

The Postle Office and Warehouses will be closed on November 28 & 29 to allow our employees to enjoy Thanksgiving with their families. We wish everyone a happy and safe Thanksgiving holiday!



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Hardbanding Site Inspections

Many of you may not know that we offer complementary <u>Site Inspections</u> where one of our hardbanding technicians will go on location at the request of a Drilling Contractor, Rental Company or Operator to check on the hardbanding process. We will also do this at the request of an applicator. This is to ensure that the correct Postle product is being applied and that proper procedures and parameters are being followed. These are explained in more detail below. It's in everyone's best interest that our products are being applied correctly. A Site Inspection report will be generated and given to the requesting company and to the hardbanding applicator as well. Non-Conformance and Corrective Action reports may be included if necessary.

Wire Substitutions

The hardbanding industry is experiencing a disturbing trend that is affecting the quality and wear life of hardbanded drill pipe. While most applicators still do an excellent job by training their personnel and applying exactly what their clients are requesting, there's a growing number who are not. In numerous cases cheaper and lesser quality wires are quietly being used in lieu of the longer-lasting premium wires that pipe owners are expecting. In some cases the applicator may tell the pipe owner that the cheaper wire is almost the same or it's equal. This can cause the hardbanding to wear away much more quickly than expected, and possibly require significant repairs. This leaves the pipe owners with higher hardbanding costs, increased down-time and the perception that the premium wire is not very good. Some of the cheaper wires can wear away 5 to 7 times faster than the premium wires. These cheaper wires can also lead to spalling and cracking which may result in accelerated casing wear. It's critically important that an inspection of work being done in the field be performed regularly to ensure that wires aren't being switched. It's equally as important to ask for a specific product (i.e. Duraband) and not just a "casing friendly" hardbanding.

Proper Parameters and Process

Another part of that Site Inspection is ensuring that the proper parameters are being followed. Cutting corners by not properly pre-heating and adequately protecting tool joints during the cool down process can result in cracking, porosity, delamination, and raised Heat Affected Zone (HAZ) hardnesses. All of these affect the performance of the hardbanding and the protection of costly drill pipe. During this inspection special care is taken to assure the hardband height is correct and not being applied too thin. We look for cracks, holes, gaps, and porosity; all of which can signal problems and most likely could have been avoided with minor equipment or parameter adjustments and better surface preparation.

Training for On-Site Supervisors

Postle offers a short course entitled *A Guide to Hardbanding* designed to show on-site supervisors what to check for when looking over the shoulders of hardbanders. Everyone knows what hardbanding is and what it looks like but not everyone knows the critical steps. This training is appropriate for Tool Pushers, Rig Managers, Superintendents, Operations Managers, and any "non-hardbanding" personnel to help them know what to look for. There is no charge for Site Inspections or for Supervisor Training. Just let us know your needs with as much lead-time as possible.

Are You Really Slow Cooling?

Our Jim Allen, recently conducted a slow cooling experiment with a customer in the Rockies. This applicator was using a standard uninsulated cooling can. The ambient temperature was 50°F and there was very little wind. The interpass temperature after three bands was 680°F. The tool joint was covered immediately with the cooling can. The temperature was checked after 30 minutes and it had already dropped to 260°F which is much too fast. To properly slow cool you need to cover with an insulated cooling can, wrap with a thermal blanket or the best solution is a Postle HB Insulator Wrap or Bag. The HB Insulators were specifically designed for this purpose and can be wrapped and secured tightly around the tool joint to keep heat in and insure proper slow cooling. See the attached data sheet for details.

To schedule a Site Inspection, On-Site Training, or to order HB Insulators, contact your Postle Industries or local Tech Center representative.