

Proteus Equipment Static Eco Box

Dependable products for demanding environments



Single-phase power



12, 16, 20 and 30 tonne capacities available, with models 20 tonnes and under able to run from a single-phase power supply.



Low emissions



Approximately 80% reduced carbon emissions, compared to an equivalent sized diesel static Hot Box.



Flameless heat



Store asphalt for up to 3 days, using the flameless thermostatic electric zonal heating and greatly increased insulation.





Proteus



Flameless heat



Fully electric zonal heating



Greatly reduced CO₂ emissions



Lower power requirements



Thermostatic temperature control



Huge increase in thermal efficiency

The Proteus Eco Box is designed to replicate the performance of a traditional Static Hot Box, but with a **huge reduction in carbon emissions**. This is achieved by zonal thermostatic temperature control, and **vastly increased insulation** and thermal efficiency.

The main downside to a traditional electric Static Hot Box is the necessity for three-phase power, which is often not available on-site, meaning many customers had no option but to choose a fossil fuel-burning Static Hot Box instead. However, these technological advancements mean that Eco Boxes up to 20 tonne capacity can be run from a **single-phase power supply**, making a fully electric Hot Box - and all the associated cost and environmental benefits - more accessible than ever before.

A 20 tonne capacity Eco Box has a maximum power draw at any one time of around **5kW**, thanks to its **flameless zonal heating** which allows the power to be moved around the Hot Box as needed. In terms of carbon emissions, this should result in a reduction of **approximately 80%** compared to an equivalent fossil fuel-burning model.

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We needed to replace our propane gas powered unit so when the manufacturer, Proteus Equipment told us they had a prototype all-electric unit, we jumped at the chance to trial it!

Costing much the same to purchase as an equivalent gas powered unit, the hotbox enables us to be self-sufficient with our energy consumption and gives the crew a consistent supply of hot asphalt to carry out local pothole and patching work.

- Dave Blackburn, Dorset Highways Waste & Recycling Manager

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Dorset Council received special recognition for its use of the Eco Box, winning a silver award at the International Green Apple Environment Awards - which featured more than 800 nominations worldwide.

Their plan involved running the Eco Box from solar panels installed on the depot's roof, making it self-sufficient. The judges said of their project: "In pursuit of environmental goals, Dorset Council optimised renewable energy by utilising solar panels to power their all-electric asphalt Eco Box, reducing carbon emissions by 80,443kg/year."

As a result of this International Green Apple Award success, the council has been invited to accept Green World Ambassador status and have its winning paper published in The Green Book (the leading international work of reference on environmental best practice) so that others around the world can follow their lead and learn from their achievement.



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