Metal One

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Recommended Field Running Procedure for EUE-PA Connections

[1] Identification

EUE-PA is a threaded and coupled connection and has the following features.

- The thread form of EUE-PA is identical to API 5B Round Thread 8TPI.
- EUE-PA pins is same as API 5B External-upset tubing (=EUE).
- EUE-PA couplings are shorter than EUE couplings
- The pin noses contact in a correctly made-up EUE-PA connection

[2] Running

[2.1] Running Preparation

- Use thread compound recommended in Appendix-A, uncontaminated and thoroughly stirred unless customer specifies special thread compound.
- Ensure the tong hangs horizontally
- Check for correct alignment of travelling block and rotary (see 2.4 Stabbing)

[2.2] Thread Inspection (If required)

Ensure that the connections are thoroughly clean and dry.
Visually check that the connections are free from burrs or tears and have a relatively even thread surface.
A “mash” on the pin or box is unacceptable.

[2.3] Thread Compound

Prior to stabbing a moderate coating of thread compound (dope) should be applied to the pin and box threads uniformly with using soft brush.
Dope must always be applied to the pin faces.

Dope recommended : Best-o-life 2000 or 2010NM

In case of “ Mill dope is used”, additional dope shall be applied on pin threads and pin face.

[2.4] Stabbing

With the joint hanging freely in the derrick – check the vertical alignment to ensure the pin is directly over the box. True vertical alignment either with a stabber, stabbing arm or with the blocks must be maintained during make-up operations.

Lower the pipe slowly into the box connection to avoid damaging the threads.
After stabbing-in ensure the pipe remains vertically aligned.

[2.5] Power make-up

Engage the power tong at non upset area.
If a back-up tong is used it should never be placed directly on the coupling, but always under the Coupling at non upset area.
Ensure the tong back-up line is at 90 degrees to the tong and pipe axis (both vertical and horizontal).
Ensure the elevators are not supporting any of the pipe weight.
Using the power tong, make-up the connection at a speed of not more than 15 rpm for

last 2 – 3 turns, and ensure that the tong does not slip during the make-up operation and damage the pipe body.
then torque will gradually build up until the two pin noses contact, at which point the torque will increase very rapidly and a torque “spike” will be seen on the torque gauge.
Make-up the connection to the correct torque & position with the aid of a torque gauge and confirm that the make-up is acceptable in accordance with the criteria in 2.6.

[2.6] Recommended Make-up torque

Table 1 Torque for standard applications such as work string

Size	Grade	Min.	Opti.	Max.	Ope.Max.
2-3/8" x 4.7#	J55	1,200	1,400	1,600	2,000
2-7/8" x 6.5#	J55	1,400	1,700	2,000	3,800
3-1/2" x 9.3#	J55	2,100	2,500	2,900	7,000

Table 2 Torque for high torque application such as PCP without Torque anchor

Size	Grade	Min.	Opti.	Max.	Ope.Max.
2-3/8" x 4.7#	J55	1,650	1,800	1,950	2,000
2-7/8" x 6.5#	J55	2,100	2,400	2,700	3,800
3-1/2" x 9.3#	J55	4,000	4,300	4,600	7,000

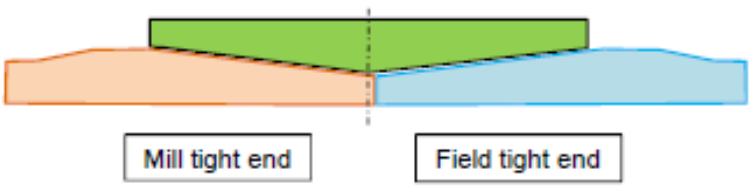
Table 3 Torque for applications as alternative to API EUE

Size	Grade	Min.	Opti.	Max.	Ope.Max.
2-3/8" x 4.7#	J55	970	1,290	1,610	2,000
2-7/8" x 6.5#	J55	1,240	1,650	2,060	3,800
3-1/2" x 9.3#	J55	1,710	2,280	2,850	7,000

Torque should be set at Optimum Torque and if no shouldering occurs, the torque should be increased up to Maximum Torque.
“Accidental” over-torque can be accepted as long as actual make up torque is less than “ Operational Max. Torque “.

[2.7] Acceptance Criteria for Make-up

Connection make-up is considered successful if pin to pin abutment is achieved and final torque is within recommended torque range in Table 1 or 2 :



To identify pin to pin abutment, there are two methods as mentioned below.

(Case 1)

The two pin noses contact which is indicated on the torque dial gauge as a very sudden increase in torque (“spike”)

(Case 2)

A tong operator can catch a feeling of shouldering with throttle lever.

[3] Pulling

The equipment required for pulling is basically the same as running.
Back-up tong should be placed on the center of the coupling. Use of the rig tongs for this operation is not recommended. If back-up tong is not available then please ensure the coupling mill-end side does not rotate and a paint line gives a useful indication.
True vertical alignment either with a stabber, stabbing arm or with the blocks must be maintained during break out operation.
Engage the power tong at the same area of the pipe as make-up. Break out the connection using controlled torque- do not “jerk”. Rotation speed during break out and spinning out should not exceed 15 rpm. Once the threads have disengaged, the pin will “bump” in the box, rotate 1/3 of a turn before lifting out the pipe.
When lifting out, care should be taken to ensure the threads are fully disengaged to prevent jump out. Use of a stabbing guide will help protect the pin and may assist in the lifting of the pipe out of
the box.

[4] Minor Damage on the threads

Light imperfections/corrosion on the threads is acceptable.
Minor damage to pin end threads such as burrs can be repaired with a fine file, hone or emery
paper.

[5] Inter-changeability with EUE (=External upset tubing)

EUE-PA and EUE connections can be inter-changed and the following points should be noted :

EUE-PA Pin & EUE Box

The pin noses will not contact and the make-up criteria should be the same as EUE. (= Not Internally Flush).

EUE-PA Box & EUE Pin

The pin noses will contact and the make-up criteria should be the same as EUE-PA (= Internally Flush).