



**CONNECTION
TECHNOLOGY
PRODUCT
SPECIFICATION**

SECTION	V	
Prepared by	SPL	Stephon Lopez <small>Digitally signed by Stephon Lopez DN: cn=SPL, o=HCT, email=SPL@hct.com</small>
Engineering	SJH	Stephen Harvey <small>Digitally signed by Stephen Harvey DN: cn=Stephen Harvey, o=HCT, email=SH@hct.com</small>
Quality Assurance	ALR	Andrea Romero <small>Digitally signed by Andrea Romero DN: cn=Andrea Romero, o=HCT, email=AR@hct.com</small>
REVISION	001	Karen DesCamp <small>Digitally signed by Karen DesCamp DN: cn=Karen DesCamp, o=HCT, email=KDC@hct.com</small>

SUBJECT: VISUAL THREAD INSPECTION

1.0 SCOPE

1.1. This document sets forth the broad guidelines for the field visual thread inspection of Hunting Connection Technology (HCT) **SEAL-LOCK FLUSH** and **SEAL-LOCK SEMI-FLUSH** connections by independent inspection agencies.

2.0 DEFINITION

2.1. Visual thread inspection shall be defined as those inspections that may be performed on HCT proprietary connections without the use of proprietary gages.

3.0 PIN/FIELD END INSPECTION

3.1. Pin Face

3.1.1. Place a straight edge across the pin face. Sight between the pin face and the straight edge to determine that the pin face is square. Ensure that the pin nose radius is fully blended and is free from sharp edges or burrs.

3.1.2. Visually inspect the pin face for surface irregularities. Minor dents or dings to the pin face are detrimental to the connection, however; most can be repaired by lightly filing to remove all protrusions. Dents or dings on new connections that are sufficiently deep to cause a raised area or protrusion on the seal surface are rejectable. The repair of such conditions during the running of the connection is at the discretion of HCT Service Representative.

3.1.3. The pin face, ID chamfer and OD chamfer are to be smooth and free from burrs.

3.2. Seal Surface

3.2.1. Carefully place a straight edge across the seal surface. It should be a slightly tapered, flat surface. Galls, burrs, dents, or dings on a new seal surface is cause for rejection. The repair of such conditions during the running of the connection is at the discretion of the HCT Service Representative.

3.2.2. Visually inspect the phonographic seal finish. The micro-grooves should be distinct and uninterrupted from the pin face to the thread start within the definitions of minor pitting, inclusions, and continuity of seal surface.

3.2.3. Repair of a new seal surface by wire brushing, sanding, or filing is unacceptable. Acceptable repair methods include polishing with 000 and 0000 steel wool, medium or fine grit Scotch Brite. **All repairs shall be covered with dry film lubricant such as molybdenum disulfide spray.**

3.3. Threaded area

3.3.1. Visually inspect full formed threads. The full formed thread is inspected from the thread start point axially along the thread crests, to a point approximately 1.000" from the thread pull-out area.

3.3.2. Small areas of impact damage or galls occurring during handling damage must be repaired. Field repairable thread damage on new connectors shall not exceed ¼ revolution in circumferential length or 0.010" in depth. All repairs shall be covered with dry film lubricant such as molybdenum disulfide spray.

3.4. External Shoulder

3.4.1. Visually inspect the external shoulder. The shoulder shall be free from protrusions due to corrosion or pitting or impact damage and free from burrs for 360°.



**CONNECTION
TECHNOLOGY
PRODUCT
SPECIFICATION**

SUBJECT: VISUAL THREAD INSPECTION

4.0 BOX END INSPECTION

4.1. Internal Shoulder

4.1.1. Visually inspect the internal shoulder. The shoulder shall be free from protrusions due to corrosion pitting and free from burrs for 360°.

4.2. Seal Surface

4.2.1. Visually inspect the groove-to-seal radius and the seal surface. The radius shall present a smooth, burr-free transition to the seal surface. The seal shall be a slightly tapered, flat surface with a phonograph finish. Galls, burrs, dents, or dings (hydrotest or drift created defects) on new box connectors are rejectable.

4.2.2. Visually inspect the phonograph finish of the seal. The micro-grooves should be finer than those on the pin but still distinct and uninterrupted for the entire seal length within the definitions of minor pitting, inclusions, or continuity of the seal.

4.2.3. Repair of a new seal surface by wire brushing, sanding, or filing is unacceptable. Acceptable repair methods include polishing with 000 and 0000 steel wool, medium or fine grit Scotch Brite. All repairs shall be covered with dry film lubricant such as molybdenum disulfide spray.

4.3. Threaded Area

4.3.1. Visually inspect the full formed threaded area for damage. Small areas of impact damage or galls occurring during hydrostatic testing must be repaired. Field repairable damage on new connectors shall not exceed ¼ revolution in circumferential length or 0.010” in depth. All repaired areas should be covered with a dry film lubricant such as molybdenum disulfide spray.

4.3.2. Allowable corrosion pitting in the full form thread area shall be as defined in the **DEFINITION OF TERMS** under minor pitting.

4.4. Box Face

4.4.1. Visually inspect the 30° box face and OD chamfer for impact damage. Impact damage that has caused the pilot diameter to be indented is cause for rejection.

5.0 CONNECTION GAGING

5.1. The gaging of HCT proprietary connections shall only be performed by an HCT Quality Assurance or Service Representative or an approved Licensee. Hunting personnel or Licensee are the only persons that have availability to the proprietary gages to which the products are manufactured.

6.0 THREAD/STORAGE COMPOUND

6.1. Upon completion of visual thread inspection, verify appropriate thread or storage compound is being applied to both ends of the tube. The approved thread/storage compound shall be as stated in the applicable **FIELD RUNNING AND HANDLING PROCEDURE**.

NOTE 1: Notify HCT Quality Assurance immediately if thread/storage compound being applied is not listed in the FIELD RUNNING AND HANDLING PROCEDURE.



**CONNECTION
TECHNOLOGY
PRODUCT
SPECIFICATION**

SUBJECT:	VISUAL THREAD INSPECTION
-----------------	---------------------------------

7.0 REJECTION

- 7.1. Any thread that does not meet the specified requirements shall be considered a reject.
- 7.2. All rejects shall have the entire thread painted red.
- 7.3. All rejects shall be clearly identified as “reject” to protect against out-of-tolerance material being shipped as prime.
- 7.4. Rejection may be reworked by removing the defective condition and re-threading the parts within appropriate tolerances.
- 7.5. Any discrepancies shall be clarified and dispositioned by HCT Quality Assurance Department before any further processing or delivery.