12-inch Gas Subsea Pipeline Repair
1. Take pipeline measurements.
   Clean obstructions from seabed.
   Remove coating.
2. Install and test mechanical hydrotaps, sandbag supports.
3. Tap pipeline.
4. Close valves and remove tapping machines. Install bypass line and open valves. (Flow continues in both lines.)
5. Install mechanical hydrotap "line stop fitting", test, and tap line.
6. Install "line stop plug", isolating damaged section.
7. Install venting and equalization clamps. Tap and flush damaged section.
8. Cold cut and remove damaged section. Clean pipe ends and mark pipe.
10. Measure for length of spool piece and install spool piece.
12. Remove bypass. Set bar plugs, de-rig equipment, and install blind flanges. Sandbag support where necessary.