

# **wilson** **Solar Dairy Hot Water Panels**

## **COST EFFECTIVE SOLAR SOLUTIONS**

Wilson has added to their successful range of dairy heaters an economical solar hot water system to pre-heat the water before entering the hotwater cylinder. Wilson has chosen state of the art evacuated tube collectors and heat pipe technology. The reason we have selected this system is this technology is approximately 50% more efficient than flat plate collectors. The energy collected by the tube is then transferred to the water by a hollow copper pipe and in our case this water is stored in a huge 310 litre 304B stainless steel cylinder. Evacuated tube technology has been used for many years in Germany, Canada, China and the UK and these systems can be used for heating domestic hot water, pools, hydronic systems and of course water required in dairy sheds. Each kitset contains a 310 litre cylinder, 4.3M<sup>2</sup> (30 evacuated tubes), stainless steel frame and associated hardware. The frame is preset at 45° which is the optimum angle however it can be adjusted slightly if required.



# wilson Solar Dairy Hot Water Panels

The kit takes about 3 hours to assemble and weighs approximately 400 kgs when full. If the unit is intended to be roof mounted we recommend checking with your local council whether building permits and/or engineering reports are required prior to installation. A north facing orientation delivers the best possible performance. This system has been designed to pre-heat water during the day and following the evening milk the contents of the solar tank/s can be transferred to the existing dairy cylinders for storage or boosting for the morning milk. Following the water transfer to the dairy cylinders the solar tanks will then be refilled for heating during the day. If the dairy currently uses 800 litres per day then 3 Wilson kitsets would be required to provide the volume of water used.

