

EN 10204 Material Certificates Explained — 2.1, 2.2, 3.1 and 3.2

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What each EN 10204 inspection document type certifies, who signs it, when a 3.1 or 3.2 certificate is actually required, how heat-number traceability works, and what to check when a certificate arrives with the goods.

The four document types

Type | Name | Content | Validated by | Test basis |

2.1 | Declaration of compliance | Statement that the goods comply with the order | Manufacturer | No test results stated |

2.2 | Test report | Compliance statement plus results of non-specific testing (routine production data) | Manufacturer | Tests not necessarily on the delivered lot |

3.1 | Inspection certificate 3.1 | Results of specific testing on the delivered lot (chemistry, mechanicals), heat numbers | Manufacturer's inspection department, independent of production | The actual melt/heat delivered |

3.2 | Inspection certificate 3.2 | As 3.1, countersigned by an external party | Manufacturer + owner's representative or third party (e.g. a class society) | The actual lot, witnessed |

When each type is enough

2.1/2.2 covers commodity fasteners, fittings and consumables where the application standard demands no lot traceability. 3.1 is the working currency of pressure equipment, structural steel and shipbuilding: PED category piping, flanges and bolting (e.g. A193 B7 stud bolts, 316L/A4-80 flange bolts) are normally supplied with 3.1 on request at order time. 3.2 appears where an owner or classification society requires witnessing — class-approved shipside valves, lifting components, offshore primary steel. A certificate type can be upgraded only by arrangement before manufacture; no paperwork issued afterwards can turn a 2.2 delivery into a 3.1 one, because the specific tests must be made on the delivered heat.

Reading a 3.1 certificate

Heat/cast number — must match the marking on the goods; this is the traceability link.

Chemical analysis — ladle analysis against the grade's limits (e.g. EN 10088 for stainless, see the 304 vs 316 guide).

Mechanical tests — yield, tensile, elongation, hardness and impact values where the grade requires them, with test temperature.

Standard and grade designation — the exact material standard with year, and any supplementary requirements from the order.

Signature block — a named inspection representative independent of production; for 3.2, the countersignature of the witnessing party.

Keep certificates filed against the purchase order and the installed location — surveyors ask for the chain (certificate !' heat number !' component) years after installation. When ordering from the catalogue, state the required certificate type in the quotation request; 3.1 availability and any cost are confirmed per item. HS-code and customs paperwork questions are covered separately in the HS code reference.

Frequently asked questions

What is an EN 10204 3.1 certificate? An inspection certificate in which the manufacturer's production-independent inspectors report specific test results (chemistry, mechanical properties, heat numbers) for the actual material lot delivered. What is the difference between 2.2 and 3.1? A 2.2 test report quotes routine, non-specific production data and is only manufacturer-declared; a 3.1 certificate reports tests performed on the delivered heat itself, validated by an inspection function independent of production. When is a 3.2 certificate required? When the purchaser or a third party (typically a classification society such as DNV or Lloyd's) must witness and countersign the tests — common for class-approved marine, offshore and lifting components. Can a 3.1 certificate be issued after delivery? No. The specific tests must be carried out on the delivered lot as part of manufacture; certificate type has to be agreed at order placement. What links a certificate to the actual part? The heat (cast) number: it is stamped or marked on the material and stated on the certificate, forming the traceability chain surveyors verify.

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