

## SHORT WAVE INFRARED HEATING CASE STUDY 4 - MINE SITE CAMP

Many mine site camps are located in remote desert areas. Mine camps offer a comfortable environment for their fly in/fly out workers, with recreational facilities such as courtyard areas. However, a desert climate can have very cold minimum temperatures from May to October, especially during the morning and evenings. This means outdoor heating is required, usually supplied by portable gas patio heaters.



Typical mine camp courtyard area with gas patio heaters.

A better option is short wave halogen infrared heaters. These heaters have reflectors that project meaningful heat to a wide area – up to 3m away. This allows overhead mounting, freeing up the floor space. These heaters are very efficient, for like sunlight, short wave infrared travels loss-free through the air to transfer maximum energy to the target area.

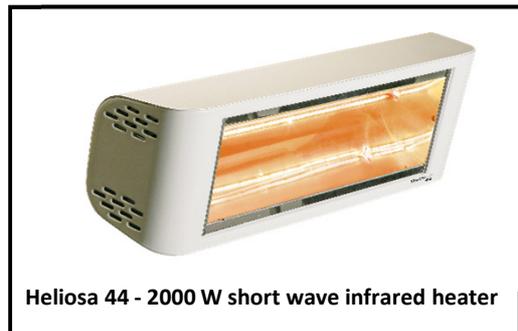
Each lamp consumes 2000 watts. With current power prices, this means around \$0.70 per hour, significantly less than the \$1.80 per hour for a 9 kg gas bottle. And being electric, they can be wired into zones to operate only when patrons are nearby.



Now overhead electric heaters warm people in the courtyard, eliminating the need for cumbersome gas patio heaters.

All gas heaters are inefficient in open areas as the heat is concentrated under their shields and easily dispersed by breezes. Gas heaters also tend to be left on, so when patrons leave the area, energy is wasted heating empty space. Another problem is that non-flued gas burners pollute the air, limiting the use of blinds to protect the area from wind and rain.

But the biggest drawback is that a standard gas bottle only last around 10-12 hours. This means a daily chore of removing the bottles to top up the gas every morning.



Heliosa 44 - 2000 W short wave infrared heater

For this mine camp 800 kilometres away from Perth, cumbersome gas patio heaters were replaced with infrared. The new heaters were installed overhead to warm evenly all those sitting at the outdoor tables. The heaters were grouped into “zones” so the number of working heaters match the number of people using the area.

Now patrons can instantly activate heaters for their particular zone and keep the heaters running until they leave the area.

Staff no longer have to fill up gas bottles or worry about bottles running out.

For more information, contact us.

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