	Superior Tubular Solutions (STS) FZE	PDG 200
	STS-6 RUNNING PROCEDURE	Dec 2015

General

Environmental regulations should be adhered to at all times

1. Handling & Storage

- a. Thread protectors should remain in place during all pipe movements.
- b. Suitable thread compound should be applied to all connections this includes any prolonged periods in the rack prior to running.
- c. Thread protectors when removed should be cleaned, dried and stored in a manner that protects them from damage.
- d. Disengaged connections should be cleaned of all residues dope, mud etc. and protected against damage using clean thread protectors that are undamaged and fitted properly.
- e. All pipes that are subject to EMI/Flux Leakage testing should be demagnetised prior to storing.
- f. Handling plugs should be used when moving the pipe to and from the rig floor
- g. Clean connections using either:
 - i. A non-metallic brush and cleaning solvent.
 - ii. A steam cleaner with hot water & may be used.
 - iii. Rotary bristle brush with jetted water.

Ensure water and solvent residues are removed especially from the back of the box connection.


Pre-Running

2. Connection Preparation

- a. Visually inspect the connections and ensure bores are free of dirt, scale and debris.
- b. Ensure connections are clean and dry before applying suitable thread compound.
- c. API modified thread running compound should be used

3. Running & Handling Equipment

- a. Verify alignment of block and rotary hole.
- b. Slip type elevators are recommended. Bottleneck or shoulder type elevators are not recommended.
- c. Ensure slips are in good order fitted with suitable dies.
- d. Ensure elevators are centred over the rotary hole when suspended from the block
- e. The power tongs should be rated for the torque that is to be applied. Integral hydraulic backups are recommended. Both tongs and backups should be fitted with the proper sized dies and the dies must conform to the curvature of the

	Superior Tubular Solutions (STS) FZE	PDG 200
	STS-6 RUNNING PROCEDURE	Dec 2015

tubing. If power tongs are not fitted with integral backups, the snub line must be at a 90 degree angle to the tongs and must be level. Verify that load cells are currently calibrated.

- f. Lifting/handling plugs should be used ensure they are in good condition.
- g. Verify all accessories are fit for intended purpose.

4. Stabbing

- a. Tubes must be properly aligned during to stabbing. (elevator alignment)
- b. Apply a light coat of thread compound to lubricate the threads and seals to a maximum of 1/3 the thread height from the thread root.
- c. Ensure tabbing guides are used.
- d. Carefully mate the connections and turn the pipe 3 times by hand or by use of strap ensuring that both cylindrical sections of the connection are engaged. Only a small gap should be visible between the connections.

5. Make-up

- a. Power tongs shall be used to achieve the specified torque value.
- b. Position the power tongs in order that they are sufficiently above and below the connection.
- c. Make-up to the specified torque range at a maximum of 5RPM.
- d. During make-up the power tong lead line must be 90° to the power tong for the working position (if applicable). The hanging line must be straight up in the working position to ensure the connection is not negatively impacted (bending) by the weight of the tong.

6. Lowering

- a. Ensure the elevator slips are set below the connection to ensure no interference.
- b. Keep the handling plug in the box connection until the joint is set in the slips

7. Pulling

- a. Use Power Tongs at max of 5RPM to break out the connection
- b. Pipe must be vertical and allowed to spin freely during breakout, Elevators may require to be slackened off to facilitate.
- c. Excessive torque or irregular rotation speed indicates poor alignment and can cause damage. The problem must be rectified prior to continuing.
- d. Care is required when lifting the pin out of the box: maintaining rotation and keeping the pin central to the box when disengaging prevents hang up and potential thread damage



APPENDIX 1
TORQUE GRAPHS

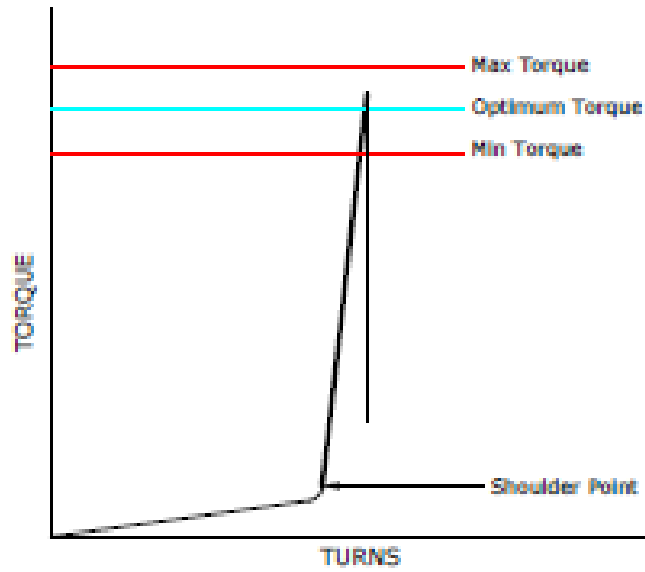


Figure 1
Acceptable STS-6 Graph (Typical)

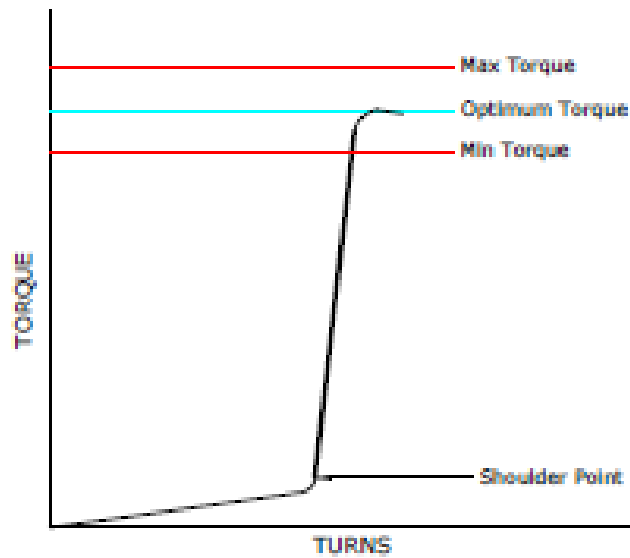



Figure 2

	Superior Tubular Solutions (STS) FZE	PDG 200
	STS-6 RUNNING PROCEDURE	Dec 2015

Indicates tong slippage or connection yielding. Typically tong slippage will be the cause. STS-6 connection can withstand very high torques before yielding

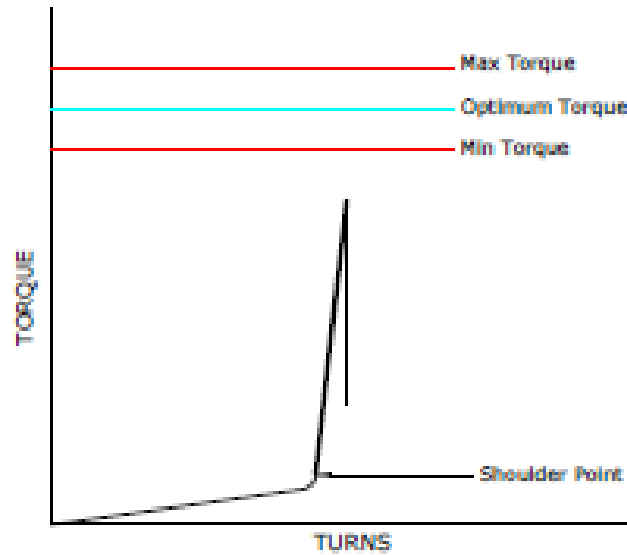


Figure 3

Minimum specified torque has not been achieved. Breakout and inspect. If acceptable remake-up.

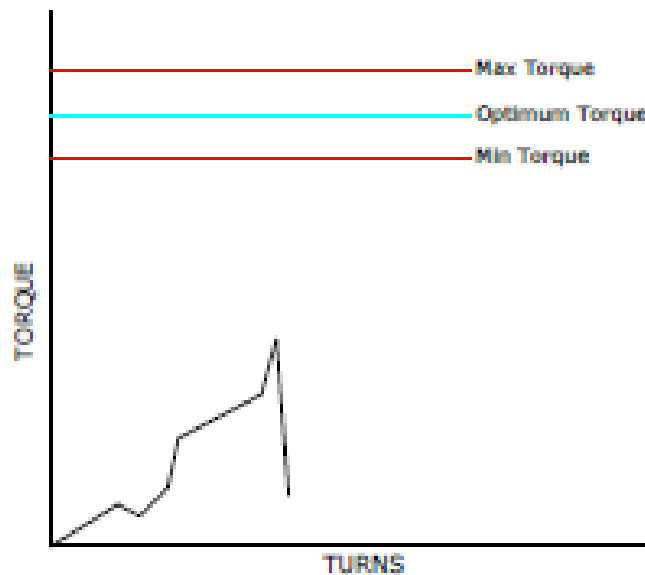



Figure 4

Indicates thread interference prior to seal engaging. Breakout and inspect

	Superior Tubular Solutions (STS) FZE	PDG 200
	STS-6 RUNNING PROCEDURE	Dec 2015

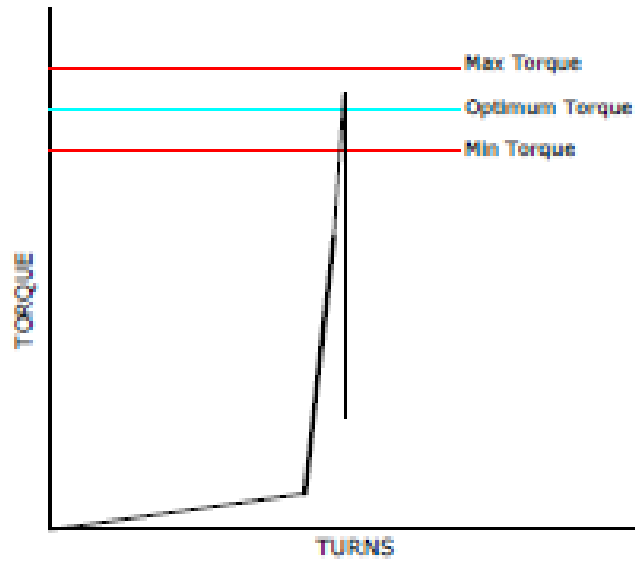



Figure 5

Indicates insufficient seal or seal interface. Verify the reference torque is low enough to register the seal interface.

	Superior Tubular Solutions (STS) FZE	PDG 200
	STS-6 RUNNING PROCEDURE	Dec 2015

Appendix 2

Recommended Thread Compounds & Weights (Carbon Grade Steels)

CARBON GRADE TUBING	
API Modified	Bestolife 72733 Jet Lube API Modified
Environmentally Safe	Bestolife PTC & PTC-ST Jet Lube Seal Guard Jet Lube Enviro-Safe

Recommended Thread Compound Weight

Size	Weight (Ounces)	Weight (grams)
2-7/8	0.6	17
3-1/2	0.55	25
4-1/2	1.13	32