

CLAIMS

What is claimed is:

1. A system for protecting a bond line comprising:
 - a downhole tool;
 - a rubber material bonded to the downhole tool to form the bond line; and
 - a barrier configured to be applied to the rubber material and the downhole tool to encapsulate the bond line.
2. The system of claim 1, wherein the barrier is dicyclopentadiene, epoxy, polyester, urethane, elastomer latex, acrylate, cyanoacrylate, or urethane acrylate.
3. The system of claim 1, wherein the barrier is configured to be applied by spray, roll, brush, or vapor deposition.
4. The system of claim 1, wherein the barrier is a hot melt.
5. The system of claim 1, wherein the barrier is configured to be applied in a solvent deposition process.
6. The system of claim 5, wherein the barrier is an acrylic melt, a solvated copolymer of ethylene and propylene, a solvated copolymer of ethylene, propylene, and a diene monomer, polycarbonate, polyimide, polystyrene, polyester, or a fluoroplastic.
7. The system of claim 1, wherein the barrier is impermeable or hydrophobic.
8. The system of claim 7, wherein the barrier is configured to be applied by a film wrapped or cold bonded to an outside of the bond line.
9. The system of claim 1, wherein the barrier is applied to one or more bond lines.
10. The system of claim 1, wherein the barrier is configured to prevent degradation of the bond line.
11. A method for protecting a bond line comprising:
 - attaching at least a portion of a rubber material to a downhole tool to form the bond line; and
 - applying a barrier to the rubber material and the downhole tool to encapsulate the bond line.
12. The method of claim 11, wherein the barrier is dicyclopentadiene, epoxy, polyester, urethane, elastomer latex, acrylate, cyanoacrylate, or urethane acrylate.
13. The method of claim 11, further comprising rolling the barrier on the bond line, spraying the barrier on the bond line, brushing the barrier on the bond line or applying the barrier using a vapor deposition to the bond line.

14. The method of claim 11, further comprising applying the barrier as a hot melt.
15. The method of claim 11, further comprising applying the barrier using a solvent deposition process.
16. The method of claim 15, wherein the barrier is an acrylic melt, a solvated copolymer of ethylene and propylene, a solvated copolymer of ethylene, propylene, and a diene monomer, polycarbonate, polyimide, polystyrene, polyester, or a fluoroplastic.
17. The method of claim 11, wherein the barrier is impermeable or hydrophobic.
18. The method of claim 17, further comprising wrapping the barrier to an outside of the bond line or cold bonding the barrier to the outside of the bond line.
19. The method of claim 11, further comprising applying the barrier to one or more bond lines.
20. The method of claim 11, wherein the barrier is configured to prevent degradation of the bond line.