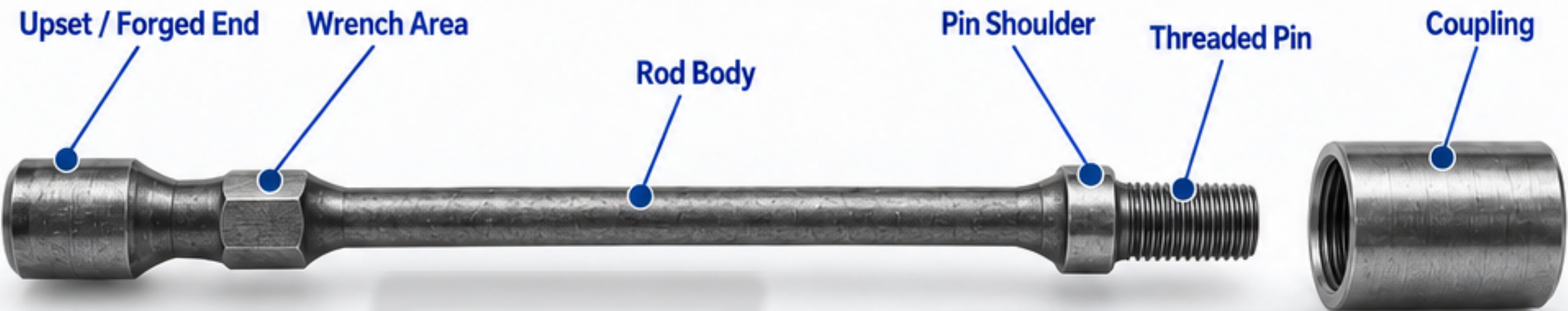


Pony Rod Connection Compatibility and Coupling Guide

Engineering Reference for Pin Connection, Coupling Matching and Rod-String Integration

Pony Rod Connection Structure and Load Transfer Path



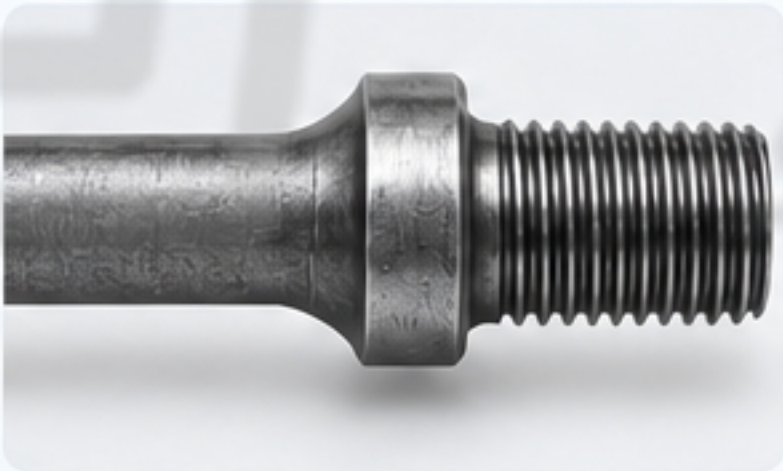
1. Forged End



Provides material for:

- wrench area
- shoulder
- threaded pin

2. Shoulder Contact



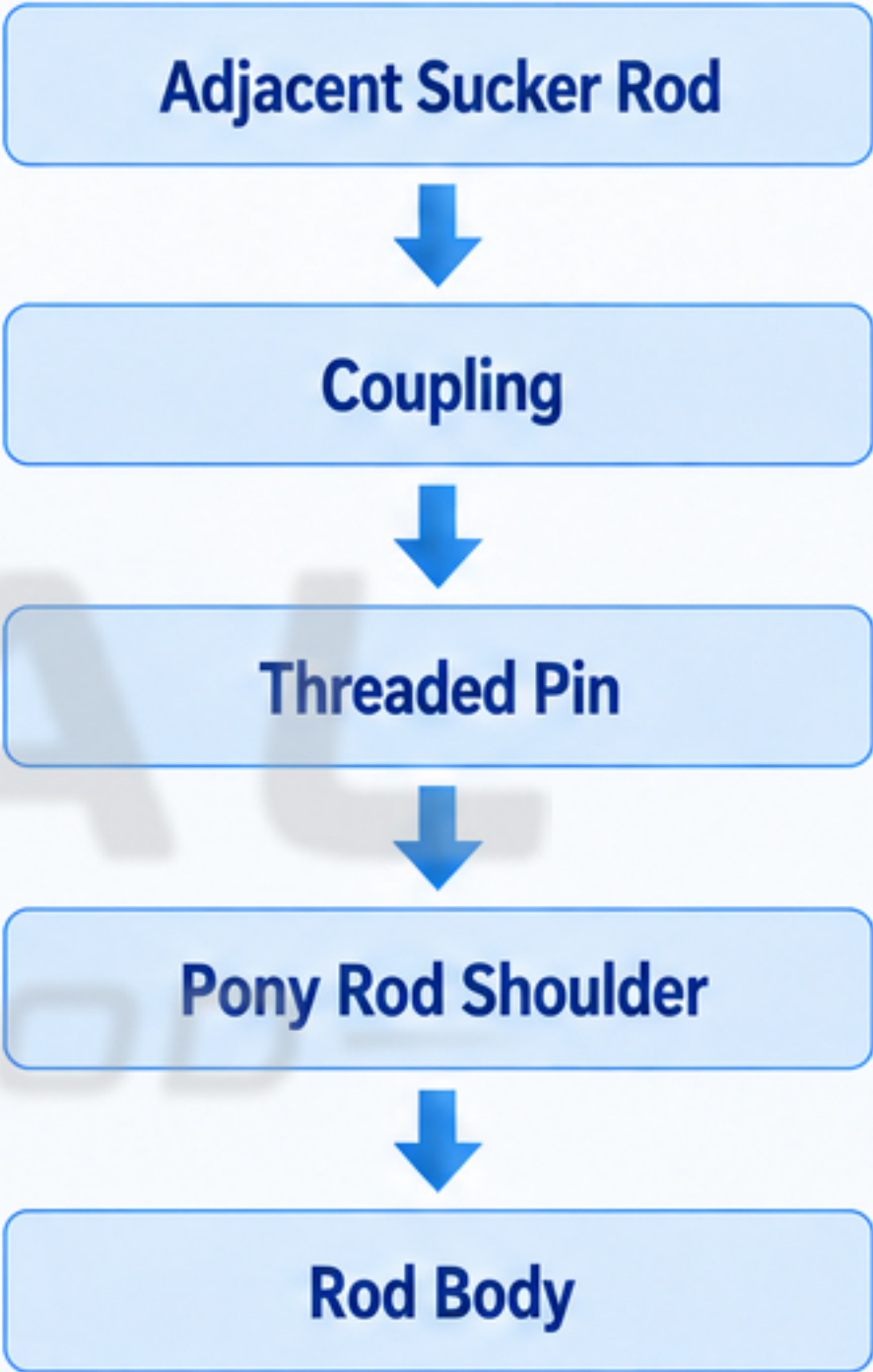
Transfers axial load through the connection.

3. Thread Engagement



Connects pony rod with compatible coupling and adjacent rod.

Connection Load Transfer

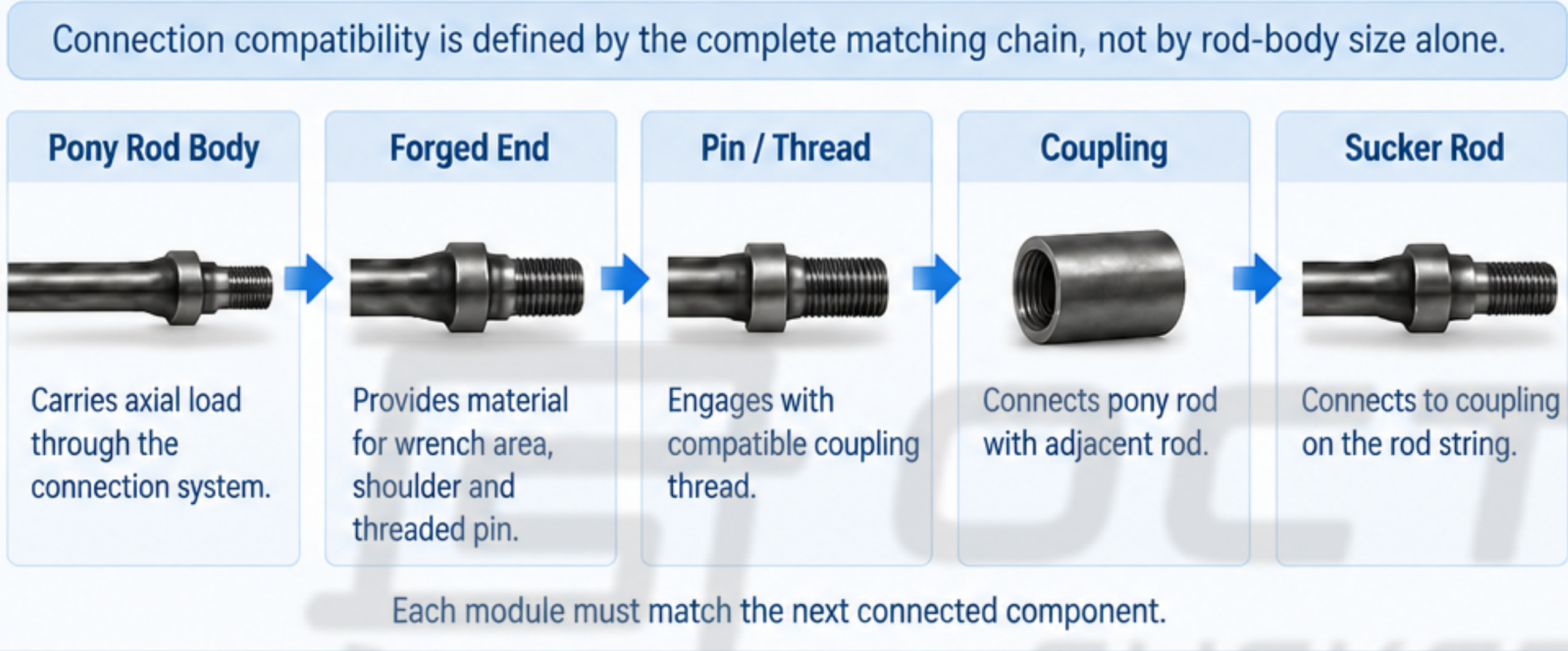


The pony rod carries axial load through both the rod body and the threaded connection system.

KEY TAKEAWAY

Pony rod selection requires connection compatibility, not only matching rod-body diameter.

Pony Rod and Coupling Compatibility Relationship



Typical Sucker Rod Connection Relationship

Nominal Rod Size	Rod Body OD	Typical Full-Size Coupling OD
5/8 in.	15.88 mm	1.500 in. / 38.1 mm
3/4 in.	19.05 mm	1.625 in. / 41.3 mm
7/8 in.	22.23 mm	1.812 in. / 46.0 mm
1 in.	25.40 mm	2.187 in. / 55.6 mm
1-1/8 in.	28.58 mm	2.375 in. / 60.3 mm

Coupling OD increases with rod size and must correspond to the connection system.

✖ Incorrect Matching



✔ Correct Matching



Connection mismatch can affect thread engagement, load transfer and assembly reliability.

KEY TAKEAWAY

Pony rod compatibility depends on rod size, forged end, pin thread, coupling type and adjacent rod matching.

Pony Rod Connection Compatibility and Coupling Guide

Engineering Reference for Pin Connection, Coupling Matching and Rod-String Integration

03 / 04

Replacement Matching Sequence

- **Existing Rod String Information**
Review current rod-string records and component details.
- **Identify Rod Diameter**
Confirm nominal rod size (e.g, 5/8 in., 3/4 in., 7/8 in., 1 in., etc.).
- **Confirm Grade / Material Class**
Verify API 11B grade, material and special service class if required.
- **Verify Thread Configuration**
Check pin thread type and form (e.g. API, special).
- **Match Coupling Type**
Select coupling style and OD based on rod and thread.
- **Check Connection Compatibility**
Confirm full matching chain before installation.

Replacement review starts from the existing rod string, then moves to size, grade, thread and coupling verification.

Coupling Selection and Replacement Matching

Replacement matching should follow the complete rod-string specification, not pony rod length alone.

Scenario 1 | New Rod String



New installation requires matching the complete rod-string configuration.

Scenario 2 | Replacement Application

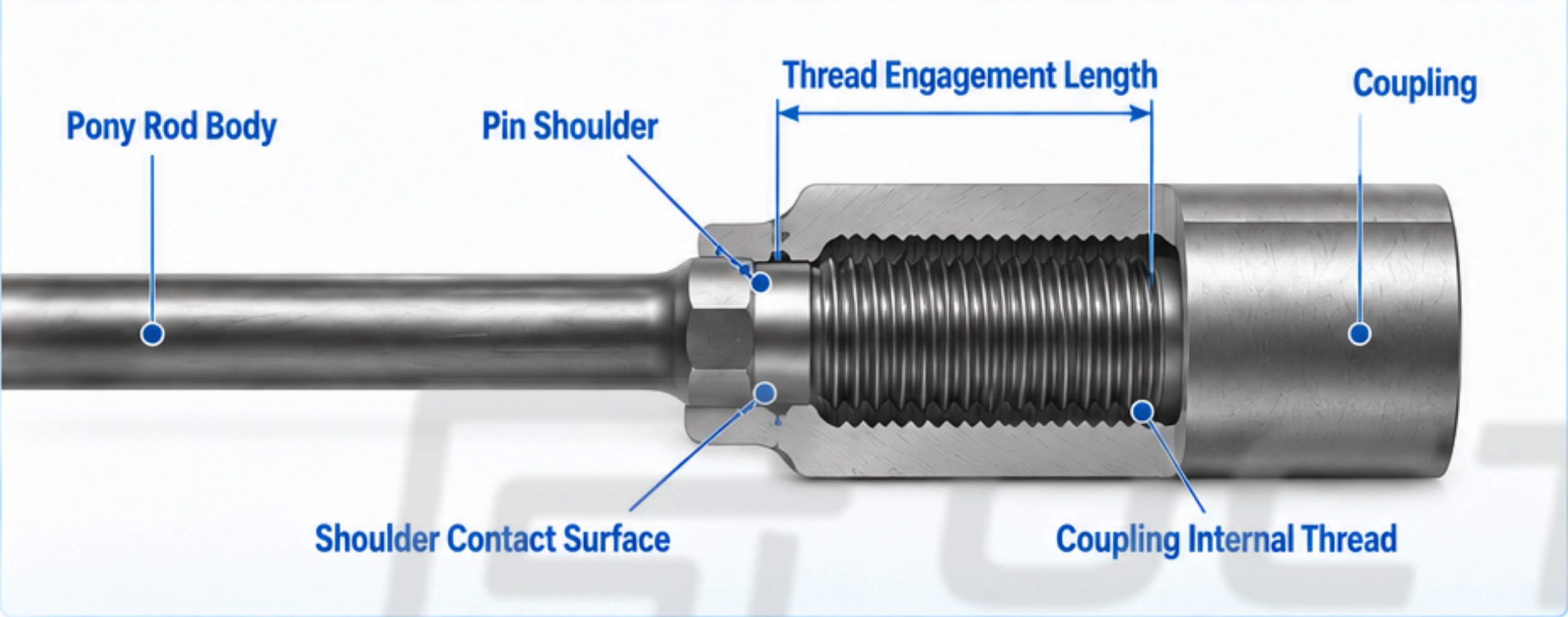


Replacement components should follow existing rod-string specifications rather than length alone.

KEY TAKEAWAY

Length adjustment is only one function of pony rod replacement. Connection compatibility determines whether the component can operate within the existing rod string.

Pony Rod Connection Clearance and Assembly Evaluation

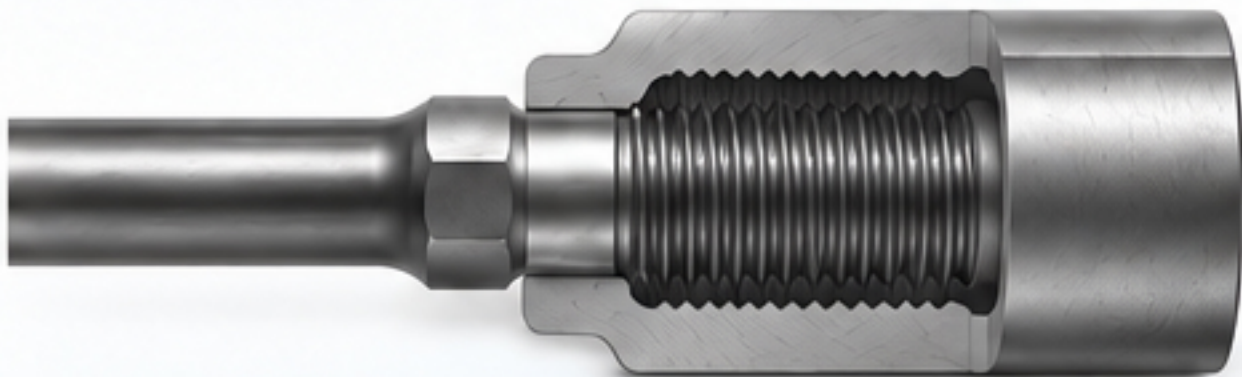


Connection Verification Points

Item	Evaluation Focus
Thread Type	Compatible thread profile
Pin Engagement	Sufficient thread engagement length
Shoulder Contact	Proper load transfer surface
Coupling ID	Compatible with pin geometry
Assembly Condition	No damage or abnormal interference

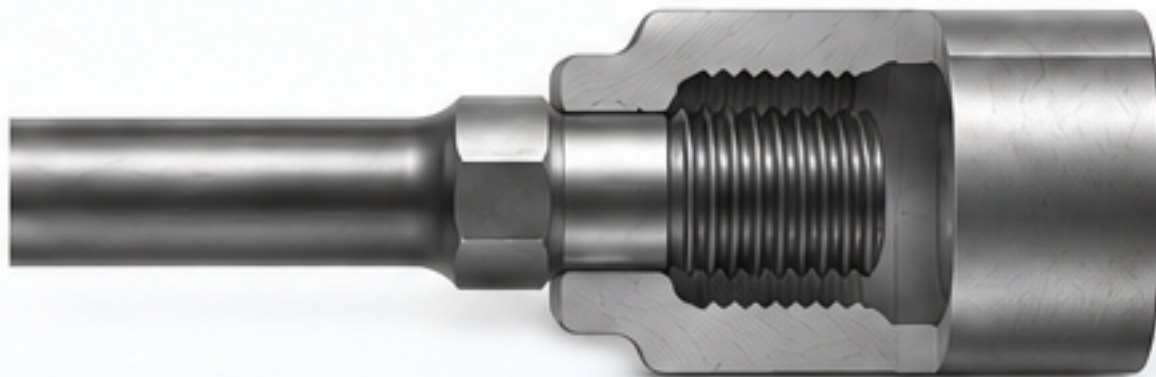
Clearance and Assembly Check

Correct



Proper engagement and load-transfer contact.

Incorrect



Insufficient engagement can reduce load transfer reliability.

KEY TAKEAWAY

A reliable pony rod connection depends on correct thread engagement, shoulder contact and coupling compatibility throughout the rod string.