

PERFECT FIT

Piecing together an award-winning puzzle

BY TINA WOJTKIELO SNYDER

It would be easy to mistake the tourmaline in this ring for a Paraiba. Then again, says designer Carley McGee-Boehm, “this Cuprian tourmaline from Mozambique is so beautiful that it doesn’t need to masquerade as Paraiba.” The challenge was presenting a suitable showcase for such a dynamic stone. The principal of Carley Jewels (*carleyjewels.com*) in San Diego, McGee-Boehm accepted the challenge and took second place in the bridal category of the 2008 AGTA Spectrum Awards.

Part of her Lago collection, the ring showcases the 13.75 carat Cuprian tourmaline cabochon as a representation of Africa’s picturesque lakes. “I incorporated an African textile pattern into this line,” she says. “In this piece, I used black spinel and diamonds in a pattern that accentuates the amazing color of the center stone,” she says.

Using the Rhino program, McGee-Boehm translated her hand-drawn

sketch into a 3-D rendering. “It was very much like piecing together a puzzle,” she describes. The ring comprises 10 separate 18k white gold components. At its core is the diamond-set interior shank, which is soldered to two vertical bars that are set with black spinels. The Cuprian tourmaline is set into a pavé diamond bezel and then connected to the shank via pegs that protrude from the two spinel-set bars. The bezel is locked onto the pegs and laser welded in place.

Once the main structure of the ring was complete, McGee-Boehm added the details. First, the spinel-set sweeping prongs were attached. The prong section was broken into two halves: the left set and the right set. Pegs that protruded from the prongs snapped into mirroring recessed areas on the interior shank. Once secured, they were laser welded into place.

Lastly, the two black spinel bezels

beneath the middle portion of the main bezel, as well as the two diamond bezels that nestle between the prongs, were laser welded into position.

Creating each of these components so that they fit together exactly would have been impossible without CAD, says McGee-Boehm. And attaching all of the components with the tourmaline in place would not have been an option without a laser welder.

“People say jewelry isn’t made how it used to be, that it’s not as carefully crafted,” says McGee-Boehm. “I disagree. With the addition of CAD/CAM and lasers, jewelers can create pieces with such precision and skill. We can make pieces that would not have been feasible without these technologies.”

However, some traditions remain: McGee-Boehm says that communication with her stone setter was critical to the successful execution of this gem-intensive design.

The prong section was broken into two halves: the left set (shown) and the right set. Pegs that protrude from the prongs were snapped into mirroring recessed areas on the interior shank and laser welded into place.

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The Cuprian tourmaline was set into a pavé diamond bezel and then connected to the shank via pegs that protrude from the two spinel-set bars. The bezel was locked onto the pegs and laser welded in place.

The two black spinel bezels beneath the middle portion of the main bezel, as well as the two diamond bezels that nestle between the prongs, were the last components to be laser welded into position.