PTF

QA/QC DOCUMENTATION & INSPECTION GUIDE
CATALOG 04 / 2026



QUALITY, INSPECTION & MTC.

Material test certificates to EN 10204, certificates of conformity, inspection and test plans, third-party inspection, hydrostatic testing and receiving checklists — for traceable, audit-ready supply.

EN 10204 3.1 · COC · ITP · TPI · API 598 · ASME B31.3 · PMI

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A practical reference for QA/QC engineers, buyers, inspectors and project teams — from reading a mill certificate to closing a Data Book.

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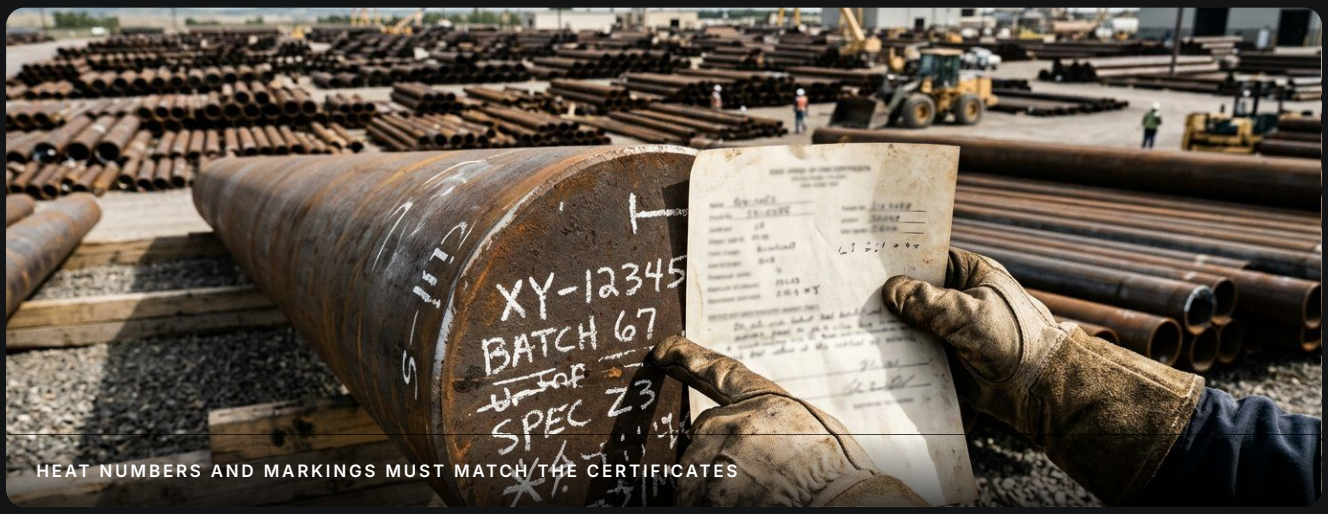
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Documents are part of the product.

In project supply, a flange without a traceable certificate is not a flange — it is a liability. Material, test and inspection documents prove that what arrives is what was ordered and approved.



HEAT NUMBERS AND MARKINGS MUST MATCH THE CERTIFICATES

TRACEABILITY

Heat & lot numbers

Each item links to a melt, a mill and a certificate — from raw material to the installed spool.

CONFORMITY

Specification & order

Proof that grade, dimensions, tests and special requirements meet the PO and the client specification.

ACCEPTANCE

Audit-ready dossier

Inspection records and certificates become the Data Book that the owner accepts at handover.

3.1

EN 10204 certificate commonly required for pressure parts

3

Risk levels drive inspection effort: low, medium, critical

1

Traceable chain from heat number to Data Book

PTF APPROACH

Documentation requirements are fixed at RFQ stage together with the technical specification — so cost, lead time and inspection scope are in the offer, not discovered after the order.

The document hierarchy.

Different documents prove different things. Knowing which one answers which question avoids both gaps and excessive paperwork.

DOCUMENT	PROVES	ISSUED BY	TYPICAL FOR
Material Test Certificate (MTC)	Chemistry and mechanical properties of the actual heat / lot	Manufacturer (3.1) or with third party (3.2)	Pipe, plate, forgings, fittings, bolting
Certificate of Conformity (COC)	Product conforms to the order / standard (no test results)	Manufacturer or supplier	Valves, gaskets, instruments, commodity items
Datasheet / GA drawing	Design data, dimensions, materials as approved	Manufacturer, approved by client	Valves, instruments, pumps, vessels
Test report	Result of a specific test (hydro, seat leakage, performance, calibration)	Manufacturer or lab	Valves, instruments, equipment
TPI / FAT report, release note	Independent witness of tests and release for shipment	Third-party inspector / client rep.	Critical and high-risk items
Packing list & shipping docs	Quantity, marks and packing for logistics	Supplier / forwarder	All shipments
Data Book / dossier	Complete compiled evidence for handover	Supplier, compiled per PO	Whole package or project

MTC VS. COC

An **MTC** contains *test results* for the specific heat / lot. A **COC** is a *declaration* that the product meets the order — it says nothing about measured values. For pressure-retaining and critical parts, a COC alone is not a substitute for an MTC.



DOCUMENT REVIEW BEFORE SHIPMENT

MUST

Defined in the PO

State required certificates per line item.

SHOULD

Linked to tag / item

Each certificate references heat numbers and the PO item.

CHECK

Reviewed before shipment

Document review is a hold point, not an afterthought.



PROCESS PLANT EQUIPMENT SUPPLIED WITH A COMPLETE CERTIFICATE SET

Reference guidance compiled from public standards and common industry practice. Acceptance criteria, test pressures, examination extents and hold points are always those of the purchase order, project specification, applicable code and the current edition of each standard — this guide does not replace them.

EN 10204: inspection documents.

EN 10204 defines how test results are documented and who validates them. The type you specify determines both cost and the level of independence.

TYPE	NAME	CONTENT	TEST BASIS	VALIDATED BY
2.1	Declaration of compliance with the order	Statement of conformity	Non-specific	Manufacturer
2.2	Test report	Conformity with results of non-specific testing	Non-specific (general production)	Manufacturer
3.1	Inspection certificate 3.1	Specific test results on the delivered product	Specific (the actual heat / lot)	Manufacturer's authorised inspection representative, independent of production
3.2	Inspection certificate 3.2	Specific test results, verified by independent inspector	Specific	Manufacturer's authorised representative **and** purchaser's representative or inspector named in the order

Non-specific vs. specific testing

Non-specific: tests on items from the same production process, not necessarily the delivered item. **Specific**: tests performed on the delivered products or on test units that represent them.

When to require 3.2

Critical service, SIS, high-pressure, sour or low-temperature items, or when the client / code demands an independent party to verify tests — often with TPI witness.



TYPICAL REQUIREMENT BY ITEM

- **Seamless pipe, forgings, fittings** — 3.1 (3.2 if specified)
- **Flange / valve body castings** — 3.1 per heat
- **Bolting** — 3.1 for stud / nut grades
- **Gaskets, consumables** — COC or 3.1 by spec.
- **Instrument wetted parts** — 3.1 on request

ORDERING TIP

Write "MTC to EN 10204 3.1 per heat number, including all mandatory tests of the product standard" — and state any supplementary tests (impact, HIC, hardness) explicitly.

Anatomy of a 3.1 certificate.

Layouts differ between mills, but every valid 3.1 certificate carries the same eight blocks. The sample below is illustrative — values are not from a real certificate.

INSPECTION CERTIFICATE 3.1 1

EN 10204:2004 | Cert. No. 0000-XXXX

Customer / PO	**Project X / PO-0000-A**	2
Product	**Seamless pipe 6″ SCH 40, ASTM A106 Gr.B**	3
Heat No. / Qty	**H-123456 / 24 pcs**	4

CHEMICAL ANALYSIS (%) 5

C	Mn	P	S	Si	CE
0.21	0.85	0.015	0.008	0.25	0.37

MECHANICAL TESTS 6

YS (MPa)	UTS (MPa)	El. (%)	Hydro
335	490	31	OK

Condition: normalised 7 *signature / stamp* 8

Illustrative layout only.

1. **Manufacturer & certificate**
   Name, address, certificate number and date; certificate type (3.1).
2. **Order & customer reference**
   Customer, PO number, item and project; links the certificate to the order.
3. **Product description**
   Item, size, schedule / class, quantity, product standard and grade.
4. **Heat / lot numbers**
   Unique identity — must match the physical marking on the product.
5. **Chemical analysis**
   Heat (ladle) analysis, plus product analysis if required; CE value where specified.
6. **Mechanical tests**
   Yield, tensile, elongation, hardness, impact and flattening / bend as required.
7. **Heat treatment & NDE**
   Condition (normalised, quenched & tempered, solution annealed), hydro and NDT results.
8. **Declaration & signature**
   Statement of conformity, stamp and signature of the authorised inspector.

MATCH

Heat number

Marking on pipe / flange equals certificate heat number.

CHECK

Standard & edition

Product standard and grade equal the PO item.

SEE

Signature & stamp

Authorised representative, independent of production.

Chemistry & mechanical review values.

Reference limits for materials frequently supplied by PTF. Use them as a first screen — the governing values are in the current edition of the product standard.

CHEMICAL COMPOSITION (% MAX. UNLESS RANGE)

ELEMENT	A106 GR.B (PIPE)	A105 (FORGED FLANGE)	A312 TP316L (PIPE)
C	0.30	0.35	0.035
Mn	0.29 – 1.06	0.60 – 1.05	2.00
P	0.035	0.035	0.045
S	0.035	0.040	0.030
Si	0.10 min.	0.10 – 0.35	1.00
Cr	0.40 (residual)	0.30 (residual)	16.0 – 18.0
Ni	0.40 (residual)	0.40 (residual)	10.0 – 14.0
Mo	0.15 (residual)	0.12 (residual)	2.00 – 3.00

Residual elements are subject to combined limits in the standard. Product-analysis tolerances may apply.

MINIMUM MECHANICAL PROPERTIES

PROPERTY	A106 GR.B	A105	A312 TP316L	A333 GR.6 (LOW TEMP.)
Yield strength (MPa)	240	250	170	240
Tensile strength (MPa)	415	485	485	415
Hardness	—	≤ 187 HBW	—	—
Impact test	On request / supplementary	As specified	As specified	Required (typically at −45 °C)

CARBON EQUIVALENT (CE)

$$CE = C + Mn/6 + (Cr + Mo + V)/5 + (Ni + Cu)/15$$

Indicates weldability — higher CE means more pre-heat and hardening risk. Many specifications set a ceiling (for example 0.43 for sour or critical lines).

READING THE NUMBERS

Compare **each** certificate value with the limit — not only the grade name. Values close to a limit deserve a second look: check units (MPa vs. ksi), test temperature and sample orientation.

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MTC verification checklist.

Review every certificate before the goods ship. Each check takes seconds — and prevents rejection at site.

- [ ] 01 Certificate type (3.1 / 3.2) equals the PO requirement
- [ ] 02 Manufacturer name and certificate number present and unique
- [ ] 03 PO / item reference matches the order
- [ ] 04 Product standard, grade and edition match the specification
- [ ] 05 Heat / lot numbers equal the markings on the goods
- [ ] 06 Chemical analysis within limits for every element listed
- [ ] 07 Mechanical properties meet the minimum; units are correct
- [ ] 08 Heat-treatment condition stated and as specified
- [ ] 09 Supplementary tests present (impact, hardness, HIC, NDT, hydro)
- [ ] 10 Size, schedule / class and quantity agree with the packing list
- [ ] 11 Signature, stamp and date by the authorised inspector (and TPI for 3.2)
- [ ] 12 Legible, complete, and not altered or re-typed

COMMON RED FLAGS

FLAG

Identical values

Several heats showing exactly the same chemistry or strength values suggests copied data.

FLAG

No traceability

Certificate lists heat numbers that do not appear on the goods, or vice versa.

FLAG

Wrong standard

Edition or grade differs from the PO; “equivalent to” grades without client approval.

FLAG

Editable file

Unsigned, re-typed or image-edited certificates with inconsistent fonts or layout.

FLAG

Missing tests

Required impact, hardness or NDT results are absent although specified.

FLAG

Dates mismatch

Test date after the shipping date, or heat dates inconsistent with the mill.

Inspection & test plan (ITP).

An ITP lists each activity, its standard, acceptance criteria and who must attend. It is agreed before manufacturing starts.

H

Hold point

Work stops until the inspector or client releases it. No bypass.

W

Witness point

Inspector may attend; work may proceed if notified and not attended.

R

Review point

Documents or records reviewed; no physical attendance.

TEMPLATE — CARBON-STEEL FLANGED VALVE (EXAMPLE)

#	ACTIVITY	STANDARD / CRITERIA	RECORD	MFR.	PTF	TPI / CLIENT
1	Raw-material MTC review	PO, ASTM A216 / A105	MTC	R	R	R
2	Heat treatment record	Specification	HT chart	R	R	R
3	Chemistry / mechanical review	Product standard	MTC	R	R	R
4	Visual & dimensional check	ASME B16.34 / B16.10	Report	H	R	W
5	PMI of trim / body (if required)	Specification	PMI report	H	W	W
6	NDT (RT / MT / PT) of castings	ASME B16.34, MSS SP-55	NDT report	H	R	W
7	Shell hydrostatic test	API 598 / ISO 5208	Test report	H	W	H
8	Seat leakage test	API 598 / ISO 5208	Test report	H	W	H
9	Painting & marking	Specification	Report	H	R	W
10	Final document review & release	PO	Release note	H	H	H

ITP principles

- Prepared by the manufacturer, approved before production
- Each step has a criterion — not just “inspect”
- Records are numbered and linked to heat / serial numbers
- Notice periods for hold / witness points are stated (e.g. 5 working days)



INSPECTION OF A STUD-BOLTED FLANGED JOINT

RULE

No hold point is passed without a signed record.

Risk-based inspection levels.

Not every item needs the same effort. Matching the inspection level to the risk keeps cost proportional and protects the critical path.

LOW RISK

Commodity items

Standard fittings in non-critical utility service, general fasteners, consumables.

Typical control
Document check (COC or 3.1), visual and quantity check on receipt.

MEDIUM RISK

Process-pressure parts

Process pipe, flanges, fittings, manual valves, standard instruments.

Typical control
EN 10204 3.1 MTC, dimensional sampling, PMI on alloys, manufacturer test reports.

CRITICAL

High-consequence items

High-pressure / sour / low-temperature service, SIS devices, rotating equipment, switchgear.

Typical control
3.2 certificates, TPI witness of tests, FAT, full Data Book review.

SELECTING THE LEVEL

CRITERION	RAISES THE LEVEL WHEN…
Service	Toxic, flammable, high pressure / temperature, sour, cryogenic
Consequence of failure	Safety, environmental or major production impact
Replaceability	Long lead time, buried or hard-to-access installation
Supplier history	New or unproven manufacturer, no prior approval
Client requirement	Owner specification or AVL conditions demand it
Documentation quality	Inconsistent or incomplete certificates

CONTROL POINT STRUCTURE

1. Document review before manufacture • 2. In-process checks • 3. Final inspection & tests • 4. Pre-shipment review and release • 5. Receiving inspection.





CRITICAL ROTATING EQUIPMENT RECEIVES THE HIGHEST INSPECTION LEVEL

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Third-party inspection (TPI).

A neutral inspection body witnesses tests, reviews documents and releases goods for shipment — giving the owner independent evidence of conformity.

1. **Define the scope**
   Items, standards, tests to be witnessed and the inspection level are listed in the PO and ITP.
2. **Appoint the inspector**
   Owner-approved or mutually agreed inspection body — stated at the RFQ stage.
3. **Issue notice**
   Inspection call with date, site and ITP reference, within the agreed notice period.
4. **Witness & verify**
   Visual, dimensional, tests, PMI, marking and document review at the manufacturer.
5. **Issue records**
   Inspection report, test records and 3.2 certificates where specified.
6. **Release for shipment**
   Inspection release note (IRN) — goods may ship only after release.

SCOPE EXAMPLE

Material certificate review • visual & dimensional • PMI • hydro / seat tests • NDT review • marking • painting • packing • release note.



PRE-SHIPMENT INSPECTION OF PIPING MATERIAL

TPI REQUEST CHECKLIST

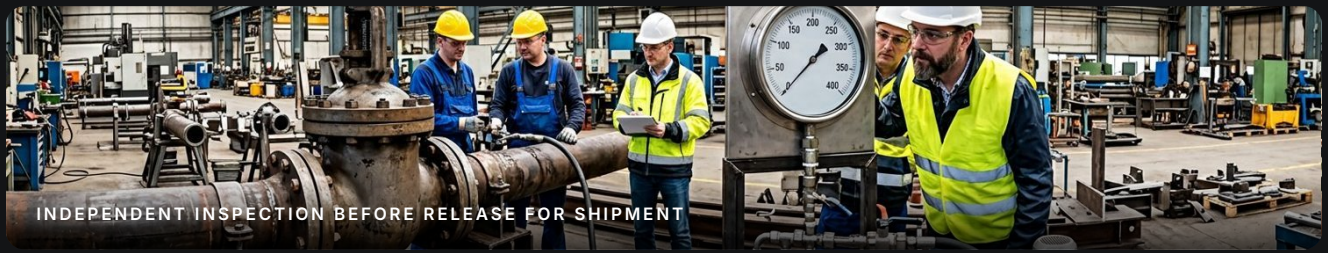
- PO number & item list
- Applicable standards & specs
- Approved ITP / QCP
- Test procedures
- Inspection location & contact
- Required dates
- Required certificate types
- Special witness points
- Release-note format
- Client inspection requirements

Typical inspection bodies

Internationally accredited organisations (for example TÜV, Bureau Veritas, SGS, Lloyd's Register, Intertek) or the owner's own inspectors — as named in the project specification.

FAT vs. TPI

FAT is a functional acceptance test at the manufacturer, usually witnessed. TPI is the independent attendance and release process around it.



INDEPENDENT INSPECTION BEFORE RELEASE FOR SHIPMENT

Receiving inspection: pipe, flanges & fittings.

A structured receiving check separates accepted, quarantined and rejected material before anything reaches the spool shop.

PIPE (ASTM A106 / A312 / API 5L)

CHECK	METHOD	ACCEPTANCE BASIS
Marking	Visual: standard, grade, size, schedule, heat number, manufacturer, length	Per product standard and PO
Outside diameter	Tape / caliper	Per ASME B36.10M / B36.19M tolerances
Wall thickness	Ultrasonic thickness gauge at several points	Nominal −12.5% minimum (seamless)
Length & straightness	Tape, string line	PO / project specification (random or double random)
End preparation	Visual and bevel gauge	30° + 5°/−0° bevel, 1.6 mm land (typical), caps fitted
Surface	Visual	No laminations, pits, cracks or deep mechanical damage
Documents	MTC review	Per MTC checklist

FLANGES (ASME B16.5 / B16.47)

- Marking: manufacturer, size, class, material, heat number, facing
- Bore, OD, bolt circle and hole count against the standard
- Raised-face height and serrated finish (125–250 AARH)
- Weld-neck bevel and hub; no pitting or dents on the sealing face
- Heat number equals MTC; forging marks readable

FITTINGS (ASME B16.9 / B16.11)

- Marking: size, schedule, grade, heat number, manufacturer
- Centre-to-end dimensions, angle and wall thickness
- Bevel and surface condition; no weld repair unless allowed
- Pipe-schedule match to the line class
- Heat number equals MTC



DISPOSITION

Accepted • accepted with remarks • quarantined pending documents • rejected (raise NCR). Tag and segregate immediately.

Valves & API 598 testing.

For valves, the test report and nameplate carry as much weight as the MTC. Check them against the datasheet and the shop test requirements.

RECEIVING CHECKLIST

- Nameplate: manufacturer, size, class, body material, trim, serial number, standard
- Tag number and datasheet revision match the PO
- Body, bonnet and trim materials per MTC / COC
- End connections: facing, finish, bevel, bolting holes
- Operation: full travel, smooth, correct direction (open / close)
- Stem packing, gland and seat visual; closed and protected ends
- Hydro / seat test report with serial numbers
- Fire-safe (API 607), fugitive-emission or NACE certificates when specified

TEST PRESSURES (API 598)

TEST	PRESSURE	MEDIUM
Shell (hydro)	≥ 1.5 × 38 °C rating	Water
Backseat	≥ 1.1 × 38 °C rating	Water
Seat (hydro)	≥ 1.1 × 38 °C rating	Water
Seat (low-pressure gas)	5–7 bar (80–100 psi)	Air / nitrogen

MINIMUM HOLD TIME (S)

NPS	SHELL	SEAT
≤ 2	15	15
2½ – 6	60	60
8 – 12	120	120
≥ 14	300	120

SHELL

No visible leakage

Shell and body-joint leakage not permitted through the walls or joints, including packing area.

SEAT

Leakage rate

Allowable rate depends on seat type (soft / metal) — ISO 5208 rate A to G or API 598 table.

WITNESS

Critical valves

Shell and seat tests witnessed by TPI; report signed and attached to the valve serial.



DON'T FORGET

Valves are shipped in the position stated in the specification (typically closed for gate / globe, partially open for ball valves), with protectors on all ends and no water inside.

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Instruments, electrical & rotating equipment.

Package equipment is accepted at the factory (FAT) and verified again on receipt. The checkpoints differ by discipline.

INSTRUMENTS

Transmitters, gauges, flowmeters

- Nameplate model code equals PO, datasheet and certificates
- Serial number matches the calibration certificate
- Calibration: as-found / as-left data, range and traceability
- Ex certificate: scheme, zone, group, T-class on the nameplate
- Wetted materials per 3.1 where required
- Firmware / HART revision recorded; new, sealed packing

See Catalog 03 for model-code and RFQ details.

ELECTRICAL

Switchgear, MCC, cables

- Type-test and routine-test certificates
- Rating plate: voltage, current, short-circuit rating, IP
- Dielectric / insulation test, functional and interlock test (FAT)
- Busbar material and arrangement against the single-line diagram
- Cable: standard, core count, cross-section, drum markings and length
- Documentation: GA, SLD, wiring, test reports

ROTATING

Pumps, compressors, drivers

- Datasheet vs. nameplate: flow, head, power, speed, API standard
- Hydrostatic test of casing; performance test curves (witnessed)
- Material certificates for pressure-retaining and shaft parts
- Balancing, vibration and noise records
- Mechanical seal arrangement and plan
- Motor: Ex rating, efficiency, insulation class

STATIC / THERMAL

Vessels, exchangers, boilers

- Code stamp and data report (e.g. ASME U, PED)
- Design data vs. datasheet; nameplate
- Hydro test report and NDE records
- Weld maps, WPS / PQR and welder qualification
- Heat-treatment records and PMI
- Third-party release by notified body if applicable



FACTORY ACCEPTANCE OF SWITCHGEAR

FAT PLANNING

Agree the FAT procedure in advance and confirm attendance and punch-list handling.

NDT & PMI: methods and extent.

Non-destructive testing confirms internal and surface soundness; PMI confirms that the alloy is the alloy on the certificate.

METHOD	DETECTS	TYPICAL USE	REFERENCE
Radiography (RT)	Volumetric weld flaws: porosity, slag, lack of fusion	Butt welds, castings	ASME V, EN ISO 17636
Ultrasonic (UT)	Planar and volumetric flaws, laminations, thickness	Plate, forgings, welds, wall thickness	ASME V, EN ISO 17640
Magnetic particle (MT)	Surface and near-surface cracks in ferromagnetic steel	Weld toes, castings, forgings	ASME V, EN ISO 17638
Liquid penetrant (PT)	Surface-breaking flaws in any non-porous material	Stainless, non-magnetic, socket welds	ASME V, EN ISO 3452-1
Hardness	Heat-treatment condition, sour-service limits	Welds, HAZ, bolting	ISO 6506 / 6508, ASTM E10
PMI (XRF / OES)	Alloy composition on site, non-destructive	Alloy pipe, fittings, valves, welds	ASTM E1476, API RP 578
Hydro / pneumatic	Leaks and strength of the pressure boundary	Pipe spools, valves, vessels	ASME B31.3, API 598

EXAMINATION EXTENT (ASME B31.3, INDICATIVE)

FLUID SERVICE	WELD EXAMINATION
Normal	Visual 100%; 5% random RT / UT
Category M / high pressure	100% RT / UT
Category D	Visual only
Severe cyclic	100% RT / UT

Governing extent is stated in the project piping class and code.

PMI SAMPLING

- Alloy materials: 100% of items for critical service; sampling otherwise per client spec.
- Check key elements: Cr, Ni, Mo for stainless; Cr, Mo for Cr-Mo steels
- Record location, instrument, result and operator
- Mark tested items; re-test if a failure is found

QUALIFIED PERSONNEL

NDT must be performed by personnel certified to EN ISO 9712 or ASNT SNT-TC-1A and in accordance with an approved written procedure.

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Hydrostatic & pneumatic testing.

A pressure test proves the strength and tightness of the completed pressure boundary. Procedure, gauges and records are as important as the pressure itself.



ASME B31.3 TEST PRESSURE (TYPICAL)

TEST	MINIMUM PRESSURE
Hydrostatic	1.5 × design pressure × (S_T / S)
Pneumatic	1.1 × design pressure
Hold time	At least 10 minutes, then examine all joints
Gauge range	1.5 to 4 times test pressure; calibrated

EXAMPLE

Design 20 bar, S_T/S = 1.0 → **test pressure = 30 bar** (rounded per client rule), hold for at least 10 minutes.

PREPARATION CHECKLIST

- Approved test package: P&ID, isometrics, test limits and procedure
- Joints visible and uncoated; supports and spring hangers pinned
- Vents at high points, drains at low points; trapped air removed
- Relief valves, instruments and valves not rated for test pressure isolated or removed
- Water quality: potable; for stainless steel, low chloride (typically ≤ 30 ppm) and drain / dry immediately
- Two calibrated gauges (one recording) on the system

SAFETY

Pneumatic caution

Stored energy is high — use only when hydro is impractical; stricter safety distance and procedure.

RECORD

Test certificate

Pressure, hold time, date, gauge IDs and witness signatures — one certificate per test package.

DRAIN

After the test

Drain, dry and preserve; reinstate removed items; remove blinds.

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Marking, packing & preservation.

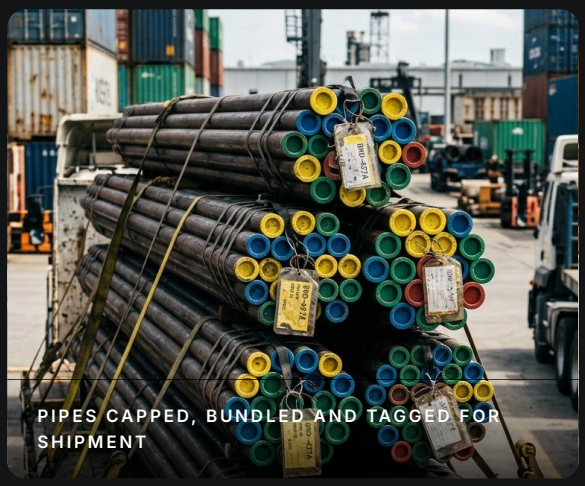
Goods that pass inspection can still fail at site through damage, corrosion or mix-ups. Packing and marking are part of quality.

MARKING

- Permanent marking on the product: standard, grade, size, class / schedule, heat number, manufacturer
- Tag / PO / item number on each package or by painted marking
- Stainless steel: chloride-free paint markers only
- Colour-coding of ends per material (client convention)
- Case marks: gross / net weight, dimensions, handling symbols

PRESERVATION

- Machined faces: coated and covered with plywood or plastic protectors
- Threads: grease and plugs / caps
- Bevel ends: caps on pipe and fittings
- Carbon steel: rust preventative; VCI paper in cases
- Stainless steel: kept separate from carbon steel to avoid contamination
- Valves: closed (or as specified), ends protected, drained and dry



PIPES CAPPED, BUNDLED AND TAGGED FOR SHIPMENT

PACKING OPTIONS

Pipe in bundles with end caps • flanges and fittings on pallets or in wooden crates • valves in individual crates • instruments in original sealed packing • export-grade crating where required.

PACKING CHECK	ACCEPTANCE
Packing list	Matches PO items, heat numbers and quantities; one list per package
Crate / pallet condition	Dry, strong, fumigation mark (ISPM 15) where required
Protectors	All sealing faces, bevels and threads protected
Documents	Certificates in a waterproof envelope; copy in the shipment folder
Photos	Packing photos recorded before closing — useful for claims



PROTECTED FLANGE FACES AND CAPPED ENDS

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Non-conformance management.

A non-conformance is any deviation from the PO, specification or standard. Record it, decide quickly, and close it with evidence.

1. **Identify & segregate**
   Tag the item; stop use or shipment.
2. **Raise the NCR**
   Item, heat number, deviation, evidence (photos, measurements), reference clause.
3. **Classify**
   Minor, major or critical, by effect on safety, function and code compliance.
4. **Disposition**
   Accept as is (concession), repair, rework, replace or reject.
5. **Corrective action**
   Root cause, action taken and preventive measure agreed with the supplier.
6. **Verify & close**
   Re-inspection, updated records and closure sign-off; documents added to the Data Book.

CLASS	MEANING	EXAMPLE
Minor	No effect on function or code compliance	Paint damage, label error
Major	Affects function or specification compliance	Wall thickness near minimum, missing test
Critical	Affects safety or code compliance	Wrong grade, falsified or missing MTC

DISPOSITIONS

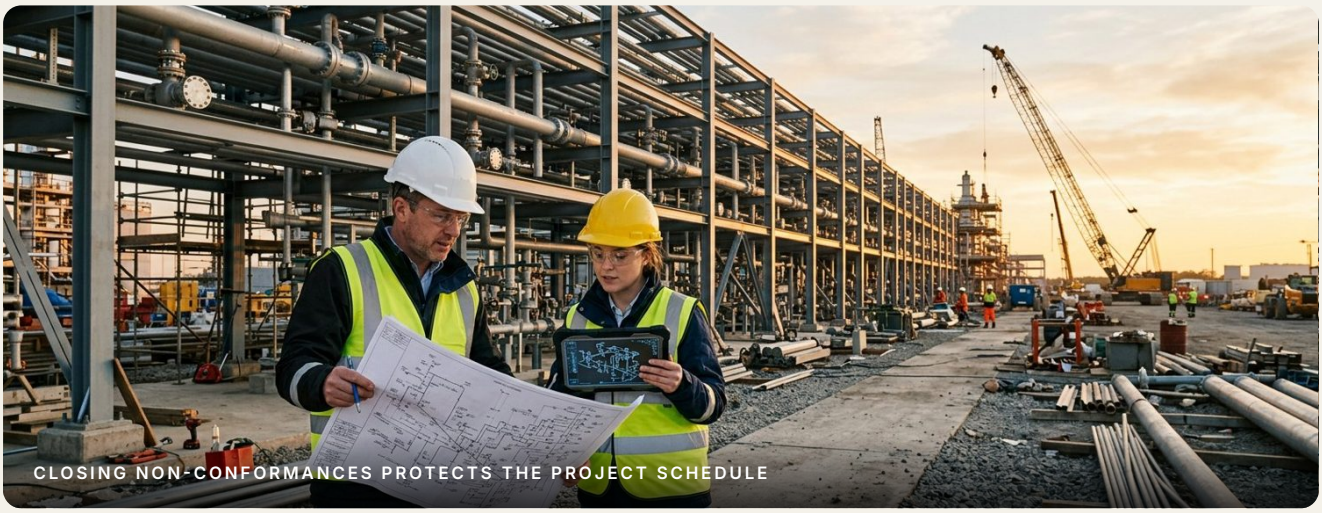
DECISION	CONDITION
Use as is	Client written concession; technically justified
Repair / rework	Approved procedure; re-inspection
Replace	Item cannot be corrected
Reject / return	Documented, supplier informed

NCR CONTENT

NCR number • date • PO / item • description and clause • evidence • classification • disposition • responsible party • due date • closure sign-off.

SUPPLIER PERFORMANCE

NCR data feeds the approved-supplier evaluation: delivery, quality, documentation and responsiveness are scored each year.



CLOSING NON-CONFORMANCES PROTECTS THE PROJECT SCHEDULE

Data Book & forms.

The Data Book is the final compiled evidence. A clear index — agreed at the start — makes handover a formality instead of a dispute.

TYPICAL DATA BOOK INDEX

SECTION	CONTENT
1	Cover, index and approval record
2	Purchase order and technical specifications
3	Datasheets, GA drawings and approved documents
4	ITP / QCP and procedures
5	Material certificates (MTC / COC) by item
6	Inspection and test reports (NDT, PMI, hydro, FAT)
7	TPI reports and release notes
8	NCR log and concessions
9	Packing list and shipping documents
10	Manuals, spare parts and warranty

FORMAT & DELIVERY

- Electronic PDF with bookmarks; hard copy when required
- Index linked to PO item and tag number
- Certificates legible, in English, signed and stamped
- Revision control — only final-revision documents
- Hand-over before final payment or as per contract

TIP

Collect certificates as items are received, not at the end — late Data Book completion delays the project closeout.

INCOMING INSPECTION REPORT (TEMPLATE)

Report no. / date	Receiving location
PO / item / tag	Supplier
Description	Size, grade, class
Heat / serial numbers	Quantity received
Documents received	MTC / COC / reports
Visual / dimensional	Result
PMI / other tests	Result
Packing condition	Damage / shortages
Decision	Accepted / hold / rejected
Inspector / signature	Witness

Reference guidance compiled from public standards and common industry practice. Acceptance criteria, test pressures, examination extents and hold points are always those of the purchase order, project specification, applicable code and the current edition of each standard — this guide does not replace them.

How PTF applies quality control.

Quality is built in at every handover: from RFQ to receipt, each step has an owner, a record and a decision.

01
RFQ
Documents & inspection requirements captured with the technical scope

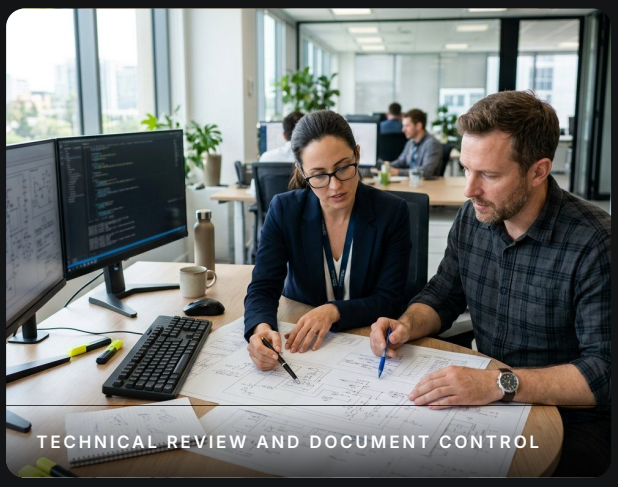
02
Sourcing
Verified manufacturers; AVL conformity checked

03
PO review
Specification, ITP and certificate matrix confirmed

04
Pre-shipment
MTC review, inspection and test witness, release

05
Logistics
Marking, packing, shipping documents

06
Receipt
Receiving inspection and Data Book handover



TECHNICAL REVIEW AND DOCUMENT CONTROL

PTF COMMITMENTS

- Certificate and inspection requirements stated in every offer
- Document review before shipment, with remarks sent to the supplier
- Traceability: heat / serial number to PO item and Data Book
- Independent inspection arranged when specified or recommended
- Transparent status: sourcing source, stock condition and documents disclosed
- Records retained for the project and warranty period

VERIFIED SOURCING — NOT OFFICIAL AGENCY

PTF sources from verified manufacturers and traceable channels. Unless stated in writing, this does not mean PTF is an official agent or distributor of any brand; each offer states the source, condition and certificate type.

ISO
Management-system standards referenced by PTF: 9001, 10002, 10004

EN
10204 3.1 as the baseline certificate for pressure parts

TPI
Arranged on request for medium and critical items

Pishro Tajhiz Fartak

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SCAN TO SUBMIT AN RFQ

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