Handling & Care of Pipes and Connections

These guidelines are for the general care and handling of Tenaris connections and pipes at a well site to ensure their optimum performance is obtained. All queries should be sent to the Tenaris Field Service Group (running.assistant@tenaris.com)

Refer to the this Running Manual, API Recommended Practice 5 c1. Tenaris Field Service Group.

Pipe handling

1. On arrival at the well site the tubulars should be lifted onto racks with appropriate care. Chrome or Duplex pipe must be handled in bundles with appropriate slings, then individually placed on the racks using non-metallic slings; steel hooks should never be used.

2. If damage has been caused to the pipe or connections, the pipe should be set aside for further examination.

3. Movement of pipe should only be carried out with the correct thread protectors securely installed and taking all necessary precautions to prevent damage to the pipe body or connections.

Pipe storage at rig site

1. For all steel grades the pipes must be stacked on wooden batons with at least three rows of wooden spacers evenly aligned across the length of the pipe between layers, thus preventing contact between pipe bodies.

2. Pipe should be stacked in such a manner as to prevent bending whilst stored.

3. A minimum height of 1.5 ft (46 cm) from ground to the lower layer is recommended.

Pipe measuring

Protectors should be removed and replaced immediately after measuring pipe.

Protectors

1. As the protectors are removed, stack them on a clean dry surface; do not allow any debris, corrosive fluid or water to enter the protector.

2. If debris or fluid contaminates the protectors, they should be thoroughly cleaned and dried prior to re-installation onto the connection.

Cleaning

1. Cleaning of the connections to remove storage compound prior to running in the well should be carried out as close to the time of running as possible.
2. Only fresh water or cleaning solvent which leaves no residue when mixed with water should be used to clean the connections. Do not use diesel or oily solvents.

3. Once cleaned, the connections should be dried with the use of compressed air, the protectors washed, dried and re-installed.

4. It is recommended that only one row of pipe at a time has the protectors removed and connections washed prior to hoisting to the rig floor. This prevents exposure of the entire string to the weather for prolonged periods if for any reason there is a delay in running.

5. If for any reason the cleaned connections are to be left exposed for more than 12 hours, a light oil should be applied to the connection by means of a spray or soft brush and clean, dry protectors should be installed.

6. Lightly oiled connections can then be lifted to the rig floor, the protectors removed and the oil wiped off prior to applying running compound on commencement of the running operation.

7. If the connections are to be exposed for more than 12 hours a suitable storage compound should be applied and clean, dry protectors should be installed. It would then be necessary to remove the storage compound prior to the running.

**Surplus pipe**

1. As soon as possible on completion of the running operation, all remaining connections should be cleaned then dried with compressed air. After that a suitable storage compound must be applied to the entire threaded and sealing area of the connection.

2. The amount of storage compound applied to the connection must be enough to protect the entire thread and seal area.

3. Great care should be taken to ensure that no corrosive fluid contaminates the connection during transportation and/or storage.

4. Protectors should be cleaned thoroughly to remove any debris and corrosive fluid, then dried prior to re-installation onto the connection.

5. Pipe should not be back loaded without the connections being cleaned, storage compound applied and clean protectors in place.

**Pulled pipe**

1. The connections of any pipe pulled from the hole after running should be thoroughly cleaned with a high pressure washdown gun using fresh water. They should then be dried and completely covered with an appropriate compound prior to clean, dry protectors being installed for transportation to an inspection facility.

2. Special care should be taken to clean thoroughly any connection which has been contaminated with completion fluid.

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**MEASURING**

Be sure to use the effective length of each pipe to be run into the hole

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EL = TL - MUL
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**TOTAL LENGTH (TL)**

**EFFECTIVE LENGTH (EL)**

**MAKE-UP LOSS (MUL)**