



Pruning with KLIMA

Maximising the benefits



The KLIMA story, our aims when we started the journey over 11 years ago

- ▶ Use less people to prune
- ▶ Retain and keep skilled people in our pruning crews
- ▶ Maintain or improve our pruning quality and fruit quality
- ▶ Save money every season



What is KLIMA cane pruning technology?

KLIMA Cane Pruning Technology is a specialised stripping and mulching machine developed in New Zealand by Nigel George and Marcus Wickham. They saw the need to mechanise one of the most labor-intensive tasks of the vineyard calendar.

Until KLIMA in 2007 cane pruning was usually reserved for premium grape varieties and spur pruning was the only way to mechanise pruning.

Most grape growers should be aware continual spur pruning seems initially cheaper but is more expensive. As spur sites diminish, yields and quality drop and cordons need to be renewed.

KLIMA has evolved into a highly efficient and revolutionary machine which now means cane pruning is more cost effective than spur pruning, reducing your labour requirements by up to 50% and saving consistently \$800-\$1000/hectare annually.



Key elements from growers who consistently achieve excellent quality results every year

- ▶ Use less people to prune
- ▶ Control and manage the pre-pruning process
- ▶ Vineyard is set up to use KLIMA
- ▶ Own or control their own KLIMA



Common mistakes



- ▶ Large pre-pruning crews 20-40 people.
- ▶ Too large to quality check, by the time you have adjusted 2-3 pruners techniques the whole vineyard is pre-pruned.

“This practice of massive pre-pruning crews totally defeats the purpose of the KLIMA system”

- ▶ 4-5 genuinely skilled people can comfortably pre-prune 100 ha of 4 cane VSP. Imagine the consistency of your pruning.
- ▶ Chopping the old cordons off, leaving 10-15 canes for your trimmers & wrappers to deal with. This practice invariably ends in you paying more for pruning.
- ▶ You have 3-4 months to prune your vineyards you do not have to complete it all in the first month or week!



Do not leave your labour contractor to decide how you prune



- ▶ Bad pruning starts with you. The labour contractor supplies the labour, be clear on what you require and ensure that you are getting the job you want.
- ▶ Be in the field yourself, having a manageable number of people is key. Know the names of your key pruning staff, this is a huge advantage in getting consistency with your pruning.
- ▶ Do not leave KLIMA pre-pruning on auto pilot.

“We hear too many growers blaming the contractor or the KLIMA for bad pruning, it is not their fault it is yours, be present in your vineyard!”

Pre-pruning & cane selection

- ▶ Pre-pruning choices are the single most important decisions made in your vineyard all year. This includes spur sites, cane selection and head shape.
- ▶ Small group of skilled well-trained people. A group small enough that the vineyard owner/manager knows them by name, and their work is checked regularly especially the first few days of pruning.
- ▶ Quality control is easy, poor decisions cannot be hidden. All the cut material stays in the canopy, you can see exactly the decisions being made by any pruner and if required adjustments can be made quickly.



- ▶ With pre-pruning for manual stripping multiple canes need to be cut into small sections to allow for hand stripping.
- ▶ Pre-pruning for KLIMA requires minimal cuts.
- ▶ Simple well-placed cuts will save time and money, over-cutting does nothing but cost more and take extra time.
- ▶ Smaller number of well selected canes for trimmers & wrappers
- ▶ Canopy height just above posts



The KLIMA pass

- ▶ If the KLIMA is well maintained and your vineyard is set up correctly this should be the easiest part of the process.
- ▶ Vineyard injuries associated with manual cane pulling are eliminated.
- ▶ Canopy height for the KLIMA pass is important and a late season trim should have your canopy at just above post height.
- ▶ If a late season growth spurt has occurred you may need to do a trim prior to the KLIMA pass, this will stop longer canes being trapped under your lifting and fruiting wires causing unnecessary breakages. This also aids the trimming & wrapping process.



Trimming, wrapping and finishing pruning



- ▶ If the pre-cutting and KLIMA pass are done well then this should be a breeze and no different to trimming & wrapping following manual pruning.
- ▶ Your fruiting wires need to be re-attached by hand, this is a quick job and saves time for the wrappers as it puts the wire on the right side of the canes for the desired inside out wrap.
- ▶ Slips, trips and falls are minimised as your crew is not climbing over un-mulched waste canes, KLIMA has taken care of this.
- ▶ Half your vineyard has the wires dropped ready for the growing season, reducing yet another task.
- ▶ Your mulching pass becomes a faster spring mow saving another usually slow tractor pass.

Case study: Blue Heron Vineyard

250 hectare vineyard in the Umpqua Valley, Oregon, USA

- ▶ Pre KLIMA, Blue Heron had to find 60+ staff to prune their vineyards on time, this task was getting harder and harder.
- ▶ Converted their vineyard allowing their wires to be re-leasable & re-attachable.
- ▶ In the first season they reduced their staff required to 30.
- ▶ Using electric secateurs 5-8 pre-cutters made all the cane selections.
- ▶ They reduced their pruning season by 3 weeks.
- ▶ KLIMA cost us\$105,000.
- ▶ Blue Heron in the first season saved \$700/hectare, equating to us\$180,000.
- ▶ Interestingly Blue Heron was happier about the labour reduction than the \$\$\$ savings.

Use the KLIMA system if you want to:



- ▶ Optimize and retain skilled people in your pruning crews
- ▶ Maintain or increase your pruning and your fruit quality
- ▶ Gain control and consistency over your pruning
- ▶ Use substantially less people to prune your vineyards
- ▶ Save money, on average \$800-\$1000/hectare savings if done efficiently
- ▶ Improve Health & Safety in your vineyard

New product - Harvester mounted Gen2

