

1. Product Safety (4.4.1.2)

- **IATF Requirement:**
 - Organizations must have documented processes to ensure **product safety** during the entire product lifecycle.
 - Special controls for high-risk parts, traceability, and regulatory compliance.
- **Not in ISO 9001.**

2. Corporate Responsibility (5.1.1.1)

- **IATF Requirement:**
 - Mandates adherence to **ethical business practices**, anti-corruption policies, and corporate social responsibility.
- **Not in ISO 9001.**

3. Contingency Planning (6.1.2.3)

- **IATF Requirement:**
 - Requires detailed plans for **business continuity** in case of power failures, labor shortages, or natural disasters.
 - Regular testing and updating of contingency plans.
- **ISO 9001 has basic risk management** but no specific contingency planning.

4. Customer-Specific Requirements (CSR) (4.3.2)

- **IATF Requirement:**
 - Organizations must comply with **customer-specific standards**, which vary by automotive manufacturer (OEM).
 - Customer satisfaction is linked to OEM-defined metrics.
- **Not in ISO 9001.**

5. Change Management (6.3.2.1)

- **IATF Requirement:**
 - Requires a formal process for managing **product and process changes**, including notification to customers.
 - Includes changes in equipment, personnel, and materials.
- **ISO 9001 does not specify customer notification.**

6. Risk Management — Preventive Actions (6.1.2.1)

- **IATF Requirement:**
 - Extensive use of **Failure Mode and Effects Analysis (FMEA)** to anticipate and mitigate risks.
 - Focus on **preventive action** rather than reactive correction.
- **ISO 9001 promotes risk-based thinking** but lacks FMEA-level detail.

7. Control of Non-Conforming Product (8.7.1.1)

- **IATF Requirement:**
 - Requires containment, quarantine, and root cause analysis of defective parts.
 - **Customer notification** mandatory for shipped non-conforming products.
- **ISO 9001 allows internal handling** but no customer reporting is mandatory.

8. Traceability (8.5.2.1)

- **IATF Requirement:**
 - Demands **traceability of products** back to raw materials.
 - Needed for recalls and defect containment.
- **Not required in ISO 9001.**

9. Supplier Development (8.4.2.5)

- **IATF Requirement:**
 - Requires organizations to **develop and monitor suppliers**, especially those not meeting performance goals.

- Supplier audits and continuous improvement programs.
- **ISO 9001 focuses on supplier evaluation** but not continuous development.

10. Layered Process Audits (LPA) (9.2.2.1)

- **IATF Requirement:**
 - Mandatory **layered process audits** (LPAs) at all levels (operator, supervisor, management).
 - Ensures process compliance and defect prevention.
- **ISO 9001 only mandates general internal audits.**

11. Total Productive Maintenance (TPM) (8.5.1.5)

- **IATF Requirement:**
 - Enforces a structured TPM system to ensure **equipment reliability**, preventive maintenance, and minimizing downtime.
- **Not specified in ISO 9001.**

12. Embedded Software Requirements (8.5.1.1)

- **IATF Requirement:**
 - Requires controls for **embedded software** in automotive components.
 - Includes version control, validation, and cybersecurity.
- **Not present in ISO 9001.**

13. Production Part Approval Process (PPAP) (8.3.4.4)

- **IATF Requirement:**
 - Organizations must follow **PPAP** to validate production processes before mass production.
- **ISO 9001 has no such approval system.**

14. Error-Proofing (Poka-Yoke) (10.2.4)

- **IATF Requirement:**
 - Requires implementation of **error-proofing** techniques to prevent defects.
 - Continuous improvement for reducing human error.
- **Not in ISO 9001.**

15. Warranty Management (10.2.5)

- **IATF Requirement:**
 - Demands a formal system for **warranty analysis** and reduction of warranty claims.
- **Not required in ISO 9001.**

16. Management of Temporary Change (8.5.6.1.1)

- **IATF Requirement:**
 - Strict controls for **temporary changes** in processes, personnel, or equipment.
 - Requires formal approval and customer notification.
- **Not required in ISO 9001.**

17. Employee Motivation and Empowerment (7.1.2.1)

- **IATF Requirement:**
 - Focuses on empowering workers for continuous improvement and problem-solving.
 - Encourages suggestion programs and reward systems.
- **ISO 9001 promotes employee competence** but not motivation.

18. Continuous Improvement — Problem Solving (10.2.3)

- **IATF Requirement:**
 - Requires structured problem-solving methodologies (e.g., **8D Methodology**).
 - Emphasis on root cause analysis and corrective actions.
- **ISO 9001 encourages improvement** but not specific problem-solving tools.



Summary of Extra Standards in IATF Compared to ISO:

Feature	IATF 16949	ISO 9001
Product Safety	✓	✗
Corporate Responsibility	✓	✗
Contingency Planning	✓	Partially
Supplier Development	✓	Partially
Traceability	✓	✗
Preventive Actions (FMEA)	✓	General Risk Management
Error-Proofing (Poka-Yoke)	✓	✗
Warranty Management	✓	✗
Production Part Approval (PPAP)	✓	✗
Embedded Software Control	✓	✗
Layered Process Audits (LPA)	✓	✗
Employee Motivation & Empowerment	✓	General Competence Focus

✓ Conclusion:

IATF 16949 **builds on ISO 9001** with **automotive-specific enhancements**, focusing on:

- **Defect Prevention**
- **Risk Management (FMEA)**
- **Supplier Development**
- **Traceability**
- **Corporate Responsibility**