

EVRlock QB1-HT Running Procedures

DOC. NO: PC-REP-003
Prepared by: Ian Nicholson

REV. NO:4
Reviewed by: Andrew Hamilton

DATE: March 11, 2022
Approved by: Tim Hylton

EVRlock QB1-HT Running Procedures

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The following information is provided as a recommendation only, prepared on the basis of standard operating and environmental conditions. Each owner and/or operator should satisfy themselves as to proper handling and make-up procedures for their own operations. Please note that the following information is provided free of charge and is not intended as a substitute for professional advice. EVRAZ gives no warranties as to the suitability or applicability of any information contained herein and disclaims any liability for its use. Please visit www.evrlock.com for the most up to date information.

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1.0 TRANSPORTATION AND HANDLING

- Prior to unloading, a visual inspection of the load should be performed to ensure that all pin end thread protectors are in place.
- If pipe are found with missing protectors, they should be identified for additional inspections.
- Thread protectors must be securely in place when transporting pipe to and from location, during loading and unloading, and whenever pipe is moved.
- Load or unload with slings or fork lift.

Do not unload pipe with end hooks.

2.0 INSPECTION AND PREPARATION

- Ensure that the drive nubbins, float equipment, thread compound, thread lock, stabbing guides, drifts, snakes and any other required accessories are on location. Visually inspect to ensure that all accessories are in good condition.
- Adequate space must be given on the pipe racks for cleaning and visual inspection, if required.
- Remove both thread protectors from each joint on the pipe racks and full length drift each joint prior to running in the hole. Use an appropriate sized Teflon or nylon drift and snake. All no-drifts should be clearly identified on the pipe and set aside.
- Pin end thread protectors must be replaced prior to moving pipe and should be free from contamination.

3.0 EQUIPMENT

Top Drive Rigs

- When not using bales and elevators, EVRAZ recommends the use of a casing running tool as opposed to a drive nubbin. Use of a casing running tool a removes handling of the box thread and will reduce the opportunity for damage to the connection.
- If a drive nubbin is used, it should be inspected before use to ensure it is in good condition.
- Drive nubbins must not abrade or damage thread forms or phosphate coating

Slant Rigs

- Running casing on slant rig tends to exhibit a number of challenges not typically encountered on verticals:
 - Connection misalignment during stabbing
 - Connection misalignment during initial and intermediate make-up
 - Pipe support during initial make-up (working to minimize the side loading of the threads in the coupling)

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- The pipe arm may be used as a support to align the pin and box

Power Tongs

- Power tongs should be clean with dies in good condition and have the correct size jaws for the casing being run.
- If a snub line is used, it should be connected and set at a 90 degree angle to the tong's arm.
- Tongs should be size-matched and be of sufficient power to apply the maximum torque for the given casing size and wall thickness.

Thread Compound

- EVRlock QB1-HT is shipped with Topco Greenseal Supreme (Canada) or Best-o-Life 2000 (USA). Other thread compounds may be used upon consultation with EVRAZ technical services.
 - If other API 5a3 compliant thread compounds are utilized the torque correction factor noted by the compound manufacturer must be considered
- The thread compound container must remain free of all contaminants (i.e.: water, ice, sand, solvent, sawdust, etc.) and should be thoroughly stirred prior to application to ensure proper mixing of solid particles.
- During cold weather, the thread compound should be stored inside and applied warm, if possible. In addition, steaming of the pipe ends is recommended to facilitate application of thread compound.
- Apply a thin, even coat of the thread compound to the pin and coupling threads. A bottle brush or a dope brush, are recommended. A thin even coat is defined as approximately 0.030" to 0.040" (0.75mm to 1mm) with thread form still clearly visible.

4.0 RUNNING PROCEDURE

EVRAZ recommends the use of bales and elevators paired with conventional or integral power tongs to run EVRlock QB1-HT. In addition, EVRAZ recommends avoiding the use of a drive nubbin since they have been shown to cause damage to the coupling.

Remove pin end protectors at the last possible moment to prevent thread damage and never remove pin protectors prior to moving pipe to the rig floor

Prior to making up the first connection, true vertical alignment of the rig must be checked. Misalignment in excess of 1 pipe diameter must be corrected prior to engagement and makeup.

For Tong Operation

- The tongs should not exceed 20 RPM while running in, and the speed should be reduced to 7 to 8 RPM for the last turn.

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DO NOT shift to low gear within one thread turn of shoulder position

EVRAZ recommends use of a stabbing guide. Stabbing should be done carefully to avoid pin nose damage. It is also very important that reasonable vertical alignment be maintained during make up.

- To avoid contamination inside of the coupling, the stump should be covered while the tower pipe is being moved into position.
- Pipe should be vertical and spin freely during make-up. Elevators should not interfere with this process.
- **In the case of a miss stab where there is pin face and box contact, lift the joint and inspect the pin face.**

Torque Limits

- Please refer to EVRlock.com for recommended torque values.
- Torque monitoring is not required to run this connection. If torque monitoring is used please contact EVRAZ technical services for details.
- Following each make up, lower the joint down the hole at a modest speed before engaging the slips.
- Place the stabbing guide on the coupling and repeat the running process.

For Top Drive Operation with drive nubbin: after each make-up visually inspect nubbin threads for damage. After approximately 6 make ups wash the nubbin with solvent and wipe dry for a thorough inspection. Repair if required and return the nubbin to the cat walk.

5.0 POST JOB

- All unserviceable and laid down joints must be painted red on the end which was damaged and clearly identified on the pipe body as to the reason for rejection.
- All unused connections following the job, including all accessories, must have storage compound applied and thread protectors firmly installed. This includes damaged connections. Damage may be minimal and thus repairable.

Thread Protectors

- EVRlock QB1-HT thread protectors are recyclable. All thread protectors are to be collected and returned for recycling. To coordinate pick up from your rig location please contact your local approved protector recycler to arrange for provision of protector transportation bags and collection of the protectors.

Revision History

Revision	Date	Details
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4	March 11, 2022	Updates and slant rig operation recommendations
3	October 21, 2016	Removed Table 1; users are referred to EVRlock.com for values originally listed in Table 1
2	June 12, 2014	Formatting and editorial changes only
1	November 25, 2013	Updated based on field trials
0	August 4, 2011	First issue