

Quick Facts:

Location:
Kaohsiung, Taiwan

Client:
Kha Shing Enterprise Co, Ltd.

Nature of Project:
Leisure

About the client:
Kha Shing Enterprises Co. Ltd., has grown in reputation since 1977 to become one of the largest luxury yacht builders in Asia.

System specifications:

- DWS400 Loose wire system
- Warmup® XSTAT thermostats
- 200W/m² heating mats

Warmup is the only underfloor heating accredited by all these leading institutions:



Warmup brings style and comfort to a luxury yacht.



The Challenge

One of their clients placed an order for a 100ft motor boat, complete with underfloor heating in the Master stateroom, VIP, Port guestroom and Starboard guestroom ensuites. Onboard safety is of paramount importance in this case.

The Solution

In a constant effort to provide their customers with the highest quality and luxury products, they searched for and selected Warmup® to supply the electric underfloor heating for their on-board bathrooms and ensuites. After reviewing the drawings, Warmup® advised and supplied their 240V 200W/m² matting systems and loose wire to satisfy the floor area requirements for the exquisitely appointed ensuites.

The Result

The Yacht offers luxury in a very customized level of comfort and style. Not only does underfloor heating dry floor quickly, but it also reduces the humidity and its effects such as dampness in surfaces, very common when you are at sea.

Master stateroom head ensuite- 2.79 m²

VIP head ensuite- 0.81 m²

Stbd guestroom ensuite- 1.09 m²

Port guestroom ensuite- 1.07 m²

Products Used

DWS Loose Wire system (DWS)

Warmup® loose wire system is flexible and ideal for quick and easy installation in irregular shaped areas. This ultra thin dual core heating element won't raise floor levels. Suitable for floor finishes such as ceramic tiles, stone and slate. There is no need to dig up the floor and no need to mix concrete.



Technical data:

- Operating voltage 230V: 50Hz
- Cable thickness: 2mm
- Average output rating: 150 W/m²
- Inner/Outer Insulation: Advanced Fluoropolymer
- Single 3m long 'cold tail' connection lead
- Approvals: ASTA BEAB, CE, KEMA & GS
- Lifetime Warranty & SafetyNet™ Installation Guarantee

PFM matting system (PFM)

Warmup® mat systems are perfect for heating up a large or regular-shaped room. Just 2mm thin, this multi-strand core, double-insulated element is the toughest and thinnest wire you can buy. Installation is as quick and simple as rolling out the mat with pre-spaced wired. Sturdy fibreglass mesh gives it extra durability while super-sticky double-sided tape allows secure installation. Multiple heaters can be combined to cover larger areas.



Technical data:

- Operating voltage 230V: 50Hz
- Width: 500mm (0.5 metre)
- Mat thickness: 3mm
- Inner/Outer Insulation: Advanced Fluoropolymer
- Output rating: 100W/m², 150 W/m² and 200 W/m²
- Single 3m long 'cold tail' connection lead
- Approvals: ASTA BEAB, CE, KEMA & GS
- Lifetime Warranty & SafetyNet™ Installation Guarantee



Warmup® XSTAT programmable thermostat

Warmup® XSTAT is a flush mounted, dual-sensor digital thermostat so easy to program that there is hardly any need to read the instruction booklet!

Technical data:

- Supply voltage: 230V: 50Hz
- Output relay SPST or 1A inductive load: 16A, 3,600W
- Built-in interrupter: 2-pole, 16A
- Temperature range: 0 / +40 °C
- Limitation of range: +5 / +55 °C
- Ambient temperature during operation: 0/+40°C
- On/off differential: 0.4°C
- Sensor type: NTC, 3 m
- Dimensions (H/W/D): 86 x 86 x 34 mm
- XSTAT Clock function: 4-events program/7 days
- XSTAT Housing: IP 20
- XSTAT Size of display (H/W): 26 x 39 mm
- XSTAT Installation depth: 14mm
- Approvals: CE, ASTA BEAB
- Available in white and graphite

Product Application

