



## Isealate Springblade Patch

Isealate Springblade Patch technology is deployed on e-line and accurately places laminate steel layers inside an existing tubing to re-instate well integrity or seal-off areas of unwanted flow. With minimal loss of internal diameter (ID), the unique configuration allows Isealate to design the patch for the specific application and well conditions. The number of rolled-laminate layers is selected to meet the pressure differential requirements in burst or collapse scenarios.

The resultant overall thickness of the patch is determined by the number of steel layers (each layer is 0.4 mm in thickness). The ID reduction in the wellbore is negligible in comparison to currently available alternatives.

| Applications        | Features   | Benefits                                       |
|---------------------|--|--|
| Eroded/pitted pipe  | <ul> <li>Accurate placement inside the<br/>tubing/casing</li> </ul>          | No limited by well restrictions                |
| Leaking connections | <ul> <li>Installed by the purpose built<br/>Isealate running tool</li> </ul> | Patch-thru-patch application                   |
| • Screens           | Material: Super Duplex Steel sheet   | Minimal loss of internal diameter              |
| Slotted liner       | <ul> <li>The epoxy cures and hardens by well temperature</li> </ul>          | Deployed on standard e-line<br>(monoconductor) |
| Pre-perforated pipe | <ul> <li>Can be punched/perforated after<br/>being installed</li> </ul>      |  |

| Specifications*                               | Imperial                           | Metric            |
|---|------------------------------------|-------------------|
| Running tool OD                               | • 2.68" - 3.55" – 4.33"            | • 68 - 90 - 110mm |
| Pipe OD                                       | • 3 ½" – 7"                        | • 89 – 177mm      |
| Collapse Pressure*                            | • 1450 psi                         | • 100 bar         |
| Burst Pressure                                | Equivalent to burst rating of pipe |                   |
| Patch length                                  | • 9.8 ft – 14.8 ft                 | • 3 m – 4.5m      |
| One layer thickness                           | • 1/64"                            | • 0.4mm           |
| Well temperature range<br>(Springblade Patch) | • 140 – 195 F                      | • 60 - 90 C°      |
| Well temperature range<br>(Running tool)      | • 50 - 250 F                       | • 10 - 120 C°     |

- \* Specifications are dependent upon application and well ID restrictions
- \*\*Collapse pressure stated is for 4.5" tubing patch with ID restriction reduction of 1/4" / 6 mm