

From Tree change to Felt Rolling Machines

Fifteen years ago when Paul and Cristine Harrison became tired of the limitations of Melbourne's city life, they decided to close their business and make a tree change. After some research they found a vacant twelve acre block alongside the Snowy Creek near Bright in Victoria. This was in the early days of alpaca breeding and as their land was ideally suited to raising alpacas, Snowy Creek Alpacas was started in 1996 and their herd of alpacas has now stabilised at around forty.

Their next major project was to build a home plus a facility for their future manufacturing business. Snowy Creek Engineering makes *Special Purpose Built Machines*. The specialised engineering workshop is run by Paul and Cristine. As the son of an engineer Paul is fortunate to have married an engineer's daughter. Brought up on Meccano and then formally trained in the pre-computer era, Paul was an early adopter of Computer Assisted Design drafting and he has continued to keep abreast of the latest technological advances.

In 2006 their involvement in alpaca breeding brought them to the national alpaca show where they met Judy Craig, then the national craft judge. Judy's interest in developing a practical way of reducing the physical effort required to produce felt sparked an interest.

Given the mounting pile of alpaca fibre at Paul and Cristine's property and their inability to knit, they looked to felting as a potential and viable way to add value to the fibre. With their engineering background, they could see a great opportunity for the manufacture of a simple and cost effective felting machine. In Paul's previous working life he was often faced with engineering challenges as well as designing for



automated production in a variety of industries.

Before Paul built the first prototype he and Cristine had discussions with felters about what this machine should do, how it should be operated and what cost limitations there might be. Four years ago the Snowy Creek Roller Felting Machine entered the market. Construction is of painted steel, PVC and polycarbonate with some components outsourced to Laser Cutting and CNC production. Electrical components and control gear are locally sourced and are to international standards.

When demonstrated at trade and craft shows the reaction is always positive and many orders follow. There has been significant interest and demand across Australia and now earlier this year from overseas.

How does it work? There are three machine driven rollers which move apart when the machine is opened. As with hand felting the project (wrapped in bubble wrap or other similar material) is wrapped around a centre core. It is then placed between the rollers and closed to provide a constant pressure. When the rollers rotate the bundle has three points of contact and the changing shape of the bundle helps the fibre to felt. The machine fits comfortably on a solid kitchen table.

How fast is it? Firstly the machine

freees the artist's time to be artistic. Secondly the machine takes the same time on big or small work, which is not the case by hand. Most importantly this machine was prototyped using dirty alpaca (difficult to felt), so considerable effort went into the design of a flexible core. This gives the machine a very similar action to hand rolling, where the bundle is constantly changing shape.

On the machine the pressure is along the whole bundle not just where your hands are. Machine users measure rolling time in minutes as opposed to hours (even for bigger pieces). Six small merino scarves rolled at the same time takes around seven minutes.

Is it cheating? No. You still have to have the creative design and layout skills. The machine is providing you with physical assistance and sustainability to produce a large quantity of products consistently, without suffering for your art with sore arms, shoulders, wrists etc. It allows you to continue with the creative task of laying out your next masterpiece.

Many artisans were secretive about their techniques. This resulted in a unique design approach whereby the machines capacity to cater for all styles of felting had to be taken into account. The machine allows for a variety of cores and carrying mediums to be used. Some of the owners are so happy with their rolling machines that they have named them. So far we have heard of two Rolleys and one Princess.

Paul and Cristine would like to take this opportunity to thank all the felters who willingly helped them understand their craft, ensuring the success and unique design characteristics of the Roller Felting Machine.