## **Techniques** for Working with Bike Inner Tube Rubber

**CUTTING:** Bike tubes can be cut using standard scissors and generally have mold seam lines on the tubes making it easier to follow these when cutting strips from the material. The tubes can be cut into sections or cut open along one of the mold seam lines before or after cleaning.

**PATTERNS:** The curves of an inner tube are molded in, something to work with and not against. It is important to respond directly to the curved material and take advantage of it when designing patterns, cutting, and creating. Following the curves and adapting to the existing forms is what makes cutting shapes out of inner tube so interesting. You can use spine sections of the tube to encourage a fold and orient curved sections to create volume. Cutting on either side of the outside spine or interior circumference curve of the tube creates straighter strips of material. Cutting along the sides of the tube creates curved strips. Experiment openly, disregarding your preconceptions for flat shapes. Consider the placement of textures and markings. Since the writing often appears only in one area, think about highlighting it in the design. Consider how different textures and colored stripes play off each other when several pieces are combined in an item. Try to utilize every part of the tube by fitting patterns together like a puzzle to minimize waste and use cut outs following a zero waste ethic.

**TRACING:** Tracing lines for cutting and marking holes for punching can be done with a ballpoint pen around thick paper or rubber patterns that will flex and match curved sections of tube since larger curved pieces do not always lie flat. Stray pen marks can be rubbed off.

**HOLE PUNCHING:** Paper hole punches can be used on bike tubes as well as single punches and rotary punches made for leather working. Hole punching the rubber allows you to assemble pieces by lacing and sewing.

LACING AND SEWING: Because cut rubber has a clean finished edge, it looks great exposed and doesn't need to be folded over like fabrics. Lacing is a useful technique in putting the rubber together. Hole punch small holes in the pieces to be combined and then lace the pieces together and finish by knotting and tucking in the ends of the lacing. Pieces can also be sewn together using a variety of stitches. Holes can be punched to make it easier to pass the needle and thread through the rubber and to keep parts from shifting you can staple them together, removing the staples when assembly is completed. Rubber can be sewn to a wide variety of fabrics and materials creating interesting effects. Thinner rubber can be stretched while sewing it onto lightweight fabrics to create shirring and pleating and the thread itself can become an intriguing component in the design.

TYING, KNOTTING, BRAIDING, WEAVING, KNITTING, AND WRAPPING: The inner tubes can be cut into strips of various widths to be used in traditional textile techniques. Bike tube works well as a wrap around other materials especially on items requiring grip.

**GLUEING:** Rubber shapes can also be easily cut and attached to wood or cardboard with basic white glue. Glueing the rubber to other rubber is difficult and requires hot glue, or instant bond glues.

**SURFACE DECORATION:** If you want to add markings to the rubber, you can paint or silkscreen using flexible latex products so the decoration can bend with the rubber, unless you don't mind the cracking that might occur from other paints. Pens, (metallic sharpies work exceptionally well), pastels and other drawing materials can also be used on the rubber.

**MAINTENANCE:** The rubber can be polished with lotion or a tire polishing product. It's best not to leave items in direct sunlight for very long periods of time since slight cracking could occur over time.

