

Standard Boundary Guide

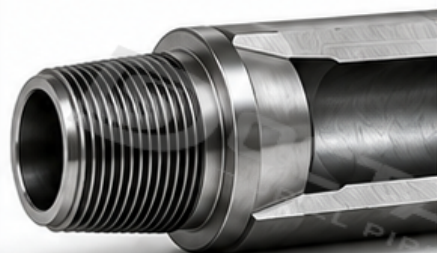
API SPEC 7-1, API SPEC 7-2 and API SPEC 5DP — product body, connection and drill pipe logic

DRILL-STRING ORDER VIEW

1. PRODUCT BODY
HWDP / Drill Collar

2. CONNECTION
Rotary Shouldered

3. DRILL PIPE
Standard Drill Pipe



API SPEC 7-1 Product Body

Covered rotary drill stem elements as products: drill collars, HWDP, kellys, drill stem subs, kelly valves and stabilizers.



API SPEC 7-2 Connection Check

Rotary shouldered connection threading and gauging: thread form, taper, pitch diameter, shoulder condition and gauge result.



API SPEC 5DP Standard Drill Pipe

Standard drill pipe delivery requirements: pipe body, grade, PSL, upset ends, welded tool joints and drill pipe records.



BOUNDARY RULE



Product body — API 7-1



Connection — API 7-2



Drill pipe — API 5DP



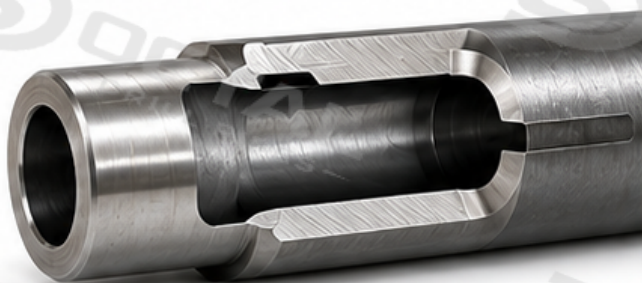
Release evidence —
MTC / HT / NDT / Gauging

Use API SPEC 7-1 for covered drilling components, API SPEC 7-2 for rotary shouldered connection checks, and API SPEC 5DP for standard drill pipe. Do not let one standard name cover all acceptance logic.

Three Standards, Three Control Areas

Summarized procurement guidance for product scope, connection control and standard drill pipe delivery.

API SPEC 7-1

**Controls:**

Covered rotary drill stem elements as products.

**Typical items:**

Drill collars, HWDP, kellys, drill stem subs, kelly valves, stabilizers.

**Focus:**

Material, heat treatment, dimensions, hardness, NDT, marking, traceability.

API SPEC 7-2

**Controls:**

Rotary shouldered connection threading and gauging.

**Typical area:**

NC, IF, REG and other rotary shouldered connections.

**Focus:**

Thread form, taper, pitch diameter, shoulder condition, gauge result, thread protection.

API SPEC 5DP

**Controls:**

Standard drill pipe.

**Typical items:**

E75, X95, G105, S135 drill pipe with pipe body, upset ends and welded tool joints.

**Focus:**

Grade, PSL, pipe body, tool joint, weld zone, hardness, CVN impact, dimensional inspection and traceability.



PROCUREMENT REMINDER — Separate product standard, connection standard and drill pipe standard before issuing the PO.

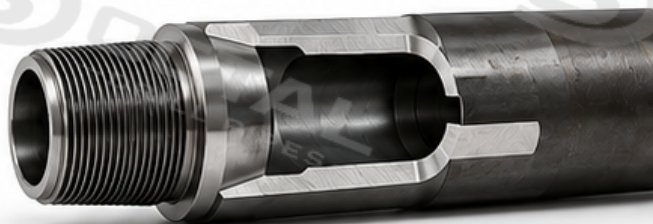


Use the controlled edition and verify inspection scope before release.

Product Body vs Connection vs Drill Pipe Logic

How to separate product scope, connection control and drill pipe delivery requirements in actual ordering.

1) API 7-1 Product Body



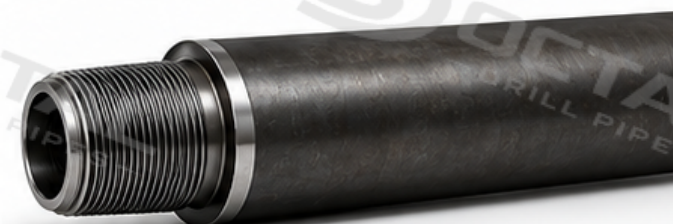
- Use for covered rotary drill stem elements.
- Verify material, heat treatment, dimensions, NDT and marking.
- Examples: HWDP, drill collars, kellys, subs, stabilizers.

2) API 7-2 Connection



- Use for rotary shouldered connection threading and gauging.
- Verify thread form, taper, shoulder condition and gauge result.
- Apply when the ordered item uses a rotary shouldered connection.

3) API 5DP Drill Pipe



- Use for standard drill pipe delivery requirements.
- Verify pipe body, grade, PSL, upset ends and welded tool joints.
- Connection control is still checked under API 7-2.

PRACTICAL ORDERING GUIDE — COMMON ORDER SCENARIOS

A


HWDP order

State API SPEC 7-1 for the product body and API SPEC 7-2 for connection gauging.

B


Drill collar order

State API SPEC 7-1 for the product, plus API SPEC 7-2 for connection review.

C


Standard drill pipe order

State API SPEC 5DP for the pipe and API SPEC 7-2 for the rotary shouldered connection.



PRACTICAL RULE — Separate product standard, connection standard and drill pipe standard in the RFQ, PO and final document review.

Procurement Risk Map

Common specification and documentation risks at the API 7-1 / 7-2 / 5DP boundary.


HOLD
POINT

Hold the order for clarification when the product standard, connection standard or release evidence cannot be separated in the RFQ/PO.

1. Standard drill pipe specified only as API 7-1

UNCLEAR

Grade, PSL, pipe body, upset ends and welded tool joints.

CORRECT

Use API SPEC 5DP for the pipe and API SPEC 7-2 for the connection.

2. HWDP ordered without API 7-2 gauging

UNCLEAR

Thread form, taper, shoulder condition, gauge result and mating compatibility.

CORRECT

State API 7-1 for HWDP body and API 7-2 for connection gauging.

3. API Monogram requested without scope review

UNCLEAR

Marking expectation and approved manufacturing license scope.

CORRECT

Verify API Monogram requirement separately and confirm approved license scope.

4. Product name used without OD, ID or inspection scope

UNCLEAR

Geometry, material condition, NDT coverage, hardness and dimensional checks.

CORRECT

Define product group, OD, ID, length, construction, material, connection and ITP.

5. Documents accepted without heat-to-packing traceability

UNCLEAR

Heat treatment, test reports and shipped item match the same lot.

CORRECT

Require marking, heat number, MTC, inspection records, final inspection and packing list.



PRACTICAL RULE

Do not let one standard name cover product body, connection and drill pipe delivery logic. Separate them in RFQ and final review.

Correct RFQ Wording Examples

Summarized procurement wording. Adjust size, material, edition, ITP and project documents to the actual order.

EXAMPLE 1 – HEAVY WEIGHT DRILL PIPE



RFQ wording

Heavy Weight Drill Pipe, API SPEC 7-1 product requirement, 5 in OD, NC50 connection, API SPEC 7-2 thread gauging required, NDT and dimensional inspection per approved ITP, MTC and heat-treatment record required.



Product body: API 7-1



Connection: API 7-2



Records: MTC / HT / NDT

EXAMPLE 2 – DRILL COLLAR



RFQ wording

Drill Collar, API SPEC 7-1, OD/ID/length as specified, connection per API SPEC 7-2 gauging, hardness, NDT, straightness and dimensional report required.



Geometry: OD / ID / length

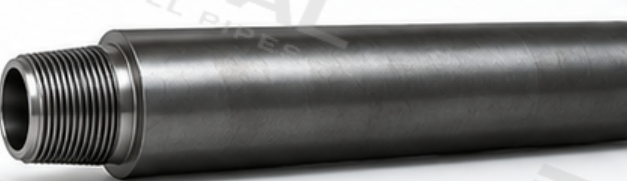


Connection: gauging



Records: hardness / NDT

EXAMPLE 3 – STANDARD DRILL PIPE



RFQ wording

Standard Drill Pipe, API SPEC 5DP, grade and PSL as specified, rotary shouldered connection checked under API SPEC 7-2.



Pipe delivery: API 5DP



Grade/PSL: E75-X95-G105-S135



Connection: API 7-2

FINAL NOTE | Separate product standard, connection standard and drill pipe standard before production starts.

Release Records by Standard

The release package should prove that product body, connection records and drill pipe records match the PO line.



API 7-1 product records

- MTC by heat number
- Heat-treatment record
- Mechanical test report where required
- Hardness record
- NDT report
- Dimensional and straightness report
- Marking verification



API 7-2 connection records

- Thread inspection record
- Connection gauging record
- Shoulder-condition review
- Mating compatibility check
- Thread protection confirmation



API 5DP drill pipe records

- Grade and PSL records
- Pipe body and upset-end inspection
- Tool-joint and weld-zone records
- Hardness and CVN where required
- Dimensional inspection and traceability



SHIPMENT RELEASE

Before shipment, the final inspection should link physical marking, heat number, inspection reports, connection gauging and packing list to the same item or lot.

Minimum traceability chain



Complete, accurate and traceable records ensure compliance and product integrity.

Procurement reference only – verify controlled standard edition, project specification and PO requirements before release.