

API Specification

5CT

8th Edition, July 2005
 Specification for Casing and Tubing

ISO 11960:2004 – Petroleum and Natural Gas
 Industries – Steel Pipes for Use as Casing or
 Tubing for Wells

Information to be Supplied by the Purchaser

5 Information to be Supplied by the Purchaser

5.1 Casing

5.1.1

When Enquiring or placing orders for pipe to be manufactured in accordance with this International Standard, the purchaser shall specify the following:

| Requirement | Reference |
|---|---|
| Standard | ISO 11960 or API Spec 5CT |
| Quantity | |
| Type of Pipe or Couplings | |
| Casing | |
| Threaded or Plain-End | 8.12 |
| Type of Connection: Round (short or long), Buttress Extreme-Line Threads, or Other Connection | 8.12, Table C.1. or Table E.1 |
| With or Without Couplings | 8.12 |
| Special Clearance Couplings | 9.8, Tables C.1, C.36 or Tables E.1, E.36 |
| Liners | 8.12.1, Table C.2 or Table E.2 |
| Label 1 or Specified Outside Diameter | Tables C.1, C.2 or Tables E.1, E.2 |
| Label 2 or Specified Mass or Wall Thickness | Tables C.1, C.2 or Tables E.1, E.2 |
| Grade and Type Where Applicable | Tables C.1, C.2, C.5 or Tables E.1, E.2, E.5 |
| Range Length | 8.6, Table C.30 or Table E.30 |
| Seamless or Electric-Welded | 6.1, Table C.4 or Table E.4 |
| Critical Thickness for Special End-Finish Couplings, Stock or Blanks | 7.6.6 |

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| Requirement | Reference |
|---|-----------|
| Critical Thickness for Special End-Finish Accessories | 7.6.6 |
| Wall Thickness Verification of Special End-Finish Accessories | 10.13.4 |
| Delivery Date and Shipping Instructions | |
| Inspection by Purchaser | Annex B |

5.1.2

The purchaser should also state on the purchase agreement the requirements concerning the following stipulations, which are at the purchaser's option:

| Requirement | Reference |
|---|------------------|
| Heat Treatment | 6.2 |
| Lower Alternative Impact Test Temperature | 7.3.7 |
| Casing Jointers | 8.7 |
| Alternative Drifting Requirements | 8.10 |
| Casing with Couplings Detached | 8.14 |
| Coupling Make-Up (other than power-tight) | 8.14 |
| Coupling Blanks | 9.2, A.4 (SR9) |
| Seal Ring Couplings | 9.11, A.8 (SR13) |
| Heat and Supplementary Analyses | 10.3 |
| Additional Markings | 11 |
| Pipe Coatings | 12.1 |
| Material Certification | 13.2, A.9 (SR15) |
| PSL 2 or 3 | Annex H |

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5.1.3

The following may be agreed between purchaser and manufacturer:

| <u>Requirement</u> | <u>Reference</u> |
|--|--|
| Cold Rotary Straightening – Q125 Grade | 6.3.5 |
| Statistical Impact Testing | 7.3.8, A.7 (SR12) |
| Impact of Group 1 Non-Heat-Treated Pipe | 7.5.1, A.10 (SR16) |
| Sulfide Stress Cracking Test – Grades C90 and T95 Grade | 7.14 |
| Length of Accessories | 8.6 |
| Thread and Storage Compound | 8.14 |
| Waiving NDE of Group 1 Couplings in Grades H40, J55 and K55 | 9.14.3 |
| Coupling Thread Plating – Q125 Grade Only | 9.17 |
| Additional Hardness Testing – Grades M65 and L80 | 10.6.2 |
| Additional Hardness Testing – C90 and T95 Grade | 10.6.2 |
| Reduced Section Tensile Specimens – Q125 Grade | 10.4.6 |
| Hydrostatic Pressure Test for Handling-Tight Make-Up, Accessories and Group 4 Pup-Joints | 10.12.2 |
| Alternative Hydrostatic Test Pressures | 10.12.3 |
| Plain-End Q125 Casing Hydrostatic Testing | 10.12.2 |
| Non-Destructive Examination | 10.15, A.2 (SR1), A.3 (SR2), A.5 (SR10) and A65 (SR11) |
| Marking Requirements | 11.1 |
| Thread Protectors | 12.2 |
| Coupling Blanks – Q125 Grade Only | A.4 (SR9) |
| Upset Casing – Q125 Grade Only | A.5 (SR10) |

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| <u>Requirement</u> | <u>Reference</u> |
|---|------------------|
| Electric-Weld Casing – P110 and Q125 Grade | A.6 (SR11) |
| Alternative <i>F</i> Factor in SR12 – Q125 Grade | A.7 (SR12.2) |
| Special End Finish for Casing, Couplings, Pup-Joints or Accessories | 8.12.8, 9.13.2 |
| Quality Assurance Requirements | |
| Special Wall Thickness for | 8.2 |
| Enhanced Leak Resistance LTC Connections | A.11 (SR22) |

5.2
Tubing

5.2.1

When enquiring or placing orders for pipe to be manufactured in accordance with this International Standard, the purchaser shall specify the following:

| <u>Requirement</u> | <u>Reference</u> |
|---|--|
| Standard | ISO 11960 or API 5CT |
| Quantity | |
| Type of Pipe or Couplings | |
| Tubing | |
| Non-Upset, External-Upset or Integral Joint | Table C.3 or Table E.3 |
| Threaded, Plain-End, or Other Connection | 8.12 |
| With or Without Couplings | 8.12 |
| Special Bevel Couplings | 9.12, Tables C.3, C.37 and C.38 or Tables E.3, E.37 and E.38 |
| Special Clearance Couplings | 9.8, Tables C.3, C.38 or Tables E.3 and E.38 |
| Label 1 or Specified Outside Diameter | Table C.3 or Table E.3 |
| Label 2 or Specified Mass or Wall Thickness | Table C.3 or Table E.3 |
| Grade and Type, where Applicable | Table C.3 or Table E.3, Table C.5 or Table E.5 |

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| Requirement | Reference |
|--|-------------------------------|
| Range Length | 8.6, Table C.30 or Table E.30 |
| Seamless or Electric-Welded | 6.1, Table C.4 or Table E.4 |
| Critical Thickness for Special End-Finish Couplings, Stock or Blanks | 7.4.6 |
| Critical Thickness for Accessory Material | 7.6.6 |
| Wall Thickness Verification of Special End-Finish Accessories | 10.13.4 |
| Delivery Date and Shipping Instructions | |
| Inspection by Purchaser | Annex B |

5.2.2

The purchaser should also state on the purchase agreement the requirements where applicable, concerning the following stipulations, which are at the purchaser's option:

| Requirement | Reference |
|---|------------------|
| Heat Treatment | 6.2 |
| Upset Length Standard or Extended | 8.11.6 |
| Rounded Nose | 8.12.4 |
| Coupling Make-Up (other than power-tight) | 8.14 |
| Tubing with Couplings Detached | 8.14 |
| Seal Ring Couplings | 9.11, A.8 (SR13) |
| Heat and Supplementary Analyses | 10.3 |
| Additional Markings | 11 |
| Pipe Coatings | 12.1 |
| Material Certification | 13.2, A.9 (SR15) |

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5.2.3

The following may be agreed between purchaser and manufacturer:

| Requirement | Reference |
|---|--|
| Statistical Impact Testing | 7.3.8, A.7 (SR12) |
| Impact Testing of Group 1 Pipe | 7.5.1, A.10 (SR16) |
| Sulfide Stress Cracking Test – C90 and T95 Grade | 7.14 |
| Length of Accessories | 8.6 |
| Thread and Storage Compound | 8.14 |
| Special End-Finish for Tubing, Couplings or Accessories | 8.12.8, 9.13.3 |
| Waiving NDE of Group 1 Couplings in Grades H40, J55 and K55 | 9.14.3 |
| Additional Hardness Testing – Grades M65 and L80 | 10.6.2 |
| Additional Hardness Testing – C90 and T95 Grade | 10.6.2 |
| Hydrostatic Pressure Test for Handling-Tight Make-Up and Pup-Joints | 10.12.2 |
| Alternative Hydrostatic Test Pressures | 10.12.3 |
| Non-Destructive Examination | 10.15, A.2 (SR1), A.3 (SR2), A.5 (SR10) and A.6 (SR11) |
| Marking Requirements | 11.1 |
| Thread Protectors | 12.2 |
| Electric-Weld Tubing – Grade P110 | A.6 (SR11) |
| Special End-Finish Tubing, Couplings, Pup-Joints and Accessories | 8.12.8, 9.13.3 |
| Quality Assurance Requirements | |
| Special Wall Thickness | 8.2 |
| Casing Used for Tubing | 8.2, Table C.30 or Table E.30 |

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5.3
Coupling Stock Accessories

5.3.1
 When enquiring or placing orders for coupling stock or accessories to be manufactured in accordance with this International Standard, the purchaser shall specify the following:

| <u>Requirement</u> | <u>Reference</u> |
|--|---|
| Standard | ISO 11960 or API 5CT |
| Quantity | |
| Outside Diameter or Tolerances | |
| Wall Thickness and Tolerances | |
| Straightness Tolerance | |
| Length | |
| Grade, Type | Tables C.4 and C.5 or Tables E.4 and E.5 |
| Impact Requirements or Critical Thickness | 7.4 |
| Inspection by Purchaser | Annex B |
| Delivery Date and Shipping Instructions | |

5.3.2
 The purchaser shall also state on the purchase agreement the requirements, where applicable, concerning the following stipulations, which are at the purchaser's option:

| <u>Requirement</u> | <u>Reference</u> |
|---|------------------------|
| Heat Treatment | 6.2 |
| Heat and Supplementary Analyses | 10.3 |
| Additional Markings | 11 |
| Material Certification | 13.2, 13.3, A.9 (SR15) |
| Product Specification Level (PSL-2 or PSL-3) | Annex H |

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