



XPatch Expandable Casing Patch

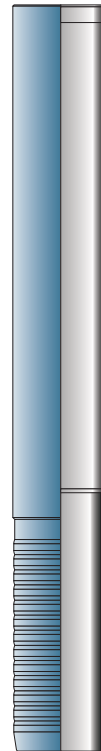
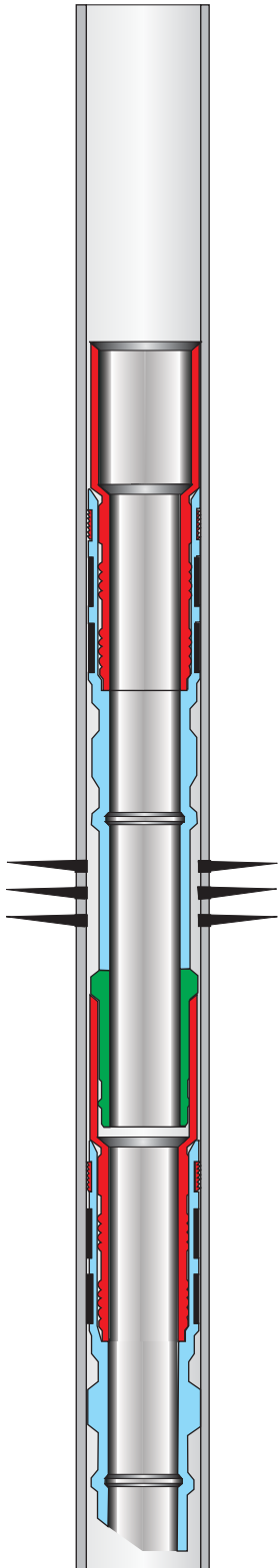
The TIW 2T XPatch System is a 2 Trip, Stratal Pack type system that allows the operator the ability to patch, with conventional tubulars, virtually any length desired while providing the largest inside diameter found in the industry today. The systems smooth full opening I.D. permits the passage of future service tools through the patch, reducing the possibilities of hang-up.

Hydraulically set with conventional surface pumps, the 2T XPatch System can be run in any type of well bore inclination including high angle, horizontal, monobore or slim hole and is available to run in any type of down hole conditions including high pressure and geothermal environments.

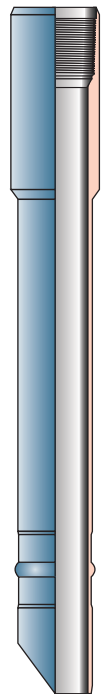
Running of the TIW 2T XPatch System requires minimal surface equipment that results in tremendous cost savings for the operator when remedial patch operations are required.

Flexibility is the name of the game with the 2T XPatch System. The systems unique design includes conventional tie back capabilities that allows for the Lower Patch to be run simply as a liner if desired. The system can then be tied back with a seal nipple as a full string tie-back to the surface or as a "stub-tie-back" when run with the Upper Patch. The Upper Patch also includes tieback capabilities that allows for multiple patches to be run and "stacked" as desired.

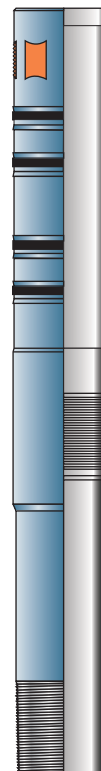
Utilizing elastomer seals and expandable metal technology, the 2T XPatch System design employs TIW's proven Metal-to-Metal Ball Seal Mandrels that not only expand the patch but provides a permanent leak-proof seal across corroded sections of pipe, perforations or any other types of leaks the operator wishes to isolate in the well bore. Pressure integrity of the patch equals that of the liner run.



Expander Tieback Receptacle



Ball Seal Nipple



Expandable Packer/Hanger