

# Art at the Cutting Edge

Artists, good artists, have always been innovators. They experiment with different materials, subject matter and effects. However, sometimes an artist will have to go beyond traditional methods in order to produce the work they want. Such was the case for up and coming Melbourne artist Rosa Tato, who turned to Hygrade Waterjet Profiling and Arrow Laser to create some extraordinary artistic decorative screens and 3D sculptures.

We asked Rosa about her work, her influences and just how she came to use laser cutting, waterjet cutting and engraving technology to create her work.

*So, just how does the create process begin for you? What type of art do you create?*

"I try to create a range of work including 3 dimensional sculptures, decorative screens, and individual works using a variety of metals and materials," said Rosa. "My works begin with an intuitive hand cutting process in paper, and once patterns emerge, the process takes on a computerised method whereby patterns are 'vectorised' for laser cutting. Keeping a hand-cut/hand-made quality throughout this intervention is crucial. This subtle shift in process is my preoccupation."

"I create work that is related to objects that are inherently beautiful and loaded with traditional meaning. I am innately attracted to traditional feminine artifacts, usually of a traditional nature. Researching and investigating its role, usage, importance in its time and space is an important part of what I do.

"Most recently, I was commissioned by Mills and Gorman Architects to use an existing design and to incorporate it in a balustrade (steel) and screen (mdf). The design was integrated into an architecturally designed setting and functions as two very separate spaces within the restaurant setting."

*Where does your inspiration come from?*

"The repetitiveness of shape, pattern, colour, beauty and texture of traditional textiles are a fundamental and ongoing source of inspiration. Most recently, motifs, patterns and textile weaves are 'triggers' for ideas. If I see a pattern, from 860 BC



or one designed in the past 20 yrs, the pattern allows me to explore the intricate detail of its own individual design. Feminine cultural artefacts also provide much source of inspiration. In



addition, patterns inspire my work on many levels."

*Are there any styles or artists that have influenced your work?*

"Spanish sculptor, Cristina Iglesias creates interesting structures, which cast intriguing shadows, whilst at the same time creating an interesting sense of interactive space. I am particularly interested in the dynamics of public interaction when a work, structure or object is created. I would like to explore the use of colour and texture in future works."

*What materials do you work with?*

"I am very process driven and research orientated, which is to say that the material I choose is at times defined by the space in which I am working. In addition, the materials I have access to is a deciding factor."

"I do not have a preferred material, although in the initial stages I like to work with trace to design marquettes, using a diverse range of blades, as a starting point. Most recently I have worked with felt, stainless steel, mirrored stainless, corten, mdf, cardboard, neoprene, rubber and foam just to mention a few mediums. I would like to work with concrete eventually."

*Who have you created work for? What was the result?*

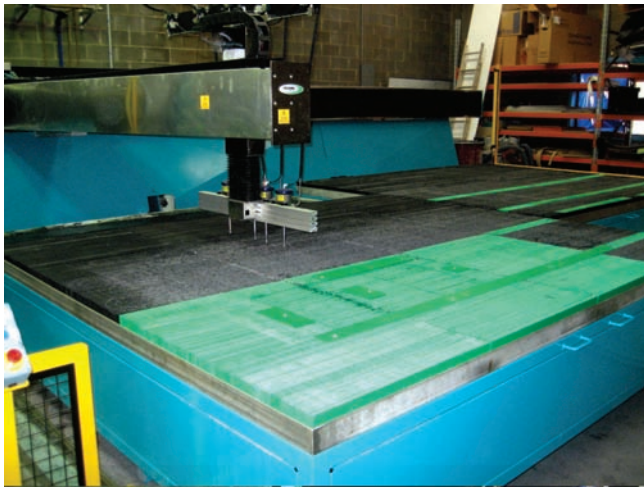
"I have enjoyed assisting several established artists in the creation of specific public art commissions."

"In 2006, a three-week project turned into a seven-month commitment with fellow artist Penelope Lee. We sourced 1000s of Sherrin footballs from all over Australia, using them for an installation celebrating the game of football – as part of the 2006 Commonwealth Games. This work sits in the brand new wing of the MCG. Creatively, it was very rewarding to be involved in a project of that size

"From November 07 – January 08 I assisted Elizabeth Weissensteiner (based in Germany and Melbourne) in the making of another public work for Clarinda Municipal offices. This work was made of resin and fiberglass.

"In between both residencies I met with





architect Craig Gorman (Mills & Gorman Architects) who was able to understand the intricacies of my work, which led to design components being integrated into several architectural features in a new restaurant called Maha Bar and Grill ([www.mahabg.com.au](http://www.mahabg.com.au)).

“I am currently working on a proposal for the Santander International Arts Festival (in Northern Spain).”

*In order to create some of your work, you had to engage the services of a waterjet profiler, laser cutter and an engraver. How did you find these companies? Were they willing to help you and did they provide valuable advice?*

“The contacts I developed within industry are the result of research. The rapport that is developed, the sharing of my process and learning limitations of my process in terms of the technology and machinery has been quite the learning curve. Having run my own business, I am well aware that time equates to dollars. I was very fortunate to find Kevin at Hygrade at the initial stages of my enquiry. His interest in disseminating industrial knowledge, process, new materials and costings was crucial to my learning and being able to then develop the artwork.”

“My initial meeting with Kevin at Hygrade was memorable. He spent a lot of time with me to discuss issues in a clear, informative manner relating to a gamut of possibilities. To an artist, this means that when you continue to create you can keep certain issues

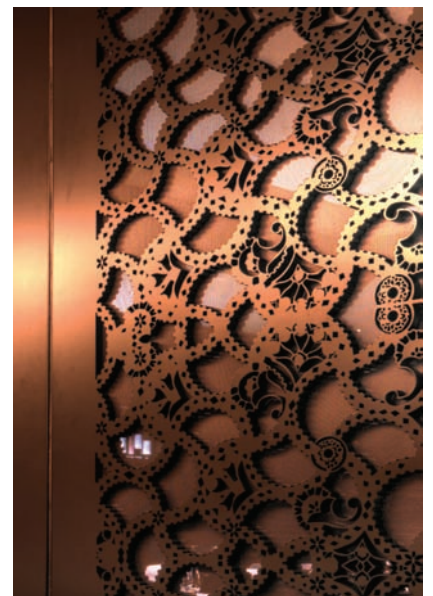
in mind – materiality, design related concerns, time, cost and quality control.

“For the laser cutting, I turned to Arrow Laser. They had helped me develop and create pieces, and because of their help, I returned to them when bigger and better commissions came in. Small clients can become big clients, and I am happy that I can send some work their way.

For Kevin Corcoran at Hygrade Waterjet Profiling, helping students and artists is not something new. The company has been an ardent supporter of the automotive engineering students from RMIT in their racing program, Formula SAE events. This involves cutting car components in steel, aluminium and titanium. It is, also, helping students with industrial design projects from Swinburne University, cutting tables and stools and a number of other items on their Multicam router. Kevin’s philosophy has always been that “you get out what you put in”. The exacting nature of the waterjet profilers was perfect for Rosa’s work because of the machine’s ability to cut the most minute and exacting detail. (Image 4)

Waterjet profiling uses a jet of water at high velocity to cut a wide variety of materials up to 100mm thick, including aluminium, bronze, copper, foam rubber, fibreglass, plastic and even wood panels. As the cutting process doesn’t require heat, there are no stress or cracked zones on the finished product. The process is very precise with repeatable profiling at  $\pm 0.1$ mm accuracy depending upon material and thickness. CAD data can be imported via email (dxf, eps, pdf etc.), with scanned images converted from the sample to a CAD file.

With no tooling required and no minimum order quantity, Hygrade’s waterjet profiling offers minimal lead times and maximum flexibility for a range of uses including prototyping,





which means that samples can be cut for evaluation purposes before tooling is made for large press runs, reducing the time and cost of alterations to the actual tool. So it was perfect for someone like Rosa who, working to a tight budget, could afford minimal wastage.



The pieces used for the Maha Restaurant in Melbourne were cut with a laser; the results look spectacular (as you can see from the photos). The laser cutting and additional engraving work creates an amazing effect. The intricate work shifts and changes as light dances and plays around it. It means that the work never stays still. Instead, it has a life of its own that is ever changing.



For engraving shops and anyone that owns and operates cutting

and shaping machinery, don't be too quick to dismiss small or even free jobs, because you never know what they could lead to in the future.

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#### As for Rosa's future...

"I'm hoping for more financially viable short and long-term projects. I hope to continue exploring the creative possibilities that technology can provide. If that means I can send more work to the shops that have helped me, that's even better."



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