

Sucker Rod Coupling Position and Load Transfer

TECHNICAL REFERENCE SHEET 1/4

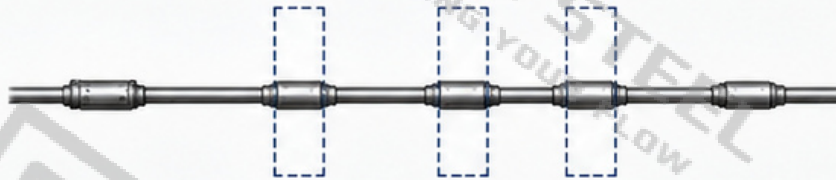
Surface Pumping Unit



Polished Rod



Sucker Rod String



Downhole Rod Pump



Sucker Rod

Pin

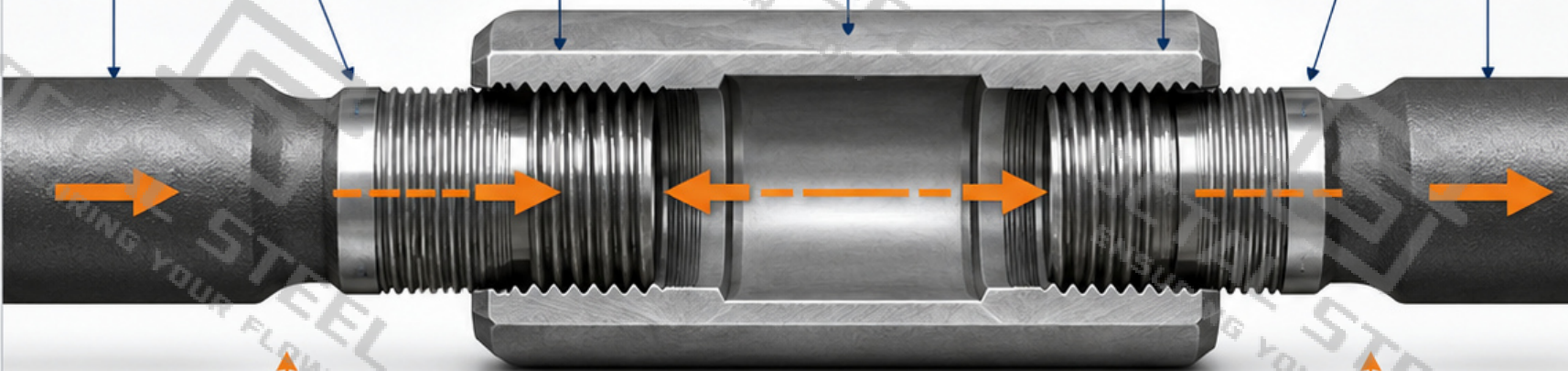
Box Thread

Coupling Body

Box Thread

Pin

Sucker Rod



Load Transfer

Function

- Joins adjacent load-carrying rod sections
- Receives sucker rod male pins through internal box threads
- Transfers cyclic axial load through the connection
- Must match the specified rod connection system

Connection Check



Rod Size



Pin / Thread



Coupling Type

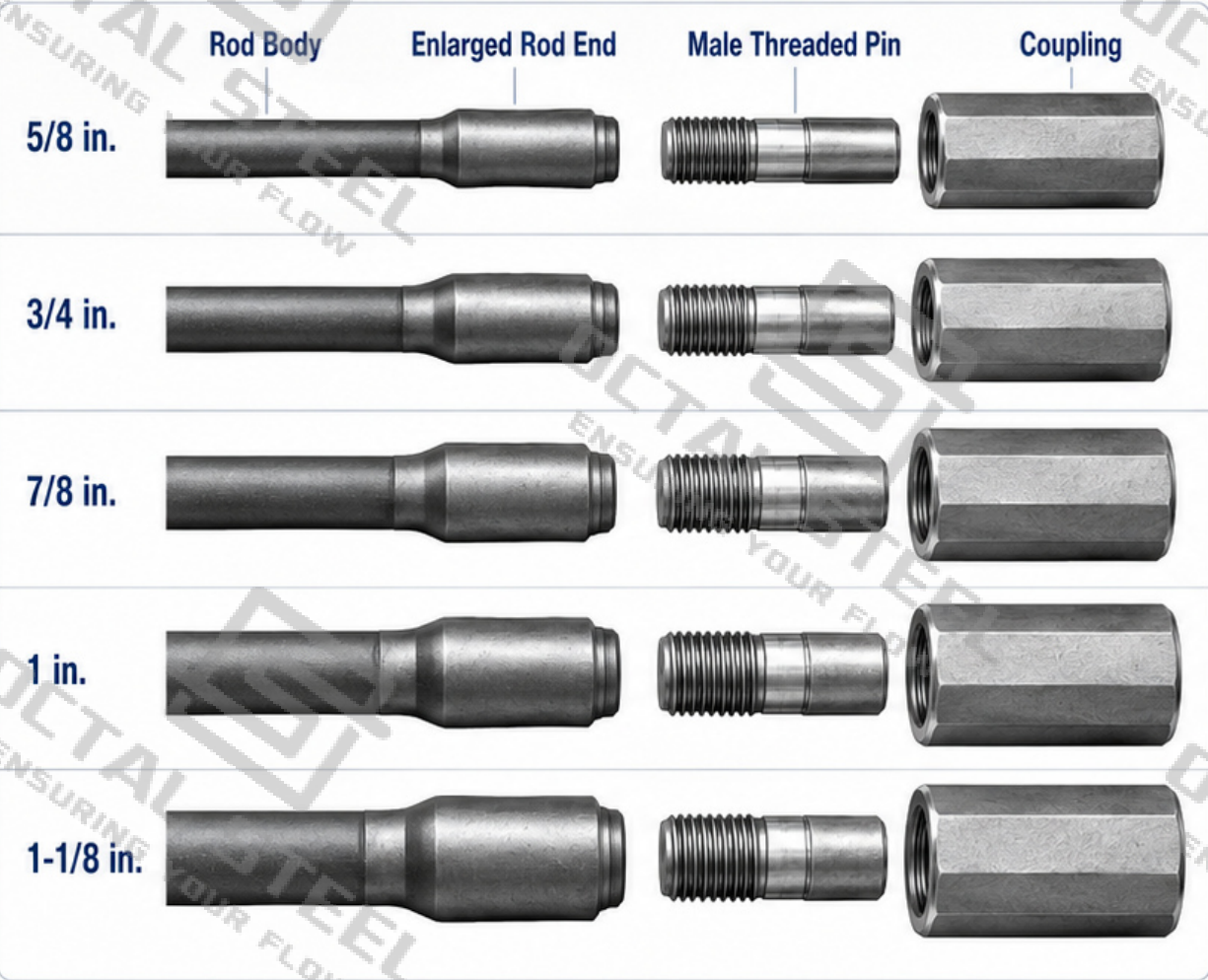


OD



Compatibility

Representative Sucker Rod Coupling Sizes and Dimensions



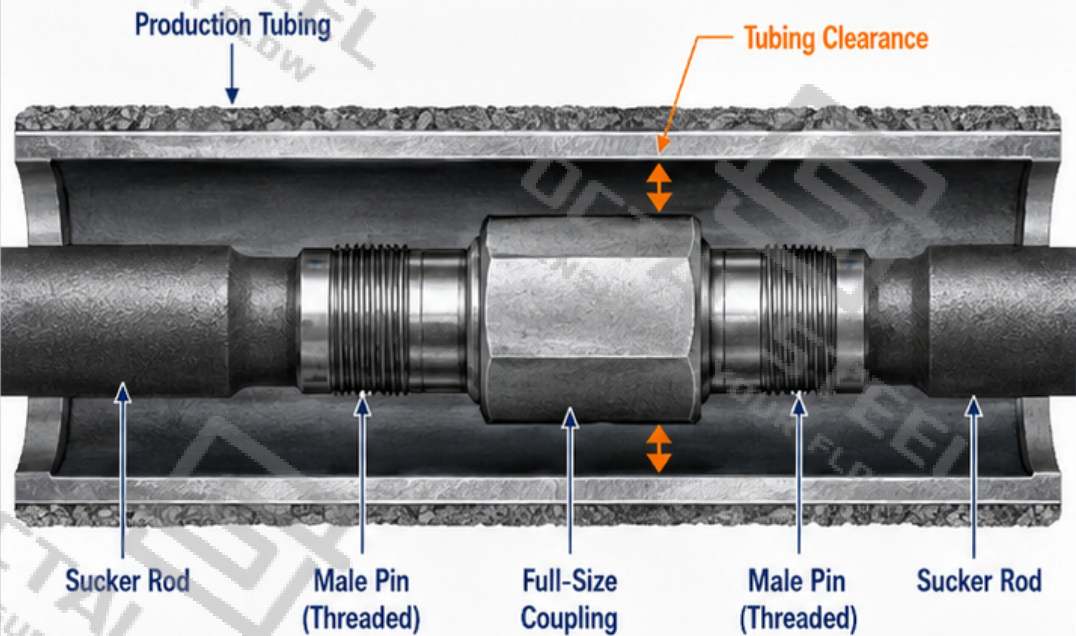
Nominal Rod Size	Representative Pin / Internal Thread	Full-Size Coupling OD
5/8 in.	15/16 in.	1.500 in. / 38.1 mm
3/4 in.	1-1/16 in.	1.625 in. / 41.3 mm
7/8 in.	1-3/16 in.	1.812 in. / 46.0 mm
1 in.	1-3/8 in.	2.187 in. / 55.6 mm
1-1/8 in.	1-9/16 in.	2.375 in. / 60.3 mm

ENGINEERING NOTE

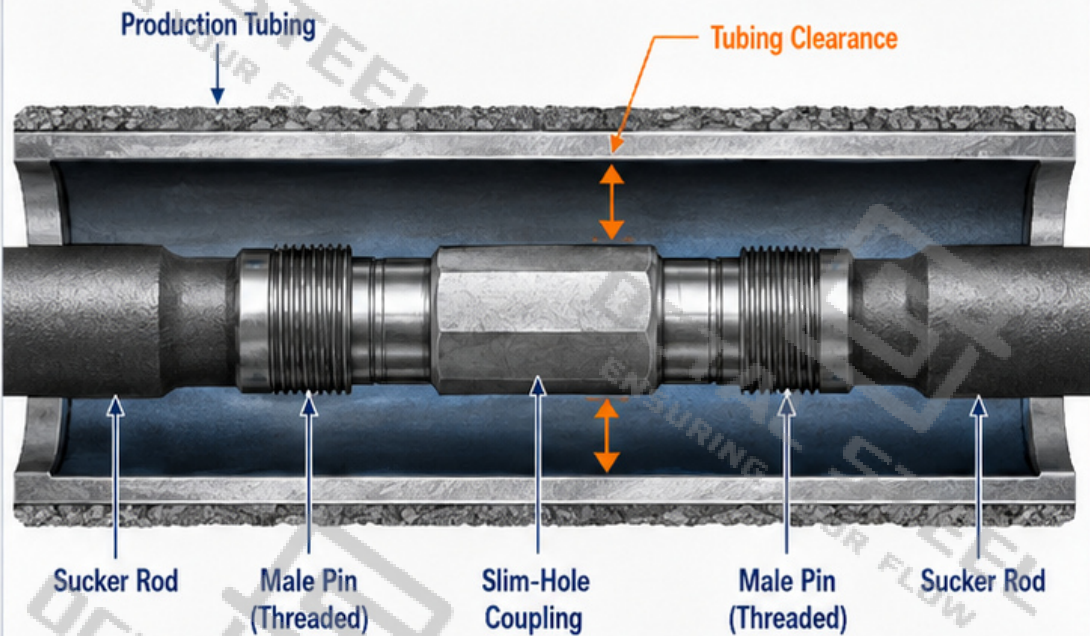


Nominal Rod Diameter ≠ Pin/Thread Size ≠ Coupling OD

FULL-SIZE COUPLING



SLIM-HOLE COUPLING



Aspect	Full-Size Coupling	Slim-Hole Coupling
Outside Diameter	Uses the standard OD envelope for the specified rod connection.	Reduced OD for increased clearance inside the tubing.
Tubing Clearance	Minimal radial clearance between coupling OD and tubing ID.	Greater radial clearance between coupling OD and tubing ID.
Main Selection Driver	Depends on tubing clearance and rod-string configuration.	Depends on tubing clearance and rod-string configuration.
Connection Requirement	Must remain compatible with the specified sucker rod pin/thread connection.	Must remain compatible with the specified sucker rod pin/thread connection.



Same tubing ID — different coupling OD



Both configurations must match the specified rod pin/thread system.

OCTAL STEEL COORDINATED SUPPLY

Coordinated component family as specified by project requirements.

Sucker Rods



Pony Rods



Sucker Rod Couplings



Polished Rods



✓

Components engineered to match specified rod size, connection, and service conditions.

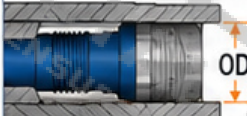
RFQ INPUTS	
RFQ Inputs	Provide / Specify
Nominal Rod Size	e.g., 5/8 in., 3/4 in., 7/8 in., 1 in., 1-1/8 in.
Mating Component	Sucker rod, pony rod, polished rod, etc.
Pin / Thread Connection	Pin size (male) / Internal thread size (female)
Coupling Type	Full-size coupling or slim-hole coupling
Coupling Class	API Class T, SM, or other as specified
API Spec 11B Requirements Where Specified	Material, dimensions, tolerances, markings, testing, and documentation as required
New Installation / Workover / Replacement	Indicate application for proper planning
Well / Service Condition	Depth, temperature, H ₂ S / CO ₂ , corrosive, abrasive, deviation, load, cycle, etc.
Inspection Requirements	Dimensional checks, NDT, hardness, thread gauges, etc.
Documentation Requirements	Mill certificates, traceability, inspection reports, compliance records, etc.

TECHNICAL SUPPORT



Connection Matching

Verify pin and internal thread compatibility for secure fit.



Coupling Configuration Review

Confirm coupling type, OD, and clearance for the application.



Inspection & Traceability

Ensure compliance with specs through inspection and full material traceability.



Packing & Shipment Coordination

Protect components with proper packaging and coordinate timely delivery.



Rod-String Requirement



Connection Matching



Coupling Selection



Inspection



Documentation



Packing & Shipment