

**API Ballot 6675
TG OCTG**

Work Item Number	2404
Title of Work Item	Review Accessory Material
Ballot Revision Level	0
Type of Ballot (Initial, Comment, Comment resolution (reference API ballot#), 1 st Re-ballot, 2 nd Re-ballot, etc.)	Initial
Submitter Name(s)	Gustavo Lopez Turconi, Frank Zeller
API Document Modified	API Spec 5CT 11 th edition
Impacted Documents	N/A
Revision Key	Current API document in black, Deletions in red strikethrough, Additions in red with gray highlight

Work Item Charge:

- Add "Accessory Material to the headers of §9.14.2, §9.15.1, §9.15.5
- Align §9.15.11.1 and §9.15.12.1
- Align Tables C./E.37 and C./E.38 on "Pipe and Accessory material" and delete footnote a in C./E.38

Ballot Rationale: Users/manufacturers who intends to buy/manufacture accessory material to spec 5CT are encountering discrepancies in the text and in the tables (e.g. C./E.37, C./E.38) of API Spec 5CT 11th in terms of the applicable NDT requirements for accessory material.

Ballot Text: File xxx

API Ballot 6675

TG OCTG

Ballot Text:

9.14.2 Pipe Body, Coupling Stock, ~~and~~ Coupling Material, **and Accessory Material** (Excluding Pipe Ends)

Each length of pipe, coupling stock, ~~and~~ coupling material, **and accessory material** shall be visually inspected over the entire outside surface for the detection of imperfections.

Nondestructive Examination

9.15.1 General

Subsection 9.15 specifies the NDE requirements and inspection levels for seamless and electric-welded pipe, ~~and for~~ coupling stock, **and accessory material**. For NDE of couplings, see 8.11. A summary of the required NDE operations for seamless pipe, coupling stock, **accessory material**, and the body of welded pipe is given in Table C.37 or Table E.37. All pipe, ~~and~~ coupling stock, **and accessory material** that require NDE (except visual inspection) shall be inspected full-body, full-length for defects.

9.15.5 Pipe Body, ~~or~~ Coupling Stock, **or Accessory Material** Inspection—General

Unless otherwise agreed upon, all required NDE operations (except visual inspection, but including the final end-area inspection in accordance with 9.15.13) for pipe, ~~and~~ coupling stock, **and accessory material** shall be carried out after final heat treatment and rotary straightening operations, with the following exceptions:

- a) certain types of pup joint (see 9.15.11);

when more than one pipe-body NDE method is applied, one of these (other than ultrasonic inspection) may take place prior to heat treatment/rotary straightening.

9.15.12 Nondestructive Examination of Coupling Stock and Accessory Material—Grades L80 13Cr, C90, T95, C110, C125, and Q125

9.15.12.1 General

When NDE is required for coupling stock or accessory material, according to Table C.37 or Table E.37, aAll coupling stock and accessory material shall be inspected for the detection of imperfections on the outside and inside surfaces by one or more of the following methods:

- a) ultrasonic testing to acceptance level as specified in Table C.38 or Table E.38 in accordance with ISO 10893-10 or ASTM E213;

API Ballot 6675
TG OCTG

- b) flux leakage testing to acceptance level as specified in Table C.38 or Table E.38 in accordance with ISO 10893-3 or ASTM E570;
- c) eddy current testing to acceptance level as specified in Table C.38 or Table E.38 in accordance with ISO 10893-2 or ASTM E309;
- d) magnetic particle inspection in accordance with ISO 10893-5 or ASTM E3024.

The reference indicators used by the manufacturer to calibrate the compression and shear wave ultrasonic equipment may be retained in the coupling stock. If the reference indicators are retained in the reference standard, the outside-wall surface area adjacent to the reference indicators shall be stenciled with the letters "RI." The reference indicators shall be considered defects and marked in accordance with 9.15.18 b).

Coupling stock for couplings that will be fully machined may have imperfections on the unmachined surfaces; however, the final machined surfaces shall meet the specified dimensions and surface inspection criteria of 8.11.

API Ballot 6675 TG OCTG

Table C.1—Acceptance (Inspection) Levels

Material	Grade	External Imperfections			Internal Imperfections			
		Longitudinal	Transverse	Oblique	Longitudinal	Transverse	Oblique	
1	2	3	4	5	6	7	8	
Pipe body ^a and Accessory material	N80 Type 1	L3	—	—	L3	—	—	
	N80Q, L80, R95	L4	—	—	L4	—	—	
	[P110 to A.9 (SR 16)]	L4	L4	—	L4	L4	—	
	P110	L2	L2	—	L2	L2	—	
	[P110 to A.9 (SR 16) and A.3 (SR 2)]	L2	L2	—	L2	L2	—	
	Q125	UT	L2	L2	—	L2	L2	—
		Second method	L2	L2	—	—	—	—
	C90, T95, C110, C125	UT	L2	L2	L2 ^{ba}	L2	L2	L2 ^{ba}
Second method		L2	L2	—	—	—	—	
Coupling stock	All grades except L80 13Cr, C90, T95, C110, C125, and Q125	L2	L2	—	N	N	—	
	L80 13Cr, Q125	L2	L2	—	L3	L3	—	
	C90, T95, C110, C125	L2	L2	L2 ^{ba}	L3	L3	L3 ^{ba}	
Weld seam	P110, Q125	L2	N	—	L2	N	—	
	All other grades	L3	N	—	L3	N	—	
	All other grades to A.3 (SR 2)	L2	N	—	L2	N	—	
Lx = acceptance (inspection) level; N = not required; UT = ultrasonic testing.								
^a —Accessory material shall be treated as pipe body.								
^{ab} Flux leakage inspection or eddy current inspection may be used as alternative NDE methods for oblique inspection for pipe body; flux leakage inspection, eddy current inspection, or magnetic particle inspection may be used as alternative NDE methods for oblique inspection for accessory material.								

API Ballot 6675 TG OCTG

Table E.2—Acceptance (Inspection) Levels

Material	Grade	External Imperfections			Internal Imperfections			
		Longitudinal	Transverse	Oblique	Longitudinal	Transverse	Oblique	
1	2	3	4	5	6	7	8	
Pipe body ^a and Accessory material	N80 Type 1	L3	—	—	L3	—	—	
	N80Q, L80, R95	L4	—	—	L4	—	—	
	[P110 to A.9 (SR 16)]	L4	L4	—	L4	L4	—	
	P110	L2	L2	—	L2	L2	—	
	[P110 to A.9 (SR 16) and A.3 (SR 2)]	L2	L2	—	L2	L2	—	
	Q125	UT	L2	L2	—	L2	L2	—
		Second method	L2	L2	—	—	—	—
	C90, T95, C110, C125	UT	L2	L2	L2 ^{ba}	L2	L2	L2 ^{ba}
Second method		L2	L2	—	—	—	—	
Coupling stock	All grades except L80 13Cr, C90, T95, C110, C125, and Q125	L2	L2	—	N	N	—	
	L80 13Cr, Q125	L2	L2	—	L3	L3	—	
	C90, T95, C110, C125	L2	L2	L2 ^{ba}	L3	L3	L3 ^{ba}	
Weld seam	P110, Q125	L2	N	—	L2	N	—	
	All other grades	L3	N	—	L3	N	—	
	All other grades to A.3 (SR 2)	L2	N	—	L2	N	—	
Lx = acceptance (inspection) level; N = not required; UT = ultrasonic testing.								
^a —Accessory material shall be treated as pipe body.								
^{ab} Flux leakage inspection or eddy current inspection may be used as alternative NDE methods for oblique inspection for pipe body; flux leakage inspection, eddy current inspection, or magnetic particle inspection may be used as alternative NDE methods for oblique inspection for accessory material.								