



**U. S. STEEL TUBULAR PRODUCTS**  
**PROPRIETARY THREAD CONNECTION MANUAL**  
(Printed Copies of this Document are *UNCONTROLLED*)

**APPROVED RUNNING AND STORAGE COMPOUNDS AND  
THREAD PROTECTORS**

**Procedure: ENG 05**  
**Revision: 26**  
**Effective Date: 08/15/2025**  
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**1.0 Scope**

- 1.1 This engineering specification lists the various approved thread compounds and thread protector vendors for U. S. Steel semi-premium and premium connections. No variations from these requirements shall be permitted without written approval from U. S. Steel product engineering.

**2.0 Application**

- 2.1 This specification is applicable to all licensees and approved threading facilities manufacturing U. S. Steel semi-premium and premium connections.

**3.0 Reference Documents**

- 3.1 TP1 Specification for Purchased Thread Protectors for Casing and Tubing, latest revision.

Note: TP1 Specification refers to the requirements used specifically by USS Corporate Quality to qualify new thread protector vendors.

**4.0 Definitions**

- 4.1 **Running Compound** – Compound applied to a connection to prevent galling during makeup.
- 4.2 **Storage Compound** – Compound applied to a connection to prevent corrosion during storage.
- 4.3 **Thread Protector** – A device attached to a connection to prevent mechanical damage during storage and handling.

**5.0 Thread Protectors**

- 5.1 Only USS Qualified and Approved Thread Protector vendors shall be used.
- 5.1.1 Table 2 lists all approved thread protector vendors per each connection.
- 5.1.2 USSTP has the responsibility to qualify and approve thread protector vendors using TP1 Specification for Purchased Thread Protectors for Casing and Tubing Connections.

Prepared by: Becker, Shelby L	Prepared date: 08/14/2025
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**5.2 Reconditioned Thread Protectors**

- 5.2.1 Protectors shall not have damaged plastic (cracked, gouged, melted, torn, broken, missing threads, etc.).
- 5.2.2 Protectors shall not have visible ovality (out of roundness).
- 5.2.3 Protectors shall not have major dents deforming the thread area.
- 5.2.4 Protectors shall not have rounded drive holes or end notches used for installing protector.
- 5.2.5 Protectors shall have identification of size, thread, and model as applicable.

**5.3 USS-CDC®, USS-CDC HTQ®, USS-CDC HTQ® SR, USS-FREEDOM HTQ®, and USS-FREEDOM HTS™.**

- 5.3.1 API BTC protectors may be substituted for USS-CDC®, USS-CDC HTQ®, USS-CDC HTQ® SR, USS-FREEDOM HTQ®, and USS-FREEDOM HTS™ provided they function properly.

**5.4 All Other USS Proprietary Connections**

- 5.4.1 Protector color shall be in accordance with U. S. Steel color code P.M.S. 2955. With written approval from U. S. Steel Product Engineering, other colors may be allowed.
- 5.4.2 All protectors shall be closed end, non-liftable design with a ¼" maximum diameter weep hole.
- 5.4.3 Reconditioned protectors must meet the criteria under section 5.2.

**6.0 Approved Compounds and Thread Protectors**

- 6.1 Table 1 lists the Approved Running and Storage Compounds by connection.
- 6.2 Table 2 lists the Approved Thread Protectors by connection.

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**Table 1: Approved Running and Storage Compounds**

	<i>BESTOLIFE® 2000®</i>	<i>BESTOLIFE® 2000® AG</i>	<i>BESTOLIFE® 2020</i>	<i>BESTOLIFE® 72733*</i>	<i>BESTOLIFE® PTC</i>	<i>Jet- Lube® Run-N- Seal Extreme®</i>	<i>Jet- Lube® Seal Guard®</i>	<i>Jet- Lube® HPHT™</i>	<i>Topco Green- Seal® II</i>	<i>Jet-Lube® Korr-Guard®</i>	<i>Kendex® OCTG</i>
<b>Product Line</b>	<b>Running Compounds**</b>									<b>Storage Compounds</b>	
USS-CDC®	•	•	•			•			•	•	•
USS-CDC HTQ®	•	•	•			•			•	•	•
USS-CDC HTQ® SR	•	•	•			•			•	•	•
USS-FREEDOM HTQ®	•	•	•			•			•	•	•
USS-FREEDOM HTS™	•	•	•			•			•	•	•
USS-LIBERTY LD®	•			•	•		•			•	•
USS-LIBERTY FJM®				•	•		•			•	•
USS-LIBERTY TC®				•	•		•			•	•
USS-EAGLE SFM®				•	•			•		•	•
USS-EAGLE SFM® SC				•	•			•		•	•
USS-EAGLE SFH®				•	•			•		•	•
USS-EAGLE SFH® SC				•	•			•		•	•
USS-EAGLE FJM®				•				•		•	•
USS-TALON HTQ®	•	•								•	•
USS-TALON SFC™	•	•								•	•
USS-EAGLE SFM® I				•	•					•	•
USS-EAGLE TC™				•	•					•	•

**NOTE:** \*Compound contains a USSTP restricted ingredient and shall not be handled by U. S. Steel personnel without appropriate controls.

**\*\* Thread running compound evaluation for performance properties is recommended based on their application prior to selection.**

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Table 2: Approved Thread Protectors

	Hunting Composite Thread Protectors	Drilltec ESP-S™	Drilltec ACT™	Drilltec STP™	MSI Mega® Composite	MSI MaxX®	MSI MAGNUM®	MSI TITAN®	MSI ULTRA®	Universal Tubi	Tri-Star Protectors NMD Series®	Tri-Star
Product Line	Thread Protectors											
USS-CDC®	•	•	•	•	•	•	•	•				
USS-CDC HTQ®	•	•	•	•	•	•	•	•				•
USS-CDC HTQ® SR	•	•	•	•	•	•	•	•				•
USS-FREEDOM HTQ®	•	•	•	•	•	•	•	•				
USS-FREEDOM HTS™	•	•	•	•	•	•	•	•				
USS-LIBERTY LD®		•			•							
USS-LIBERTY FJM®		•	•	•	•				•	•		
USS-LIBERTY TC®		•	•	•	•				•	•	•	•
USS-EAGLE SFM®		•			•							
USS-EAGLE SFM® SC		•			•							
USS-EAGLE SFH®		•	•	•	•				•	•		•
USS-EAGLE SFH® SC		•	•	•	•				•	•		•
USS-EAGLE FJM®		•	•	•	•				•			
USS-TALON HTQ®		•	•	•	•				•	•		•
USS-TALON SFC™		•	•	•	•				•	•		•
USS-EAGLE SFM® I		•	•	•								
USS-EAGLE TC™		•	•	•								•

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**7.0 Revision Notes:**

- 7.1 Re-formatted Table 1.
- 7.2 Added Table 2.
- 7.3 Removed Jet-Lube® Run-N-Seal from Table 1.
- 7.4 Removed BOL 2020 and Topco Green-Seal® II from USS-TALON HTQ® connections as it is no longer acceptable.
- 7.5 Added general disclaimer, denoted by \*\*, regarding thread compound selection.

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