PETPOOJA

CHECKLIST

Manufacturing Quality Control Checklist for India

Incoming material inspection, in-process checks, final inspection, calibration, non-conformance, and traceability for Indian manufacturing units. Every task is labelled by stage and frequency, and mapped to BIS, ISO 9001, and Legal Metrology requirements.

Updated July 2026 11 Pages

What's Inside

01 Daily Quality Quick Reference

02 Incoming Material Inspection (IQC)

03 In-Process Quality Control (IPQC)

04 Final Inspection and Pre-Dispatch (FQC)

05 Calibration and Measurement

06 Non-Conformance, Rework and CAPA

07 Traceability and Documentation

08 Machine, Tool and 5S Housekeeping

09 Standards, Compliance and Staff

65+
Checklist Items
Incoming to dispatch

8+1
Sections + Quick Ref
Daily summary + 8 sections

3
QC Inspection Stages
Incoming, in-process, final

ISO
9001 & BIS Aligned
QMS and ISI-mark ready

All
Units Covered
MSME to large factories

01 Daily Quality Quick Reference

Print this page and pin it at the QC desk. Tick off each task every shift.

Stage	Task	Who
Shift start	Verify QC gauges/instruments are within calibration date	QC inspector
Shift start	Review previous shift's non-conformance and rework status	QC in-charge
Incoming	Inspect incoming material against PO, spec, and supplier CoA	IQC inspector
Incoming	Sample per plan (AQL); accept, reject, or quarantine with a tag	IQC inspector
In-process	First-piece / setup approval before a production run starts	Line QC + operator
In-process	Patrol checks at set frequency; record readings on the control chart	Line QC
In-process	Quarantine and tag any non-conforming output immediately	Operator
Final	Final inspection against spec before packing; verify net quantity	FQC inspector
Final	Check label: MRP, net quantity, mfg date, batch, mfg details	FQC inspector
Final	Approve batch for dispatch only after QC sign-off	QC in-charge
All day	Log every reading, rejection, and deviation with batch/lot number	All QC staff
Per shift	Update rejection / rework register and daily QC summary	QC in-charge
Housekeeping	5S at each workstation: sort, set, shine, standardise, sustain	Operators
Safety	PPE worn, machine guards in place, no unsafe practice on the floor	Supervisor
Shift end	Reconcile production vs accepted vs rejected; sign the QC log	QC in-charge

How to Use This Checklist

This checklist covers quality control from incoming material to final dispatch, plus calibration, non-conformance, and traceability. Each item is labelled by stage and frequency. This quick reference lists only the critical daily tasks. Detailed steps and standard references are in Sections 01-08 that follow. Adapt items to your product and process.

02 Incoming Material Inspection (IQC)

Bad input becomes bad output. Stop defects at the gate.

AQL	CoA	3 bins
Sampling by Plan	For Every Lot	Accept / Reject / Hold
IS 2500 / ISO 2859 sampling	*Supplier Certificate of Analysis*	*Clear physical segregation*

Receiving and Verification

- ✓ **Match incoming material to the Purchase Order and approved specification** — Every lot
  Check grade, quantity, dimensions, and the supplier against the approved vendor list. Material that does not match the PO or spec is not received into stock without QC review.
- ✓ **Collect and file the supplier Certificate of Analysis / test certificate**
  For raw materials, chemicals, and components, the CoA or mill test certificate is verified against your specification. Keep it on file, linked to the lot number, for traceability.
- ✓ **Sample and inspect per the sampling plan (AQL)** — Every lot
  Use an Acceptance Quality Limit sampling plan (IS 2500 / ISO 2859) rather than inspecting everything or nothing. Record the lot size, sample size, and number of defects found.
  IS 2500 / ISO 2859-1
- ✓ **Verify GST invoice and e-way bill accompany the consignment**
  For taxable inward supplies, confirm the GST invoice and, where applicable, the e-way bill. A mismatch between the material, invoice, and e-way bill is flagged to stores and accounts.
  CGST Act; e-way bill rules

Disposition and Tagging

- ✓ **Tag material clearly: Accepted (green), Rejected (red), or Hold/Quarantine (yellow)** — Every lot
  Every lot carries a status tag with the material name, lot/batch number, date, and inspector. Accepted stock moves to the store, rejected stock to the reject area, and doubtful stock to quarantine, physically separated so it cannot be used by mistake.
- ✓ **Record inspection results in the incoming inspection register**
  Log the supplier, lot, quantity, sample result, disposition, and inspector. This feeds supplier rating and traceability.
- ✓ **Raise a supplier non-conformance for rejected lots**
  Rejected material triggers a supplier NC with photos and measurements. Track the debit note, replacement, and the supplier's corrective action. Repeated rejections affect the vendor's rating.
- ✓ **Verify weighing and measuring instruments used for receiving are legal-metrology stamped**
  Weighbridges and scales used for trade or receiving quantity must carry a valid Legal Metrology verification stamp. An unstamped or expired scale is not used for quantity acceptance.
  Legal Metrology Act 2009

03 In-Process Quality Control (IPQC)

Catch drift on the line, not after the batch is finished

1st piece	SPC	Hourly
Approved Before Run	Track the Trend	Typical Patrol Rate
Setup / first-article approval	*Control charts, not just pass/fail*	*Set by product and process risk*

- ✓ **First-piece (first-article) inspection approved before the run starts** — Every setup
  After every setup, tool change, or material change, the first piece is fully inspected and approved against the drawing before mass production begins. Production does not run on an unapproved setup.
- ✓ **Patrol / in-process checks at the defined frequency**
  QC checks key dimensions and parameters at a set frequency (for example hourly) during the run. Frequency is higher for critical characteristics and new processes.
- ✓ **Record readings on a control chart to spot drift early**
  Plot key measurements over time (Statistical Process Control). A trend towards the limit is caught and corrected before parts go out of spec, not after a full batch is scrap.
  IS 397 / ISO 7870 (control charts)
- ✓ **Verify process parameters match the control plan / work instruction**
  Temperature, pressure, speed, torque, cycle time, and settings match the approved control plan. Operators run to the documented parameters, not from memory.
- ✓ **Quarantine and tag non-conforming output immediately** — As found
  Any part that fails is segregated and tagged at once so it cannot mix with good stock. The quantity, defect, and time are logged for analysis.
- ✓ **Line clearance done between two different products or batches** — Every changeover
  Before switching product or batch, the line is cleared of the previous material, documents, and labels to prevent mix-ups. This is critical in food, pharma, and packaging.
- ✓ **Operator self-inspection recorded alongside QC checks**
  Operators check their own output at defined points. Self-inspection plus independent QC catches more than either alone and builds ownership on the floor.

04 Final Inspection and Pre-Dispatch (FQC)

The last gate before your name leaves the factory

100%	Label	COC
Or AQL by Product	Legal Metrology Check	Certificate on File
Critical items often 100% checked	*MRP, net qty, mfg date, batch*	*Certificate of Conformity per batch*

✓ **Final inspection against the finished-goods specification** — Every batch

Dimensions, function, appearance, and performance are checked against the finished-product spec. Critical-to-quality features are verified 100% where required; others by sampling plan.

✓ **Verify net quantity / fill and weight against the declared value** — Every batch

For packaged goods, the net quantity or weight matches the declared value within permitted tolerance. Under-filling is both a customer and a legal-metrology issue.

Legal Metrology (Packaged Commodities) Rules 2011

✓ **Check mandatory label declarations on packaged goods** — Every batch

MRP (inclusive of taxes), net quantity, month and year of manufacture, name and address of the manufacturer/packer, consumer-care details, and country of origin are present and legible.

Legal Metrology (Packaged Commodities) Rules 2011

✓ **Confirm BIS / ISI mark applied where the product is under a Quality Control Order**

For products notified under a BIS Quality Control Order, the ISI mark and licence number must be applied. Selling notified products without the mark is an offence.

BIS Act 2016; product QCO

✓ **Packing, sealing, and shipping marks verified before dispatch**

Primary and secondary packing protect the product in transit. Handling symbols, batch, and shipping marks are correct. Damaged or wrong packing is rejected before loading.

✓ **Certificate of Conformity / inspection report issued per batch**

A signed COC or final inspection report accompanies or is filed for each dispatched batch, linking the batch to its test results. Customers and audits rely on this record.

✓ **QC sign-off obtained before the batch is released for dispatch** — Every batch

No batch leaves without a documented QC release. A hold at this gate is cheaper than a recall after the goods reach the customer.

05 Calibration and Measurement

You cannot control what you cannot measure accurately

NABL	Sticker	MSA
Traceable Calibration	On Every Instrument	Gauge R&R Done
Accredited lab / national standard	*Calibration status + due date*	*Measurement System Analysis*

Instrument Control

- ✓ **Every measuring instrument carries a calibration status sticker with due date** — Always
  Verniers, micrometers, gauges, weighing scales, thermometers, and pressure gauges show a unique ID, last-calibrated date, and next-due date. An overdue or unlabelled instrument is withdrawn from use.

- ✓ **Calibration traceable to national standards via a NABL-accredited lab**
  External calibration is done by a NABL-accredited laboratory, with certificates traceable to national standards (through NPL India). Keep the certificates on file and linked to the instrument ID.
  NABL / national metrology (NPL)

- ✓ **Maintain a master calibration register and schedule**
  List every instrument, its calibration frequency, last and next due date, and status. The schedule flags what is due this month so nothing lapses.

- ✓ **Weighing instruments used for trade verified and stamped under Legal Metrology** — Compliance
  Scales and weighbridges used to determine quantity for sale or dispatch carry a valid Legal Metrology verification stamp, re-verified before expiry.
  Legal Metrology Act 2009

Measurement Confidence

- ✓ **Gauge R&R / Measurement System Analysis done for critical measurements**
  Before trusting a measurement to accept or reject, confirm the measuring system itself is repeatable and reproducible. A gauge that disagrees with itself makes every downstream decision unreliable.

- ✓ **Reference and master gauges controlled and periodically checked**
  Master gauges, setting rings, and slip gauges are stored protected, used only for reference, and re-calibrated on schedule. Working gauges are checked against masters.

- ✓ **Damaged or suspect instruments quarantined and re-verified**
  A dropped micrometer or a gauge that gives odd readings is pulled from the floor, tagged, and re-calibrated before it returns to use. Any product measured by it since the last good check is reviewed.

06 Non-Conformance, Rework and CAPA

A defect found is a chance to stop it recurring

NCR	5-Why	CAPA
Raised, Not Hidden	Root Cause, Not Symptom	Closed With Evidence
Every non-conformance logged	*5-Why / fishbone analysis*	*Corrective + preventive action*

- ✓ **Raise a Non-Conformance Report (NCR) for every defect or deviation** — As found
  Whether from incoming, in-process, final, or a customer complaint, the non-conformance is documented with the part, quantity, defect, and where it was found. Nothing is quietly reworked and forgotten.
- ✓ **Disposition decided: rework, repair, use-as-is (with concession), scrap, or return**
  A responsible authority decides and records the disposition. Use-as-is requires a documented concession/deviation approval. Reworked items are re-inspected before acceptance.
- ✓ **Root-cause analysis for repeated or significant non-conformances**
  Use 5-Why or a fishbone (Ishikawa) diagram to find the real cause, not just the symptom. Fixing the cause is what stops the defect coming back.
  ISO 9001:2015, Clause 10
- ✓ **Corrective action taken and its effectiveness verified**
  The corrective action addresses the root cause. After implementing it, verify the defect actually stopped recurring before closing the CAPA. An unverified 'closed' action is not closed.
- ✓ **Preventive action applied to similar processes or products**
  If the same cause could affect other lines or products, apply the fix there too, before it becomes their problem.
- ✓ **Rejection and rework tracked with cost and trend**
  Maintain a rejection/rework register with quantity, reason, and cost. Review the trend monthly. The top few defect types usually cause most of the loss, target those first.
- ✓ **Customer complaints logged, investigated, and closed with response**
  Every customer complaint is logged, root-caused, and answered within a committed timeline. A recurring external complaint is a failure of the internal QC gates.

07 Traceability and Documentation

If you cannot trace it, you cannot recall it or defend it

Batch	FEFO	Records
End-to-End Trace	Stock Rotation	Retained on Schedule
Raw material to finished lot	*First-Expiry-First-Out for shelf life*	*Per QMS / statutory period*

Traceability

✓ **Batch / lot number links raw material, process, and finished goods** — Every batch

From a finished-goods batch you can trace back to the raw-material lots, the machine, the shift, and the operator. This is what makes a targeted recall possible instead of a total one.

✓ **Mock recall / traceability check done periodically** — Periodic

Pick a finished batch and trace it fully back to inputs, and forward to customers, within a target time. A failed mock recall exposes gaps before a real one does.

✓ **Shelf-life items follow FEFO with expiry visible**

For products with shelf life, First-Expiry-First-Out is enforced and expiry is checked at dispatch. Expired or near-expiry stock is quarantined, not shipped.

Records and Documents

✓ **Controlled documents in use: current spec, drawing, control plan, work instruction**

Only the current, approved version of each document is on the floor. Obsolete drawings and specs are removed so no one works to an outdated revision.

✓ **Inspection records complete, legible, and signed**

Incoming, in-process, and final records are filled at the time of inspection, not backfilled, and carry the inspector's sign-off. Blank or backdated records fail an audit.

✓ **Records retained for the defined period and retrievable**

Quality records are kept for the period set by your QMS and any statutory requirement, stored so they can be produced quickly during an audit or complaint investigation.

ISO 9001:2015, Clause 7.5

08 Machine, Tool and 5S Housekeeping

Clean, maintained equipment makes consistent quality

5S	PPM	Poka
At Every Station	Preventive Maintenance	Yoke Error-Proofing
Sort, Set, Shine, Standardise, Sustain	*Scheduled, not breakdown-only*	*Design out common mistakes*

- ✓ **5S maintained at every workstation and in the QC area** — Daily
  Sort (remove what is not needed), Set in order (a place for everything), Shine (clean daily), Standardise (visual standards), Sustain (audit and hold the gain). A cluttered station hides defects and mixes parts.
- ✓ **Preventive maintenance done on schedule, records maintained** — Per schedule
  Machines follow a planned preventive maintenance schedule, not just fix-on-breakdown. A worn or drifting machine produces out-of-spec parts long before it stops working.
- ✓ **Tools, moulds, dies, and fixtures inspected and maintained**
  Worn tooling is a leading cause of dimensional drift and surface defects. Inspect and maintain tools, moulds, and dies on a schedule and log their condition and life.
- ✓ **Machine guards, interlocks, and safety devices in place and working** — Every shift
  Guards and interlocks are never bypassed for speed. A safe machine is also a controlled machine. Report and fix any defeated safety device immediately.
  Factories Act 1948
- ✓ **Error-proofing (poka-yoke) used where mistakes are common**
  Where an operator can easily make a wrong assembly or setting, design a simple check or fixture that makes the error impossible or obvious. Prevention beats inspection.
- ✓ **Calibrated jigs and fixtures verified before use**
  Setting fixtures and go/no-go jigs are themselves verified. A worn fixture passes bad parts as good, quietly, until a customer finds them.

09 Standards, Compliance and Staff

The certifications and statutory duties behind a compliant factory

ISO	10/20	10+
9001:2015 QMS	Factories Act Threshold	ESI / POSH Threshold
Voluntary but widely required	*10 with power / 20 without*	*ESI 10+ ; POSH 10+ employees*

- ✓ **ISO 9001:2015 QMS maintained where certified: audits, reviews, actions closed**
  If certified, internal audits are conducted on schedule, management reviews are held, and audit non-conformities are closed with evidence. Certification lapses if the system is only alive at audit time.
  ISO 9001:2015

- ✓ **BIS licence current for products under a Quality Control Order** — Compliance
  For notified products, the BIS licence is valid and the ISI mark is applied correctly. Renewal is tracked so the licence never lapses while you are still selling.
  BIS Act 2016

- ✓ **Factory licence, Consent to Operate, and fire NOC current** — Compliance
  The factory licence under the Factories Act, the Consent to Operate from the State Pollution Control Board, and the fire NOC are valid and displayed. Renewal dates are tracked.
  Factories Act 1948; SPCB consent; fire rules

- ✓ **Legal Metrology model approval and stamping for measuring instruments**
  Weighing and measuring instruments used in trade have model approval and valid verification stamps. This covers weighbridges, scales, and volume/flow meters used for quantity.
  Legal Metrology Act 2009

- ✓ **QC staff trained and competency recorded for their inspection tasks**
  Inspectors are trained on the spec, the instrument, and the sampling plan for their role, with training records kept. An untrained inspector is a source of both escapes and false rejects.

- ✓ **PF for 20+ employees, ESI for 10+ employees, deposited on time** — Monthly
  PF applies at 20 or more employees; ESI at 10 or more where wages are up to ₹21,000/month. Both are deposited by the 15th of the following month, with liability extending to the person in charge.
  EPF & MP Act 1952; ESI Act 1948

- ✓ **POSH Internal Committee and worker safety training in place (10+ employees)** — Compliance
  Factories with 10 or more employees need a POSH Internal Committee and policy, plus documented worker safety and machine-handling training under the Factories Act.
  POSH Act 2013; Factories Act 1948

PETPOOJA

This checklist is provided by Petpooja for informational purposes. Verify all compliance details with official sources before acting.

www.petpooja.com

PETPOOJA

AUTOMATE QUALITY CONTROL

Stop tracking QC on *paper and WhatsApp*

Petpooja Tasks digitises inspections and shop-floor routines with photo/video proof, AI verification, geo-tagged checks, and reminders for every shift and stage. 150+ pre-built templates, dependent and group tasks, reward and penalty points. One plan, unlimited users across lines and locations.

Book a Free Demo

Call: +91-63589 16474 | gettasks@petpooja.com