



**thermowave**  
brand of Neison Group

[www.thermowave.eu](http://www.thermowave.eu)

## In the land of the backpackers

**In 2010, thermowave delivered five TL 500 high-pressure appliances from the thermolinePlus series to Australia. They were sold to the Australia plant manufacturer Gordon Brothers Industries based near Melbourne.**

The appliances have a heat load of 4 x 1250 kW and 1 x 1510 kW and are used to cool a mine at a depth of approximately 500 m. At this depth the atmosphere in the mine is extremely aggressive and corrosive due to the high level of humidity. This makes huge additional demands on the pressure frame of the plate heat exchangers.

The water column bearing down on the apparatuses exerts a pressure of 46 bar. With conventional plate heat exchangers, it was previously impossible to withstand such high pressure. With the development of our thermoPlus product line, however, design pressures of 50 bar on the module side and 25 bar on the gasketed side are now possible for the first time.



### Technical data

Business Line:	Refrigeration
Application:	process cooling
Country:	Australia / Sunshine
Refrigerant:	water
Product:	thermolinePlus TL 500 KGGL

thermowave Gesellschaft  
für Wärmetechnik mbH  
Eichenweg 4  
06536 Berga  
Germany

thermolinePlus appliances are extremely efficient. Combined with their suitability for pressures of 50 bar they are the ideal solution for the relatively small logarithmic temperature differences of 3 K in this application.

The advantages for the end customer lie in a low energy consumption and lower investment costs compared with conventional solutions. Whereas it was previously the norm to use pressure breakers or considerably larger, heavier and more cost intensive tube bundles, a single plate heat exchanger is now sufficient to solve the problem.

This use is just one of many options that can be covered by our thermolinePlus product line. thermolinePlus appliances are also used successfully used as high pressure condensers, cascade heat exchangers and in various ways in the CO<sub>2</sub> technology.

<b>Fabr.no.</b>	<b>Media</b>	<b>Plate type</b>	<b>Gasket</b>	<b>Plate material</b>	<b>Modul-welded</b>
FN 36020	water	TL 500	NBR	1.4301	x
FN 36021	water	TL 500	NBR	1.4301	x
FN 36022	water	TL 500	NBR	1.4301	x
FN 36023	water	TL 500	NBR	1.4301	x
FN 36024	water	TL 500	NBR	1.4301	x