Best Practice Category: General Work — *Category the document will be located on the Intranet under Best Practices*

Document #: BP047GW — *BP + Sequential Number + Category*

Document Title: Drills and Bits

Owner: — *BUL of Originating Business Unit*

Effective Date:

Revision #: 0

Business Unit Designation:

- ☐ BU 01 - Infrastructure
- ☐ BU 02 - BR Civil
- ☐ BU 04 - Houston Civil
- ☐ BU 15 - Deep Foundations
- ☐ BU 23 - Marine
- ☐ BU 29 - BR Mechanical
- ☐ BU 30 - Houston Mechanical
- ☐ Pipe Fab Facility
- ☐ Form Fab Facility
- ☐ Westport Operations
- ☐ Cajun Office Facilities

A check next to a Business Unit indicates this best practice is required by that business unit and therefore is a mandatory Standard Operating Procedure (SOP) for that business unit.

PURPOSE:

The purpose of this requirement is to prevent hand injuries and protect our employees from the hazards of drill bits binding in material being drilled.

PROCESS:

In order to better protect the safety of our employees, the decision to not allow the use of paddle bits/spade bits of any size on our jobsites. This applies to Cajun owned tools as well as personal tools. Any hole that need to be drilled, must be done by other means such as tri-flute bits, hole saws, and drill presses. When using these alternate methods we still need to use caution. With drill presses, we need to ensure that they are set up properly and securely mounted. When using drill presses we should also ensure that the item being drilled is properly secured (clamp, vise, etc.). With hole saws we need to understand that they are a safer alternative, but they too still have the potential to jam.

We also need to reinforce with our employees that when using a drill or hole saw, they must use both hands on the handles and hold the tool firmly. As a final reminder, our Dewalt representatives are a great resource for training and to answer questions. The Dewalt drills equipped with the Perform & Protect E- Clutch feature are required. When a stall is detected, the E-Clutch feature engages, killing power to the drill. This is a great feature but it will not eliminate all risk. Using the right size bit, improved engineered drills, proper hand placement and proper ergonomics all aid in the reduction of bit stalling.

When drilling into metal using a hand held drill and twist bit, you should limit the size of the bit to the size of the drill. (Example: For a ½" drill, you should limit the bit size to ½".) Larger bits can be purchased with a reduced shank that will fit into the chuck of a ½" drill, but should be used in a drill press or mag drill only for better control and to reduce the chance of injury. Larger bits will take larger bites and increase the chance of stalling.

See next page for pictures.

Example of paddle bit (not allowed).

Safer alternatives to paddle bits which are approved for use.		
		
Tri-Flute Bit	Auger Bit	Hole Saw Bit

Approvals		
Title	***Signature***	***Date***

Revision History				
Rev #	***Date***	***Reason for Changes***	***Originator***	***Effective Date***

Note: SOP Requirement

Work must be performed in accordance with the information in this Best Practice. If it is determined, that work cannot be done as required in the document or that it presents additional risk, you must obtain authorization for variance from the Business Unit Sr. Construction Manager and Business Unit Manager of Safety.