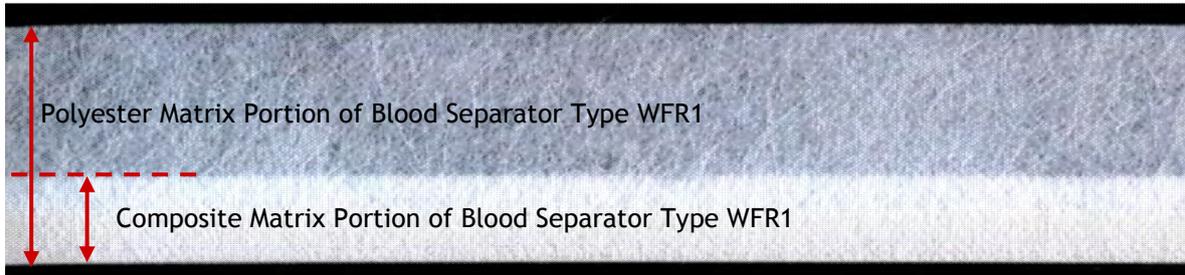
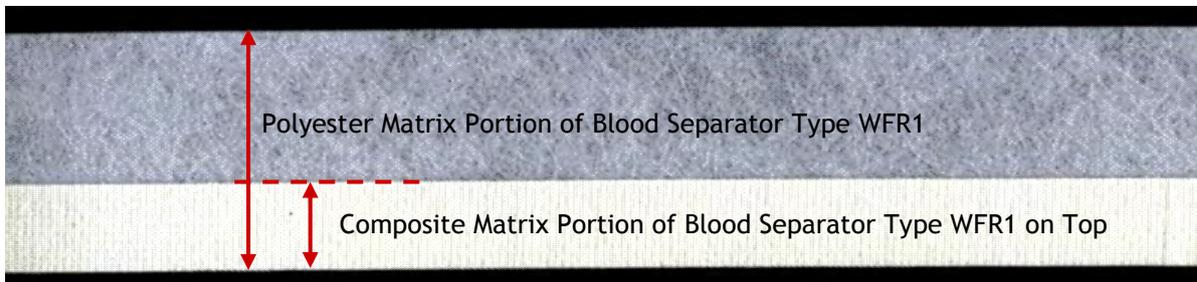


1. Construction of mdi Blood Separator Type WFR1

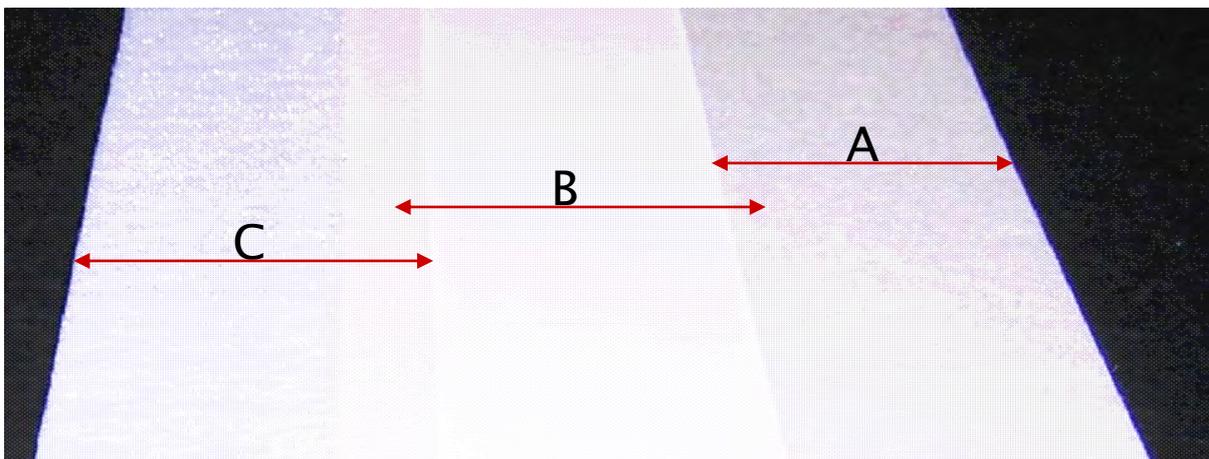


1.1 : Top View of mdi Blood Separator Type WFR1



1.2 : Reverse View of mdi Blood Separator Type WFR1 with Composite Matrix Visible

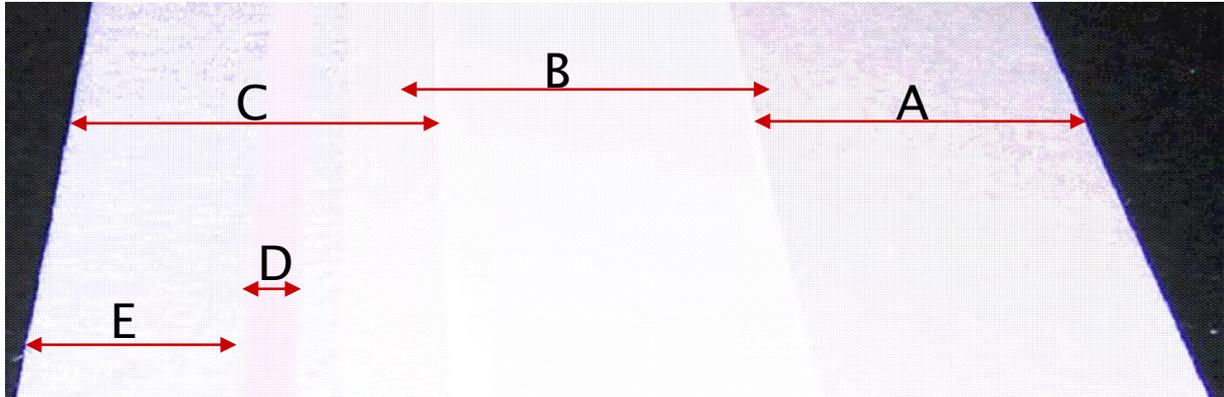
2. Mounting of mdi WFR1 and Absorbent Pad on Laminate



2.1 : mdi WFR1 and Absorbent Pad mounted on the laminate

- A. Absorbent Pad mounted on the plastic backing laminate (overlapping the Nitrocellulose Membrane)
- B. Nitrocellulose Membrane mounted on the Plastic backing (overlapped by Absorbent pad on one side, and by mdi WFR1 composite matrix on the other)
- C. mdi Blood Separator mounted on the plastic backing such that the composite matrix is on the bottom and is touching/overlapping the membrane

3. Gold Conjugate Sprayed on mdi Blood Separator Type WFR1



- D. Gold Conjugate sprayed on the polyester matrix
- E. Location for placing the sample (whole blood) for the test

4. How the Test Works (Functional Mechanism-Schematic)

1. The whole blood sample is placed on the polyester matrix of WFR1, close to location where gold conjugate has been sprayed and dried. The test sample flows from C to A through B.
2. Initially the sample would travel through the polyester matrix of WFR1 (C) and take the gold conjugate along until it reaches the non-permeable region (where polyester matrix is glued to composite matrix).
3. At this non-permeable region, the test sample along with gold conjugate will travel downwards into the composite matrix and then through the composite matrix to the membrane. The RBC is stopped in the WFR1 Matrix and only plasma travels to the membrane alongwith dissolved conjugate.

