Exposed Geometry

Karis Foster,
Department of Textile and Apparel Technology and Management,
North Carolina State University, USA

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Karis Foster & Lisa Parrillo-Chapman, Ph.D.

The purpose of this design was an exploration of the capabilities of a Shima Seiki Whole Garment Knitting Machine. This design was also a result of the learning experience with the Shima Seiki Apex 3 Knitting Software. Various knit structures were examined and then added to a template within the Apex 3 Knitting Software. Since the Whole Garment machines are equipped with four needle beds, tubes may be achieved along with complicated structures like ribs, miss, tuck and cable stitches. Typically these stitches can only be achieved as a one-sided effect on a hand-operated V-bed machine.

The dress features a dropped waist with a continuous 2x2 rib, while the hem features an inch high links-links stitch. The intricate grid pattern along the skirt of the dress is created by varying miss, front and back stitches. Several iterations of this dress were knit to ensure the loop length was appropriate for the available yarns. This dress was knit on a Shima Seiki Mach 2X SWG-X, 8 Gauge Machine. One end of bronze 18/1 Pro Spin yarn containing 50% Polyester and 50% Carded Cotton was used to knit the final garment which gives the dress an overall luxurious feel.

Autumn/Winter 2015/16 trend forecasting through WGSN inspired the asymmetrical grid pattern used in this design. Many indications suggested during this research that geometric influences would be trending in knitwear. The ultimate knitting time for this garment was __ minutes.

Garment: Bust: 33 inches; Waist: 32 inches; Hips: 32 inches; Overall CF Length: 62 inches **
Approximately Fits American Size 4-6