

Field Running Procedure of MO-FXL

Rev. 1 8-5/8" MOFXL WAS ADDED IN THE APPENDIX.

1. Running Precaution

- 1.1 Pipe shall not be stacked higher than five tiers at the rig.
- 1.2 Wooden dunnage shall be placed between successive layers.
- 1.3 Thread protector should always remain in place when moving or handling.
- 1.4 Avoid rough handling. Do not unload pipe by dropping.

2. Running Preparation

- 2.1 Thread compound that was applied to the connections may have been contaminated during storage and should be removed prior to running operations. The handling or lifting plugs that are used in the running operation for the MO-FXL connection require the box connection to be properly cleaned prior to installation of the handling or lifting plug. Diesel oil shall not be used to clean connection.
- 2.2 Ensure the thread compound is available
API RP 5A3 modified or Best-o-life 2000 is recommended unless customer specifies otherwise.
- 2.3 Handling Plug should be installed before lifting MO-FXL.
- 2.4 Locking slip type elevators are recommended (not spring loaded type elevators) and should be of the correct size and length to accommodate the casing. Make sure that the slip type elevators are in good working condition, so as not to cause ovality in the pipe.
- 2.5 Collar type elevators should not be used on this size of material as this would put all of the string weight onto the face of the handling plug that was screwed into the box connection.
- 2.6 Check for traveling block alignment.
- 2.7 Power tongs with lead line at 90 degrees and level with tong.
Ensure that accurate torque monitoring device is available.
- 2.8 Make sure that the meter indicates torque (ft-lbs) or load (lbs).

3. Running

- 3.1 It is recommended to use stabbing guide applied to box of the pipe set in the slip.
- 3.2 Pick-up a joint from the rack to the vee door with the pin protector in place. The box protector should be removed when the joint of pipe is in the vee door of the rig. Install the handling plug into the clean box connection. Make sure the elevator is securely clamped.
- 3.3 Remove the Handling Plug and apply an even coat of thread compound to the box connection with a brush.
- 3.4 Remove the pin protector and make sure that pin connection is free from foreign materials.
- 3.5 Apply thread compound on the 100% pin threads with a brush.
- 3.6 Lower joint, pin into box. Ensure alignment before stabbing

4. Make-up

4.1 It is critical during the initial stabbing and make-up that the pipe be maintained in a true vertical position. Vertical alignment is that is the position of the pin connections in relationship to the box connection in the rotary table. Vertical alignment must be maintain during the make-up.

4.2 Make up torque : See Appendix_A Torque Table (ft-lbs)

4.3 It is strongly recommended to lower the RPM prior to shouldering less than 10 RPM to avoid over-shooting of torque. In the case of pressure gauge is used instead of torque meter, Hydraulic pressure equivalent to recommended torque shall be converted from torque - pressure chart.

4.4 For first 10 joints, check make up position

External shoulder shall be completely closed.

If the external shoulder is not closed, then increase the torque until the shoulder is closed. Torque may be deviated from the recommendation depending on grease used, and very hot or very cold temperature may change friction factor of grease.

5. PULLING

5.1 Preparation

5.1.1 Same precaution shall be paid as running

5.1.2 Clean thread protector should be available prior to laying down.

5.2 Breaking out

5.2.1 Back up tong shall be applied on the location about 1 foot from box face.

5.2.2 After breaking loose, great care should be paid not to overspin to prevent galling.

5.2.3 Great care should be exercised to disengage all of the thread before lifting a pipe out of Box connection.

6. Definition in the document

6.1 Handling Plug

Handling plugs are designed to be installed hand tight into the box connection and are used during general running operations and are NOT intended to hold string weight.

6.2 Lifting Plug

Lifting plugs are designed to lift the entire string weight. If the customer needs lifting plugs, then please contact a Metal-One representative.

Appendix_A Torque Table (ft-lbs)

OD	Ppf	WT	J55/K55			L80/N80			T95/P110		
			Min.	Max.	Ope. Max	Min.	Max.	Ope. Max.	Min.	Max.	Ope. Max
7-5/8"	29.7	0.375"	9,200	11,200	14,000	11,200	13,600	17,000	15,500	18,900	23,600
8-5/8"	32.0	0.352"	8,200	10,000	16,700	10,000	12,200	20,300	11,600	14,200	28,400