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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