditional maintenance techniques and insufficient budgets has led to the problem become more widespread. We at IRMAC have developed what we believe is the best technology to provide an eco friendly, cost effective, sustainable and advanced asphalt maintenance and repair system.

Infra-red asphalt heating technology is employed using the Patented AR2 process. The result is seamless and monolithic giving greatly increased life expectancy when compared to traditional methods. Vertical joints, the achilles heel of the standard method of repair are completely eliminated. All this is achieved whilst reducing material and energy use. Prevention is better than a cure, the SEALCOAT system protects the road surface from high temperatures, ultra violet and freeze-thaw reducing the formation of pot holes.

The IRMAC AR2 system has already been used extensively by many Local Authority, Civil Engineering, F1 Motor Racing Circuits, Supermarket Chains, Blue Chip Companies in the UK.

## BENEFITS OF THE IRMAC SYSTEM

As well as pothole repair the IRMAC AR2 can also be used for re-surfacing, surface dressing, preformed markings (including floor graphics), white line removal, traffic calming, expansion joints and water proofing.

## ECONOMIC & ECOLOGICAL

**99% of recycling of existing material so producing no waste materials**

**80% smaller Carbon footprint than traditional repairs**

**50% to 90% less of new material needed to be used in repairs**

**50% reduction in cost over traditional repairs**

## OPERATIONAL

- A typical repair takes only 20 minutes to complete using AR2 infra-red technology.
- Allows for productivity range of 60 sqms per day per two man team.
- The control management heater system gives the most precise application of infra-red heat enabling the system to work with different types of asphalt and surface dressing.
- The heater is a fully self contained independent unit, with fully rechargeable and refillable designed host vehicle.
- The fully portable heater, fitted with adjustable rubber wheels allow the machine to be moved with ease into extremely restricted spaces.

## IRMAC PRODUCTS

With the AR2 heater being a completely self contained unit. IRMAC can provide, very cost effectively, just the AR2 heater itself. Ideal for existing road maintenance or civil contracting companies that already have necessary plant and equipment in place to maintain asphalt and macadam. As well as being able to tailor a package to provide any combination of equipment up to a complete package.

## IRMAC AR2 ASPHALT HEATER SPECIFICATION

### Dimensions:

- Length: 3200mm
- Width: 1100mm
- Height: 860 mm
- Weight: 445kg

### Power:

- Infra-red asphalt heater 2 x 1 sq metre self contained specification.
- 2 x 1m x 1m stainless steel burner pods.
- Energy - LPG 80 litre refillable tank.
- 1 x 12v 200 amp gel filled battery with 24v converter.

### Charging Options:

- Charging overnight and condition.
- Solar panel charge whilst working.
- Inline charger to plug in to host vehicle.
- Led touch screen temperature & time controls.

### Ignition:

- 24v 30 sec silicon glass 1300°C 5 secs with 0 to 50°C first stage system check 50 -150°C within 60 secs Gas safe.
- Control system - Led touch screen through processor to control
- time burner temps ambient temp surface.
- Temp ignition start up and system ignition and emergency stop  
Powered by pre mix 24 v fan fitted with twin solonoid gas valve fully adjustable Fans are fitted with k and n washable filters.

### Options:

- Exterior gas take off to run accessories and tools
- 12 v exterior take off to run working hazard lights

### IRMAC SEAL COAT:

Sealing an asphalt or macadam area with IRMAC's Specially formulated SEALCOAT can restore and preserve all modern asphalts and macadam surfaces, that have degraded due to oxidation and trafficking over a period of time and where major repairs are not necessary.

The Sealcoat enhances the surface regenerating its original rich deep colour as well as increasing the anti-skid properties of the macadam up to a PSV of 68. Repeat coatings are applicable within 5 years, suitable for driveways, footpaths, estate roads and surfaces not subjected to high speed traffic flow.





## IRMAC Hotbox and Trailers

*(UK specification may vary worldwide)*

The IRMAC hot box utilises the same ultra efficient heating technology as built in to the AR2. Hotboxes are fuelled by LPG and can keep 1 ton of new asphalt at 100°C for up to 48hours.

Hotboxes can be supplied separately or fitted to any vehicle. But are usually supplied fitted to one of our custom made trailers specially designed to also carry a vibrational roller.



## Vans

*(UK specification may vary worldwide)*

We can provide Renault Master or Vauxhall Movano long wheelbase mid roof vans.

Fully fitted out with chequer plate including lights, loading ramps, on board pulley and battery charging systems.



## Peripherals

*(UK specification may vary worldwide)*

We also can supply all other peripheral equipment from JCB VMS 71 vibrational rollers, road traffic signs, traffic lights, Rakes, Brushes, Spazels, Bitumen sprayers, Hand Lances etc.



## Training

We recommend and provide full in house certified training courses that fully teach how infra-red repairs are done, up to fully covering the operation and maintenance of the operational handbooks and course guides are provided for future reference.

### 3 Levels of course:

**Level 1** - Operator

**Level 2** - Supervisor

**Level 3** - Training Provider & Service Engineers

## DISTRIBUTOR DETAILS:

### Distributors In:

UK • IRELAND • U.A.E • OMAN • SAUDI ARABIA • SYRIA • YEMEN • QATAR • JORDAN • IRAQ • S. KOREA  
HONG KONG • MALAYSIA • SINGAPORE • THAILAND • VIETNAM

*Irmac AR2 Heater UK Patent Pending Application Number 1120383.3*