

1. Scope

This document is to be used for field make-up acceptance of the Hercules® SP Connection.

This procedure shall be used in conjunction with FT-RP-000 General Running Procedure and the latest revision of the Connection Data Sheet (CDS). Where conflicts exist, this connection-specific running procedure and CDS shall govern.

1.1. Product Description

Hercules® SP Connection:

- Threaded and Coupled
- Conventional Shouldered
- Thread sealing



Figure 1 – Product Image

1.2. Approvals

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Reviewed	Israel Martinez – Quality Director	02/06/2026
Approved	Wesley Ott – Director of Engineering	02/09/2026

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1.4. Reference Documents

Document Number	Document
FT-RP-000	General Running Procedure
FT-FI-001	Fermata Connections Field Visual Inspection and Repair Requirements

Available online: fermata-connections.com/running-procedures/

*Always confirm the most current Running Procedure through the online portal or by contacting Field Service.

2. Connection Running

For general running see FT-RP-000 General Running Procedure

Fermata® strongly recommends using a Fermata® certified thread representative for all casing runs. If not used, the operator is responsible for ensuring all make-ups meet Fermata® criteria.

See Section 4.1 in the FT-RP-000 General Running Procedure for Field Service details.

2.1. Connection Compatibility

- Common box connection for multiple pin weights.
- Different pin weights have different wall thickness and critical sections while box is unchanged.
- Different weights have different make-up torques. See CDS for torque range.

Table 1: Interchangeability Chart

OD (inches)	Compatible Weights (lb/ft)
5.000	15.00
	18.00
	21.40
	23.20
	24.10
5.500	15.50
	17.00
	20.00
	23.00
	26.00

Confirm compatibility in Table 1 and performance properties prior to running. Careful consideration of the performance properties of the weakest connection must be made by the operator.

2.2. Thread Compound Application

See FT-RP-000 General Running Procedure Section 4.2 for thread compound application.

2.2.1. Approved Compounds

- BOL 2000
- BOL 72733, or API Modified.

2.2.2. Compound Amount

Refer to Table 2 for the required thread compound volume:

Table 2: Thread Compound Amount

OD (inches)	Volume (mL)
5.000	3.50
5.500	4.00
7.875	6.75

2.2.3. Thread Compound Application

- Apply thread compound only on the box connection, leaving the last ¼” bare.
- Coat full thread form (flanks, roots, and crests).

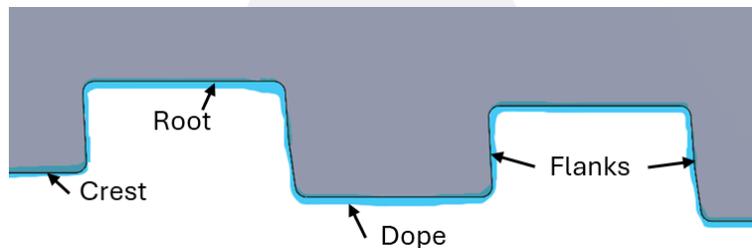


Figure 2 – Thread Form

See Figure 3, Figure 4 and Figure 5 for visual reference.



Figure 3 – Pin Connection (no compound)



Figure 4 – Box Connection Application

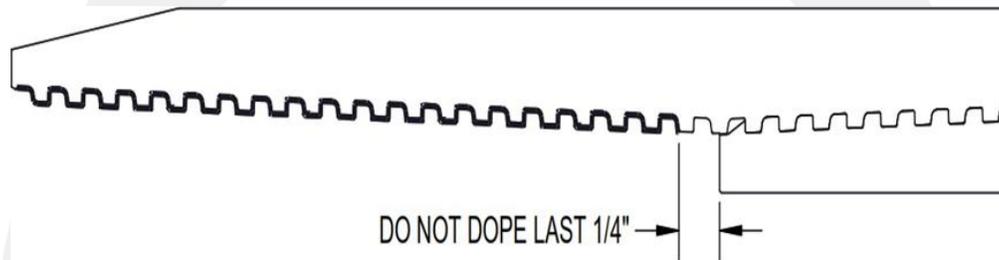


Figure 5 – Thread Compound Location on Box End

2.3. Connection Make-Up

2.3.1. General

See FT-RP-000 General Running Procedure

2.3.2. Hercules® SP Torque-Turn Plot

- Verify the make-up result against Figure 6.
- For Hercules® SP, shoulder torque occurs when the pin noses contact. This event appears as a distinct spike on the torque-turn plot and should occur between 5% and 90% of final make-up torque.

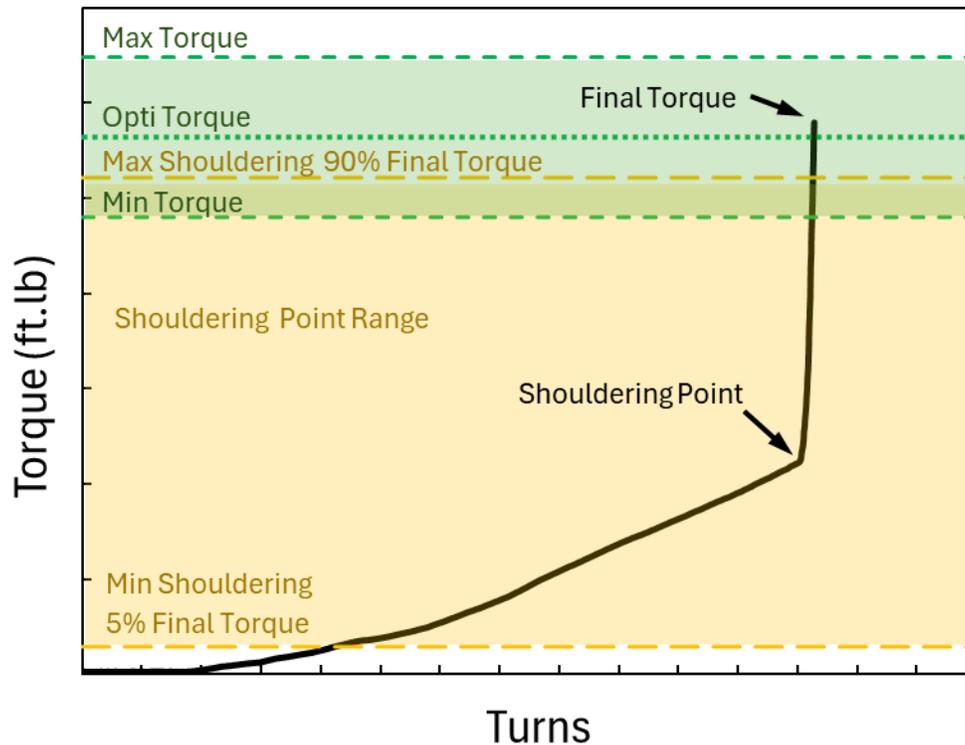


Figure 6 – Hercules® SP Torque-Turn Signature

2.3.3. Make-up Acceptance Criteria

Connections are accepted based on required graph elements (2.3.2), and Knurling/Triangle stamp make-up indicators.

2.3.3.1. Make-up Indicator

Verification of connection make-up can be made by checking the triangle stamp or knurling.

Triangle:

- To locate the triangle there is a 1" wide X 24" long white paint stripe is applied to the field end pin.
- After make-up, the box face must be within a tolerance of ± 0.063 " from the triangle base.

Knurl:

- The knurl is applied around the circumference of the pin.
- After make-up, locate a region around the circumference that has full knurl width indented. The box face must be within a tolerance of ± 0.063 " from the knurl base.

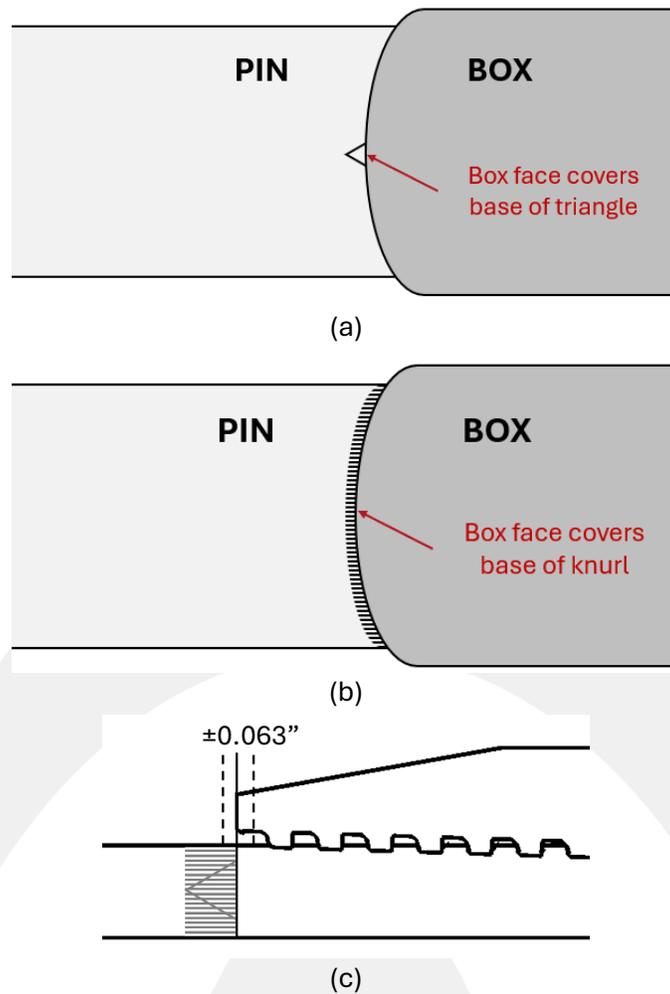
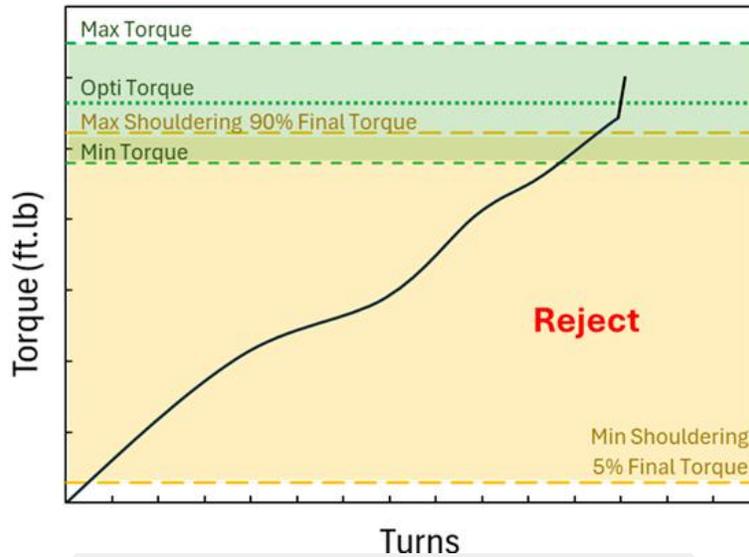


Figure 7 – Triangle stamp after make-up (a), knurl after make-up (b), and (c) position tolerance.

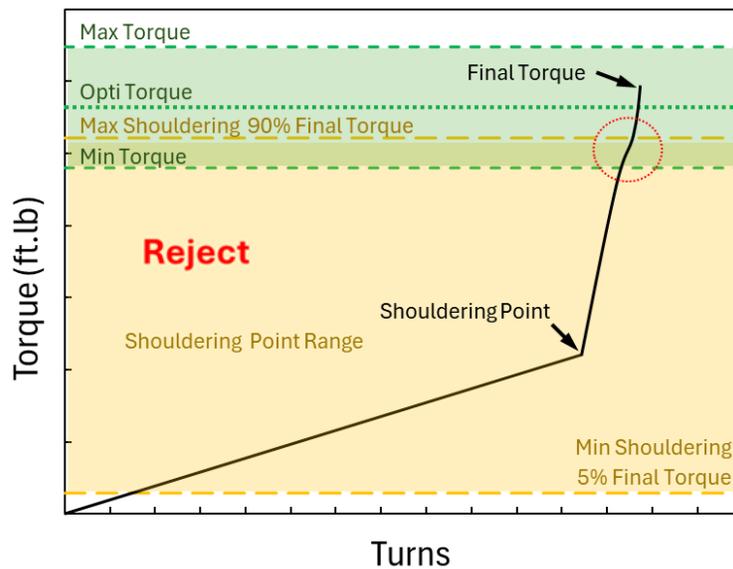
2.3.3.2. Graph Acceptance

- Figure 6 shows an example of an acceptable make-up signature.
- Figure 8 shows examples of unacceptable make-up graphs.
- Contact Fermata[®] Support for any graph irregularity's acceptance.
- See FT-RP-000 General Running Procedure for further examples.



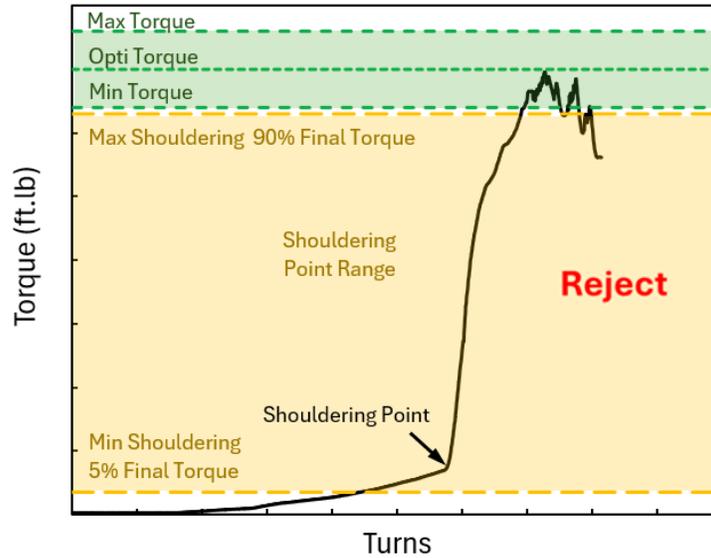
NOTE: High shoulder – Break-out, inspect, if ok remake to max torque.

(a)



NOTE: Irregular torque build after shoulder and just before the optimum torque is reached. Break-out, inspect the connection. If ok, remake with less thread compound.

(b)



NOTE: Yielding – Break-out, lay down pin and box joint, set aside for inspection.
(c)

Figure 8 – Examples (a), (b) and (c) of unacceptable make-up graphs.

Contact Information:

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