

Case Study Slink Skins, Thornbury

Drive to sustainably lower energy costs

Slink Skins is a well-established tannery based in the heart of Southland. Founded well over 40 years ago by Jack Hazlett and now run by his son Jonny, Slink Skins exports highly refined leather skins to the world. Its products find their way to high-end fashion houses in Europe that cater to a sophisticated clientele, principally in European markets.

Slink Skins has a considerable requirement for thermal energy for use in a variety of processes. These include washdowns, skin drying and dye processes. To date, the thermal energy needs of the business had been met with two steam boilers fired by LPG trucked in with bulk trucks.

In recent years, the cost of LPG had risen considerably, triggering a re-think on how to best meet the energy needs of the business going forward.

Following considerable research on behalf of the team at Slink Skins, they were put in touch with Spark Energy by one of Spark Energy's existing clients in Dunedin.



Slink Skins Tannery, Thornbury

Designed for success

Detailed analysis was undertaken of historical energy use to determine the projected return profile for the investment in modern wood boiler technology.

Highly favourable projected savings, in combination with a mechanical design that would see the retention of the existing heat sources (for latency purposes and to provide peak load support), satisfied the financial and operational objectives for the project.



Spark Energy was thus engaged on a design-build basis to deliver the project, working closely with the team at Slink Skins to integrate the new system within the operation on site.

To minimize the use of the peak load boilers during the morning's peak use of hot water, a large 12,000 litre buffer tank capacity was specified. In addition, a smart controls package was implemented to give the team on site close control over how the new wood-fired heat source would interact with the existing steam boilers.

Also, a massive hopper with a working capacity of just under 100 m3 is serviced with a Fliegl wood chip delivery system with spreader head.



Project summary

Main contractor	Spark Energy
Subcontractors	Foleys Mechanical, Aotea Electrical
Base load boiler	KOB Pyrot wood chip boiler 540kW
Buffer tank capacity	12,000 litres
Wood fuel handling	Agitator system with 100 m3 hopper
Peak load boilers	LPG-fired steam boilers
Wood fuel	Fuel-grade wood chips (S50W35A1)
Wood fuel supplier	Spark Energy