Machine Knitting Pattern for a Sock

Yarn: 4 ply (Sock yarn, wool & synthetic for better wear)
Tensions (shortened to T for the remainder):
For the 1 x 1 Rib Band ‘0’ (for cast on & circular row)
‘3’ for main rib
‘6’ stocking stitch (st = stitch)

With main yarn, T ‘0’ cast on 75 stitches in 1 x 1 rib (zig zag row right to left). Knit ‘1’ circular row. Remove circular setting, T ‘3’, knit 33 rows in rib. Transfer all stitches to main bed, decrease 7 stitches evenly along bed. Close gaps keeping centered.

T ‘6’, knit 1 row in stocking st. Take work off with a few rows of contrasting waste yarn. Remove cast on comb and weights. H pitch on ribber, 34 needles on each bed to working position.

With the wrong side of the last knitted row facing you, start on the right centre needle and place the left most loop of the sock onto that needle (NOT the waste, fold it under, away from you). Now roll the rib into a circle and place what was the right most loop onto left centre needle and 1 loop onto all remaining needles along the main bed. This should put the centre seam of the rib at the back of the sock and on the main bed. Work your way along the bottom bed, 1 loop from the sock (NOT the waste) onto each needle. T ‘6’ knit 40 circular rows (80 on row counter) keep downward pressure.

Machine knitting the sock heel

Drop the ribber bed half way only, change to main bed only (presser). T ‘5’ on main carriage. Set "holding cam lever" (N-H-I) to H. Remove the circular knitting setting on the main carriage.

On the top bed, assuming your carriage is on the right, bring the furthest needle from the carriage to holding position (left most needle, all the way out), knit 1 row (from right to left), place yarn under the protruding needle (now closest to carriage), bring furthest needle from carriage (right most) to holding position, knit 1 row, place yarn under right most needle, protrude 2nd left needle, knit 1 row, now place the yarn under the 2nd left needle but over the 1st… Repeat until there are 8 needles in holding position on each side of the sock. Main bed only!

NOTE: Keep downward pressure on the article underneath the main bed throughout the knitting of the sock heel as the sock will grow longer under the main bed as the heel takes shape, ribber bed side will not.

You should have 8 needles out on each side with the carriage on your right, and the yarn under the 8th innermost right needle but over the first 7 needles on the right… Push the innermost (8th) left needle back to knitting position D. Knit 1 row, place the yarn under the new innermost (7th) left needle but over the remaining 6 left needles. Push the innermost right needle to knitting position D. Knit 1 row.

Place the yarn under the new innermost (7th) right needle but over the remaining 6 right needles. Push the innermost (7th) left needle back to knitting position D. Knit 1 row. Repeat until all needles are in except the rightmost needle the carriage should end up on the left with rightmost needle only remaining out. Remove presser, replacing with ribber, raise ribber bed to knitting position and set main carriage back to circular knitting.
NOTE: Next row has to be worked on the ribber only, which it should because in circular knitting settings from the above step, moving from left to right only knits on the ribber bed. Make sure the remaining needle in the holding position on the main bed is on the outside of the needles on the ribber bed.

T ‘6’, knit 1 row (left to right). Place yarn under remaining needle. Set "holding cam lever" (N-H-I) to N and set knitting machine for circular knitting again. Reset counter. Knit 60 circular rows (120 on row counter). This will be the foot.

**Machine knitting the sock toe**

Using a double pointed transfer tool, decrease 1 stitch each end on both beds (pick up 2 stitches, but only move 1 needle space inward, meaning the 2nd last needle has the last stitch on it but the 3rd last has 2 stitches). Knit 2 circular rows (twice back and forth with the carriage, ends on same side). Do this 5 times.

Using a double pointed transfer tool, decrease 1 stitch each end on both beds again. Knit 1 circular rows (twice back and forth with the carriage, ends on same side). Do this 6 times. Hopefully you have 12 stitches remaining!

Break yarn leaving about 30cm and replace with more waste yarn, knit a few circular rows and break waste, knit until sock falls off!

**Grafting the sock toe by hand**

This grafting method leaves no seam, the most comfortable sock you will ever knit or wear! Grab a needle and thread the 30cm of yarn you had left onto a needle. Poke it through from the outside into the space beside the last knitted stitch, so that it comes out on the inside. Fold the waste yarn out over the toe to expose the single row of main colour, stitching from inside to outside of the article (out of stitch), starting with the stitch nearest you and closest to the end you came through on. Another out of stitch through the opposing side of the toe. In to stitch (from outside to inside) you came out of first (closest to you), then out of stitch in the next one along (2nd closest to you). In to stitch first stitch on opposite side, then out of stitch in the next one along (2nd one opposing side). Repeat this until toe hole is closed! Poke the needle through to the inside of the sock at the end of the last graft.

Remove the waste yarn from the sock toe. Remove waste yarn from rib. Sew up the rib, avoid using mattress stitch as this creates a ridge. End all threads.

For the full instructions including photos and videos please visit www.machine-knitting.net