

API 5DP Drill Pipe Pre-Shipment Inspection Checklist

Inspection scope, release records, and document matching guide for finished drill pipe before shipment.

Purpose of this checklist

This downloadable checklist is designed for finished API 5DP drill pipe release review. It helps verify whether the physical pipe, dimensional results, tool joint condition, NDT evidence, MTC, marking and packing records match before shipment. Final acceptance shall follow the contract, project ITP and applicable API standards.

Pre-Shipment Release Chain



Technical Basis to Confirm

Reference / Control Point	What to Confirm Before Release
API 5DP scope	Finished drill pipe with upset pipe-body ends and welded-on tool joints; PSL-1 / PSL-2 / PSL-3 as specified.
API 5DP identification	Label, grade, upset type and rotary shouldered connection identity shall match product marking and records.
API 7-2 connection reference	Rotary shouldered connection thread, gauge and inspection requirements are controlled separately from pipe body checks.
Project ITP / release plan	Defines hold points, witness points, NDT scope, dimensional reports and document package for shipment release.

Data Points Worth Keeping in the Release File

Data Group	Recommended Release Evidence
Dimensional data	OD, wall thickness, length range, upset transition, straightness, pipe identity and visual surface condition. OD near the external upset should be checked at the required reference position.
Connection data	Box / pin identity, thread profile, shoulder face, gauge result when required, hardbanding condition and thread protector fit.
Record data	MTC, heat number, chemical composition, mechanical properties, NDT report, hardness record, marking photos, bundle tag and packing list.

Practical Release Checklist

Use this page as the main checklist when reviewing API 5DP drill pipe before shipment release.

Checkpoint	What to Verify	Minimum Record to Keep	Release Note
Specification	Grade, OD, nominal weight, wall thickness, upset type, RSC connection, PSL level and length range.	Contract / specification sheet / ITP	No release if grade, size or connection identity conflicts.
Pipe body	OD, wall thickness, length, straightness, surface damage, pitting, gouges or abnormal handling marks.	Dimensional report and visual inspection note	Dimensional report must match marking and packing list.
Upset area / weld zone	Upset transition, weld-sensitive area, visible surface condition and linked NDT / hardness evidence.	NDT report / hardness record where required	Any unresolved indication or record gap should be clarified.
Tool joint	Box / pin identity, shoulder face, tool joint OD / ID, hardbanding condition and tong area marks.	Tool joint inspection record / photos	Tool joint condition should support makeup and torque transfer.
Thread and protector	Thread profile, shoulder contact face, seal area where applicable, protector type and protector fit.	Thread inspection / gauge record where required	Damaged or exposed threads should not proceed to loading.
NDT records	UT, MPI, EMI or other applicable records; inspected zone, result, report date and acceptance basis.	NDT report linked to pipe number / heat / lot	Record identity must match physical pipe or inspected lot.
MTC and traceability	Heat number, grade, chemical composition, yield strength, tensile strength, elongation and required test data.	MTC / mechanical test records	MTC must support marked grade and heat / lot identity.
Marking and packing	Visible marking, bundle tag, piece count, length tally, thread protectors and packing list.	Marking photos / bundle photos / packing list	Shipment documents must match physical bundle identity.
Final release	Physical pipe, inspection records, MTC, marking and packing list describe the same shipment.	Release checklist signed or accepted per ITP	Cargo ready is not release ready until records align.

Release rule

Do not release a shipment only because the pipes are packed. Release should be based on a matched set of physical inspection results, drill pipe NDT records, drill pipe MTC, marking verification and packing information.

Data and Record Fields for a Downloadable Release File

The following data fields make the checklist useful for shipment release, not only for general quality review.

Dimensional and Hardness Data Notes

Data Point	Useful Release Value / Field	Why It Matters
OD reference near upset	Check OD at the required location adjacent to the external upset; API 5DP Addendum 1 notes 127 mm (5 in.) behind the upset for sizes below label 1: 6-5/8, and about one OD for label 1: 6-5/8.	This is a fatigue-sensitive and geometry-sensitive area.
Surface hardness limit	Grades E, X, G and S: not above 37 HRC; Grade V: not above 40 HRC; SS grades: not above 32 HRC, or applicable table limits.	Hardness control supports weld-zone and sour-service risk review.
Hardness test methods	ISO 6506-1 / ASTM E10, ISO 6507-1 / ASTM E92, ISO 6508-1 / ASTM E18, as applicable.	Record method, location and result, not only pass/fail wording.
Weld-zone hardness record	For relevant API 5DP categories, test frequency / locations should be traceable to the applicable table; records may include three locations 120 degrees apart for weld-line hardness checks.	Shows whether weld-zone control was actually recorded.

NDT, MTC and Shipment Record Matching

Record	Required Matching Field	Hold / Clarify If
UT / MPI / EMI report	Pipe number, heat / lot, inspected zone, result and acceptance basis.	The report cannot be tied to the pipe or inspected lot.
MTC	Heat number, grade, chemistry, tensile result, yield result, elongation and certificate identity.	MTC data does not support the visible marking or packing list.
Thread / connection record	Connection type, gauge result where required, box / pin identity and shoulder condition.	Connection identity or thread condition is unclear.
Marking photos	Grade, size, connection, heat / lot and bundle identity where applicable.	Visible marking conflicts with MTC or packing list.
Packing list	Bundle number, piece count, length summary, grade, connection and shipment identity.	Quantity, length or bundle information does not match the physical cargo.

Hold Before Shipment Release

Do not release if...	Reason
MTC, NDT report, marking or packing list show different pipe identity.	Traceability is broken.
Thread damage, missing protectors or shoulder damage remains unresolved.	Connection reliability may be uncertain.
Dimensional report does not match the visible pipe marking or shipment tally.	The physical cargo may not match the release documents.
NDT / hardness records do not state inspected zone, result or acceptance basis.	The release file cannot support inspection status.

Reference note Reference basis: API Spec 5DP scope and Addendum 1 hardness / test-frequency notes; API Spec 7-2 connection threading and gauging scope. This checklist is a practical release aid and does not replace the project specification, ITP, applicable standard text or qualified inspection procedure.