Vintage Arches

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The purpose of this design was to create a modern dress infused with elements from historic buildings and garments that also explored the possibilities available through whole garment knitting. First commercialized in 1995, whole garment knitting is a relatively new technology in the fashion industry. Whole garment knitting, in addition to Shima Seiki's Apex design software, offers several benefits to the fashion industry. The design software allows designers to see a virtual rendering of their garment before it is ever knitted, helping to save time and resources during the sampling process. Likewise, whole garment knitting also helps to conserve resources – the entire garment is knitted to shape in one piece, eliminating all of the waste that would occur in a traditionally cut-and-sewn garment. This technology also reduces the time and labor needed to make a garment, as there is no need for any construction or seaming. Furthermore, the lack of unsightly seams adds to the comfort of the garment.

As improvements to whole garment knitting machines and advances in computer aided design software continue to be made, the designs that follow must also continue to evolve. Every new development in this technology gives rise to new design capabilities. Thus, the goal of this project was to take advantage of and push the abilities of Shima Seiki's new Mach2x whole garment machine and Apex software. The idea of using new technology to reproduce vintage motifs, in addition to 1920s evening gowns and the supporting arches of cathedrals, inspired this dress.

Research on the trends for Spring/Summer 2015 knitwear revealed the widespread occurrence of openwork in garments, so this inspiration was recreated by outlining arches around the hem and neckline of the dress using openwork circles. Lines of these small, open circles were placed stitch by stitch to construct the smooth curves of the arches. By creating arches around the bottom of the dress using openwork circles, the hem was given a faux scalloped appearance. Likewise, the arches around the top of the

dress gave the neckline a faux sweetheart neckline. The use of openwork adds an element of delicacy to the dress, and this, combined with the faux scalloped hemline in particular, reflects the elegant evening gowns of the 1920s. Yet, these elements were given a modern twist by using a bright coral-colored yarn and enlarging the design motif to create a bolder pattern. In addition, the openwork structures that make up the arches creates a dramatic, sheer neckline which further gives the dress a more modern feel while still recalling images of the immense arches of historic buildings.

The design for this dress was created using Shima Seiki's Apex design system and was knitted using two ends of 16/2 100% cotton yarn on a Shima Seiki Mach2x 7 gauge whole garment knitting machine. The dimensions for the center back, bust, and hip are 44, 36, and 40 inches, respectively. Swatches of the chosen yarn as well as two sample dresses were knitted to check the quality and sizing of the garment before the final dress was completed on May 28, 2014.

References

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