Nose tip of the Indigenous Light Combat Aircraft (LCA)-TEJAS is a composite structure. Contour woven socks is used as a reinforcement material in the nose tip. It’s a conical shape engineered fabric. The yellow fabric is made of Aramid and the white one is made of Glass material. The product has been developed for Aeronautical Development Agency (ADA), Ministry of Defence, GoI.
Warp in the fabric is placed in vertical direction and weft in the circular direction perpendicular to the warp. Warp and weft placement is shown in the following figure.

Technical Specification of the developed fabric

1. Length - 2200mm [100%]  Width - 1480mm
2. Length - 1760mm [80%]  Width - 1320mm
3. Length - 1320mm [60%]  Width - 1100mm
4. Length - 880 mm [40%]  Width - 850mm
5. Count - 1310 dtex
6. Twist/meter - 80 S
7. Number of filaments - 1000
8. End/inch - 20
9. Picks/inch - 20
10. Thickness - 0.39mm
11. GSM – 220
12. Weave – 2/2 Twill

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