

API 7-2 Drill Pipe Thread Connection Inspection Checklist

2-3/8 inch E75 drill pipe | 60.33 mm OD x 7.11 mm WT | API 5DP body | API 7-2 connection control

Inspection Scope	Shipment release checklist for 2-3/8 inch E75 drill pipe with API 5DP body requirements and API 7-2 drill pipe thread connections. The focus is pin/box condition, shoulder face, tool joint area, thread protection and document matching.
Use Case	Pre-shipment inspection, final cargo release, receiving-inspection preparation, connection compatibility review and export packing verification.
Standard Logic	API 5DP supports drill pipe body and welded tool joint delivery basis. API 7-2 supports rotary shouldered connection threading and gauging basis. Both should be checked before loading.

Product Information

Item	Shipment / Inspection Data	Release Comment
Product	2-3/8 inch E75 drill pipe	Small diameter drill pipe E75 shipment.
Metric Body Size	60.33 mm OD x 7.11 mm WT	Approx. 2-3/8 inch OD x 0.280 inch WT.
Pipe Body Basis	API 5DP drill pipe	Covers drill pipe body, grade, welded tool joint and delivery basis.
Connection Basis	API 7-2 threading and gauging	Applies to rotary shouldered connection thread and gauge control.
Connection Type	Per purchase order / approved connection data	NC thread connection such as NC26 or NC31 only when specified by the order or drawing.
Main Inspection Areas	Pin end, box end, shoulder face, tool joint, thread protector, marking, documents	Inspection result should match physical cargo and shipment records.
Destination / Project	Korea / Iran shipment	Destination data should match packing list and loading records.

Release Principle

The checklist is designed to confirm that the physical pipe, API 7-2 connection condition and shipment documents support the same delivered specification. Hold release if connection identity is unclear, pin/box threads are damaged, shoulder faces are not protected, thread protectors are missing, or documents do not match the loaded cargo.

Checklist Structure and Inspection Focus

This page summarizes what each inspection section should verify and what record should be kept for shipment release.

Section	PDF Content Focus	Output Record
Product Information	2-3/8 inch E75 drill pipe, 60.33 mm OD x 7.11 mm WT, API 5DP body, API 7-2 connection	PO / MTC / product marking / packing list
Pin End Inspection	Pin thread crest and root, pin nose, shoulder face, rust, impact mark, protector condition	Pin-end visual record, photo, inspection sheet
Box End Inspection	Box entry, internal thread, shoulder area, cleanliness, protector fit	Box-end visual record, photo, inspection sheet
Tool Joint Check	Tool joint OD/ID, tong space, pin/box length, weld area, surface condition	Dimensional record / tool joint inspection
API 7-2 Threading and Gauging	Gauge basis, connection identification, thread condition, standoff if required	Thread inspection / gauge record
Shipment Protection	Protector installed, bundle marking, end protection, loading photos	Loading photos / packing check
Document Matching	MTC, packing list, marking photos, inspection record, quantity	Final document package

Key Acceptance Risks

Risk Area	Typical Problem	Release Control
Connection mismatch	General NC wording without exact connection basis, drawing or gauge requirement.	Confirm connection type, tool joint OD/ID, pin/box form and approved API 7-2 threading and gauging basis.
Thread-end damage	Dents, galling, torn crests, rust pits, damaged shoulder face or protector missing during handling.	Inspect pin and box ends before loading; reinstall suitable protectors after inspection.
Document mismatch	MTC, packing list, marking photos or inspection records do not match the actual cargo.	Match heat number, size, grade, order number, bundle data and loaded quantity before release.
Transport damage	Bundle movement, exposed thread, moisture exposure or rough port handling.	Use stable bundling, clear marking, protected ends and loading photo records.

Detailed Inspection Checklist

Record each item before loading. Any unclear thread identity, damaged shoulder face, loose protector or document mismatch should be closed before shipment release.

No.	Inspection Area	Checkpoint	Verification Requirement	Record / Status
1	Product identification	Size, grade and standard basis	Confirm 2-3/8 inch E75 drill pipe; 60.33 mm OD x 7.11 mm WT; API 5DP body; API 7-2 connection basis.	<input type="checkbox"/> OK <input type="checkbox"/> Hold
2	Product identification	Order and destination	Order No., packing list and destination data should match shipment plan and bundle marking.	<input type="checkbox"/> OK <input type="checkbox"/> Hold
3	Pin end	Pin thread crest and root	No torn thread, flattened crest, galling, rust pits, heavy scratch, dent or visible impact damage affecting make-up.	<input type="checkbox"/> OK <input type="checkbox"/> Hold
4	Pin end	Pin nose and shoulder face	Pin nose and shoulder contact area should be clean, smooth and free from deformation, dent or corrosion at the contact surface.	<input type="checkbox"/> OK <input type="checkbox"/> Hold
5	Pin end	Pin protector	Correct protector fitted securely; protector should not be loose, cracked, missing or exposing thread/shoulder area.	<input type="checkbox"/> OK <input type="checkbox"/> Hold
6	Box end	Box entry and internal thread	Box entry should be clean and undamaged; internal thread should be free from galling, rust, impact marks and foreign material.	<input type="checkbox"/> OK <input type="checkbox"/> Hold
7	Box end	Box shoulder area	Shoulder area should have no dents, corrosion pits, deformation or handling damage affecting shoulder contact.	<input type="checkbox"/> OK <input type="checkbox"/> Hold
8	Box end	Box protector	Protector should fit securely and protect box entry and internal thread during loading and sea freight.	<input type="checkbox"/> OK <input type="checkbox"/> Hold
9	Tool joint	Tool joint OD/ID and tong space	Check against purchase order or approved drawing where required. Do not release when tool joint data is unclear for connection matching.	<input type="checkbox"/> OK <input type="checkbox"/> Hold
10	Tool joint	Weld zone and surface condition	Tool joint weld area and transition should be visually acceptable; no harmful handling damage, crack-like indication or severe corrosion.	<input type="checkbox"/> OK <input type="checkbox"/> Hold
11	API 7-2 threading and gauging	Connection identification	Exact connection basis should match PO, drawing or approved data. General NC wording is not sufficient when NC26, NC31 or another specific connection is required.	<input type="checkbox"/> OK <input type="checkbox"/> Hold
12	API 7-2 threading and gauging	Gauge / inspection basis	Use correct gauge basis and inspection procedure. Record standoff or gauge result if required by inspection plan or project specification.	<input type="checkbox"/> OK <input type="checkbox"/> Hold

Shipment Protection and Document Matching

The final release check should confirm that physical cargo, thread condition, marking and documents all refer to the same delivered specification.

No.	Area	Checkpoint	Verification Requirement	Record / Status
13	Shipment protection	Thread protector after inspection	After thread inspection or gauging, reinstall protectors and confirm both pin and box ends are protected before loading.	<input type="checkbox"/> OK <input type="checkbox"/> Hold
14	Shipment protection	Bundle marking	Bundle tag or marking should show order, size, grade and quantity clearly for receiving inspection.	<input type="checkbox"/> OK <input type="checkbox"/> Hold
15	Shipment protection	End protection and surface condition	Pipe ends, tool joints and thread protectors should be protected from impact, moisture, severe rust and bundle movement.	<input type="checkbox"/> OK <input type="checkbox"/> Hold
16	Shipment protection	Loading photos	Photos should show cargo condition, bundle arrangement, visible marking and protected pipe ends before dispatch.	<input type="checkbox"/> OK <input type="checkbox"/> Hold
17	Document matching	MTC	Material Test Certificate should match E75 grade, heat number, size and supplied drill pipe quantity where applicable.	<input type="checkbox"/> OK <input type="checkbox"/> Hold
18	Document matching	Dimensional / inspection record	Inspection record should support body size, tool joint area and API 7-2 connection inspection scope required by the order.	<input type="checkbox"/> OK <input type="checkbox"/> Hold
19	Document matching	Packing list	Packing list should match product name, size, grade, order number, destination, quantity and bundle data.	<input type="checkbox"/> OK <input type="checkbox"/> Hold
20	Document matching	Marking photos	Marking photos should support traceability from physical pipe to MTC, inspection record and packing list.	<input type="checkbox"/> OK <input type="checkbox"/> Hold

Final Release Logic

Release Point	Required Consistency Before Shipment
Physical Cargo	Pipe size, grade, tool joint condition, pin/box thread condition and thread protectors are visually checked and recorded.
Connection Basis	API 7-2 threading and gauging basis is clear; NC connection type is confirmed when required by order or drawing.
Traceability	Pipe marking, MTC, inspection records, packing list, marking photos and loaded quantity refer to the same shipment.
Hold Condition	Hold shipment if connection identity is unclear, threads are damaged, protectors are missing, or documents do not match cargo.

Sign-off

Inspector	
Date	
Result	<input type="checkbox"/> Released <input type="checkbox"/> Released with remarks <input type="checkbox"/> Hold
Remarks	