Metal One

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Field Running Procedure of SUPERMAX-TS and SUPERMAX-TS2

(Rev. 8a : 4-1/2 x 15.1 lbs/ft P110 ;Torque value was revised)

RUNNING

1. Precaution

1) Pipe shall not be stacked higher than five tiers at the rig.
2) Wooden dunnage shall be placed between successive layers
3) Thread protector should always remain in place when moving or handling
4) Avoid rough handling. Do not unload pipe by dropping.

2. Preparation

Ensure all necessary running equipment and accessories are available and in good condition.

1) Elevator shall be proper size and **non-upset collar type** or slip type.
2) Slips are of correct size to accommodate size and length of tubing
3) Check for traveling block alignment
4) Ensure all necessary running equipment and accessories area available and in good condition.
5) Ensure the thread compound is available
6) Power tongs with lead line at 90 degrees and level with tong.
   Ensure that accurate torque monitoring device is available.
7) Make sure that the meter indicates torque (ft-lbs) or load (lbs).
8) Box protector may be removed on the rack before picking up to floor.

3. Running

1) It is recommended to use stabbing guide applied to coupling of the pipe set in the slip.
2) Pick up a joint from the rack (or truck) on to the derrick with pin protector on. Make sure the elevator is securely clamped.
3) Apply thread compound on the coupling with a brush.
4) Remove the pin protector.
5) Lower joint, pin into box. Ensure alignment before stabbing .

4. Make-up

1) Carefully watch pipe swinging, and rotate pipe while pipe is aligned with lower joint.

2) Dope recommended :

- Non-thermal applications : API 5A2 Modified, Best-o-life 2000
- Thermal application : TOPCO TK2

3) Application of dope

Dope shall be applied on the coupling, uniformly to cover all threads.

Dope MUST always be applied to the internal shoulder of coupling.

4) Make up torque (ft-lbs)

Table 1 SMAX-TS, SMAX-TS2 Recommended Make up Torque (ft-bs)

OD	Weight	J55			L80			P110		
inch	lbs/ft	Min.	Opt.	Max.	Min.	Opt.	Max.	Min.	Opt.	Max.
2 3/8	4.6	1,080	1,200	1,320	1,170	1,300	1,430	1,260	1,400	1,540
2 7/8	6.4	1,620	1,800	1,980	1,800	2,000	2,200	1,980	2,200	2,420
3 1/2	9.2	2,880	3,200	3,520	3,060	3,400	3,740	3,240	3,600	3,960
4	10.7	3,150	3,500	3,850	3,420	3,800	4,180	3,690	4,100	4,510
4 1/2	10.5	3,330	3,700	4,070	3,510	3,900	4,290	3,690	4,100	4,510
4 1/2	11.6	3,500	4,000	4,500	4,100	4,600	4,700	4,800	5,400	6,000
4 1/2	12.6	4,000	4,500	5,000	4,700	5,200	5,700	5,000	5,500	6,000
4 1/2	13.5	4,600	5,100	5,600	5,300	5,900	6,500	6,300	6,900	7,500
4 1/2	15.1	5,500	6,100	6,700	6,300	7,000	7,700	7,700	8,600	9,500
5	15.0	5,400	6,000	6,600	6,200	6,900	7,600	7,200	8,100	8,900
5	18.0	7,000	7,800	8,600	8,100	9,000	9,900	9,500	10,500	11,500
5 1/2	15.5	5,400	6,000	6,600	6,100	6,800	7,500	7,200	8,000	8,800
5 1/2	17.0	6,300	7,000	7,700	7,200	8,000	8,800	8,500	9,400	10,300
5 1/2	20.0	7,900	8,800	9,700	9,100	10,100	11,000	10,800	12,000	13,200
6 5/8	20.0	9,000	10,000	11,000	10,000	11,000	12,000	11,500	13,000	14,500
6 5/8	24.0	11,500	13,000	14,500	13,500	15,000	16,500	15,300	17,000	18,700
7	23.0	10,000	11,000	12,000	11,300	12,600	13,900	13,300	14,800	16,200
7	26.0	11,700	13,000	14,300	13,500	15,000	16,500	15,700	17,500	19,200
7	29.0	13,500	15,000	16,500	15,300	17,000	18,700	18,000	20,000	22,000

- Use low gear and speed shall be less than 10 RPM.

- If actual torque has over-shooting and higher than torque set, adjust set torque to achieve actual final torque to be in the range of torque table.

- 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.

3) For first 10 joints, check make up torque and position
As this is shouldered connection, torque goes up steeply once shouldering.
For first 10 joints, observe shouldering
Coupling end shall come to the base of triangle mark.
If coupling end does not reach to the base of triangle, increase torque to reach up to the base of triangle.

* Torque may be deviated from the recommendation on very hot or very cold days due to friction factor change of grease.

PULLING

1. Preparation

1) Same precaution shall be paid as running
2) Wooden platform for standing back (Refer to API 5C1)
3) Clean thread protector should be available prior to laying down or standing back.

2. Breaking out

1) Back up tong shall be applied on the lower side of coupling.
2) After breaking loose, great care should be paid not to overspin to prevent galling.
3) Great care should be exercised to disengage all of the thread before lifting a pipe out of coupling.

3. Setting back

1) Pipe should be set on a firm wooden platform when set back in the derrick.
2) Protect thread from dirt or injury when the pipes are out of hole.
Thread protectors should be installed on pin.