

# WATERWARE

MODULAR
PLANT ROOM SKIDS

waterware.co.nz

# **BESPOKE** | PRE-PLUMBED | PRE-WIRED | PRE-TESTED | TRANSPORTABLE

Commercial duty domestic hot water and or central heating plant rooms designed and built off site according to specific installation requirements. Cost contained, these turnkey modular plant rooms are built on a custom designed steel chassis which is transported to site fully assembled, needing only basic wiring and plumbing connections to make operational.

#### **Domestic Hot Water**

Commercial quantities of domestic hot water are generated via an optimised combination of appliances and duplex stainless steel hot water cylinders – the selection of which may be influenced by site limitations, client preference, performance requirements or fuel sources available on site.

## **Central Heating**

The same heat source used to generate the domestic hot water can also be utilized to load share and generate the appropriate temperature water for underfloor and or radiator central heating systems or even for heating large pools.

#### **Delivery and Commissioning**

Typically the completed skid is transported via flatbed truck and lifted into position via appropriate lifting eyes incorporated into the chassis design. According to the availability and competency of local trades, Waterware can also contract in to commission the installation if required.





# **PRIMARY COMPONENTS**



#### **VAILLANT AROTHERM HEAT PUMPS**

Vaillant aroTHERM air to water heat pumps harvest free energy found in the air outside the building envelope even when external temperatures drop as low as -10°C. Engineered in Germany, Vaillant heat pumps offer world leading quality and reliability.

| Model                                       | HPV9   | HPV16  |
|---|--------|--------|
| Heat output (Water 35°C / Air 7°C D.B):     | 8.1kW  | 14.6kW |
| Operating efficiency (according to A7/W35): | 470%   | 450%   |
| Height:                                     | 975mm  | 1380mm |
| Width:                                      | 1103mm | 1103mm |
| Depth:                                      | 463mm  | 463mm  |
|   |        |        |



#### **VAILLANT ECOTEC GAS BOILERS**

Vaillant ecoTEC gas boilers are a premium quality, high performance condensing boiler packed with features which result in the most reliable and lowest running cost boiler available today.

| Model                  | GBV15  | GBV24  | GBV37  | GBV46   | GBV80   | GBV120   |
|------------------------|--------|--------|--------|---------|---------|----------|
| Heat output (80°/60°): | 3-15kW | 5-24kW | 6-37kW | 12-44kW | 15-75kW | 22-112kW |
| Maximum efficiency:    | 112%   | 112%   | 112%   | 108%    | 109%    | 109%     |
| Height:                | 720mm  | 720mm  | 720mm  | 800mm   | 960mm   | 960mm    |
| Width:                 | 440mm  | 440mm  | 440mm  | 480mm   | 480mm   | 480mm    |
| Depth:                 | 335mm  | 335mm  | 403mm  | 450mm   | 602mm   | 602mm    |



### **GRANT VORTEX DIESEL BOILERS**

Grant Vortex diesel boilers are a premium quality, high performance condensing boiler made in Ireland. They are quiet, clean burning, reliable and are a practical option particularly in areas lacking reticulated gas.

| Model                  | DBV26  | DBV36   | DBV46   |
|------------------------|--------|---------|---------|
| Heat output (80°/60°): | 5-26kW | 26-36kW | 36-46kW |
| Maximum efficiency:    | 95%    | 97%     | 93%     |
| Height:                | 860mm  | 900mm   | 1234mm  |
| Width:                 | 470mm  | 470mm   | 563mm   |
| Depth:                 | 603mm  | 603mm   | 786mm   |
|                        |        |         |         |



#### PROTANK DIRECT HOT WATER CYLINDERS | 500L and 1000L

Protank direct hot water cylinders are designed for high demand hot water production using the high output 'Habanero' heat exchanger module or as a stand alone buffer tank for direct water heaters.

#### **Features**

- 800kPa or 1000kPa cold water expansion installation kits
- All tapping's including the inlet and outlet ports are side mounted for easy access and reduced overall height
- Direct mount pressure relief and cold water expansion valve ports vertically aligned for easy waste connection
- Up-sized 50mm inlet and outlet ports for low pressure drops and high flow rates
- Integrated temperature gauge port
- Convenient installation kit including gauge, pressure relief valve, cold water expansion valve & primary thermostat



#### **OPTIONAL 'HABANERO' MODULE**

In place of the traditional coil in tank style calorifier, together with RM Cylinders we have developed an external heat exchanger module which manifolds directly into the accumulators pre-arranged ports.

| Model                           | CYSH100              | CYSH200    |
|---------------------------------|----------------------|------------|
| GEA Heat exchanger brased plate | AISI304 brased plate | AISI304    |
| Maximum transfer                | 100kW                | 200kW      |
| Primary flow required           | 8.8m3/hr             | 14.7m3/hr  |
| Primary pressure drop           | 41kPa                | 35kPa      |
| SS Recirc. pump size/volatge    | 32mm, 230V           | 32mm, 230V |
| Pump max consumption            | 190W                 | 225W       |



#### CALEFFI PRESSURE AND TEMPERATURE CONTROL VALVES

Caleffi from Italy is one of Europes largest and most highly respected manufacturers of plumbing and heating control valves. Waterware has represented Caleffi's full range of domestic hot water and central heating control valving in NZ for over 20 years.











# **RECENT PROJECTS**

Star Mountain Hilton Hotel Papua New Guinea: 212 room 5 star hotel and convention centre.

3 x 120kW LPG boilers and 4000 litres of storage.









Sherwood Lodge Hot Water and Heating Skid: 80kW gas boiler and 1000 litres of storage.

Set on three acres of alpine hillside in Queenstown overlooking Lake Wakatipu and the Remarkables range, Sherwood offers a unique setting to unwind, and reconnect with self and nature.

Stratford Pool Heating Skid: 4 x 120kW gas boilers and heat exchangers.

The TSB Pool Complex has a 25m, 7 lane heated indoor pool, an indoor learners pool, an outdoor toddlers' pool and showering facilities.

Village At The Park Hot Water and Heating Skid: 3 separate skids, the latest 170kW gas boiler and 1000 litres of storage.

Village at the Park Lifecare is built on the site of the former Athletic Park and provides a range of aged life care options for its residents.

Woodlands Resthome Heating Skid: 4 x 120kW gas boilers and 1000 litres of storage.

The Woodlands Resort resthome caters for those aged over 70 years young and includes an onsite hospital facility.