

HACCP Compliance Checklist for Motion Components

A self-audit tool for Maintenance Managers and Food Safety teams in poultry, meat, and food processing facilities

Facility/Plant: _____

Completed by: _____

Date: _____

Lines/Areas reviewed: _____

This checklist identifies compliance gaps in bearing and drivetrain specifications for food processing environments. Use it to audit your highest-risk applications — product contact zones, washdown areas, and lines where bearing failures occur. Items marked "No" or "Unsure" represent action items. Review with your food safety team for FSMA Preventive Controls documentation.

1. Lubrication Compliance

All bearings in or near product contact zones are lubricated with **H1-rated (NSF-certified) food-grade grease**.

If No: Non-H1 lubricants in product contact zones are an FSMA Preventive Controls chemical hazard. Replace with H1-rated grease at next scheduled PM.

Yes	No	N/A
☐	☐	☐

Grease zerks and lube holes on bearings in product zones are **sealed or eliminated** to prevent lubricant intrusion into product areas.

If No: Open lube ports in product zones are FSMA-relevant contamination pathways. Evaluate lubed-for-life replacements for high-risk positions.

Yes	No	N/A
☐	☐	☐

Re-lubrication schedules are **documented and consistently followed** for all bearings requiring periodic greasing.

If No: Inconsistent re-lubrication is a Preventive Controls monitoring gap. Establish a documented schedule or eliminate re-lube requirements where possible.

Yes	No	N/A
☐	☐	☐

Bearings in difficult-to-access locations or high-washdown zones that are evaluated for **lubed-for-life design** (factory-sealed, no re-greasing required).

If No: These are candidates for specification upgrade. Lubed-for-life designs eliminate a maintenance labor requirement and a contamination pathway simultaneously.

Yes	No	N/A
☐	☐	☐

2. Housing Design and Sanitary Configuration

Bearing housings in product contact or splash zones **do not create crevices** between the housing and the mounting surface. **HIGH RISK**

If No: Standard pillow block housings create bacterial harborage points that resist cleaning. 3-A Sanitary Standards require smooth, crevice-free surfaces. Evaluate standoff housing configurations for product zone positions.

Yes	No	N/A
☐	☐	☐

Housing material in direct washdown areas is **stainless steel or food-grade thermoplastic** (not standard cast iron or carbon steel).

If No: Non-stainless housings corrode under caustic sanitation chemicals, creating contamination risk and structural failure over time.

Yes	No	N/A
☐	☐	☐

All bearing housing surfaces in product zones can be **fully accessed by cleaning spray** without disassembly.

If No: Document inaccessible surfaces as a sanitary design gap in your food safety plan. Evaluate redesign or equipment modification options.

Yes	No	N/A
☐	☐	☐

3. Ingress Protection and Seal Specification

Bearings in direct sanitation spray zones are rated **IP69K** (high-pressure, high-temperature washdown protection). **HIGH RISK**

If No: IP65 or IP67-rated bearings do not provide adequate protection against poultry-grade washdown conditions (1,160–1,450 PSI, 176°F). Water ingress = premature failure and contamination risk.

Yes	No	N/A
☐	☐	☐

Bearings in **sub-40°F applications** (freezer corridors, chill conveyors) are specified with solid lubricant or appropriate low-temperature seal — not standard IP69K quad-lip design.

If No: IP69K seal drag in freezer applications accelerates wear and reduces bearing life. Stainless steel radial bearings with solid lubricant are the correct specification for cold environments.

Yes	No	N/A
☐	☐	☐

Bearing specifications in washdown zones have been **reviewed by an application engineer** within the past 24 months.

If No: Application conditions change as processes evolve. A scheduled specification review identifies components that have drifted out of alignment with current sanitation protocols.

Yes	No	N/A
☐	☐	☐

4. Chain and Drive Components

Conveyor chain in washdown or product contact zones is stainless steel (not standard carbon steel or nickel-plated). **MODERATE RISK**

If No: Standard chain corrodes under caustic sanitation chemicals, can shed rust particles into product zones, and fails rapidly in washdown environments.

Yes	No	N/A
☐	☐	☐

Chain lubrication in product zones uses **food-grade (H1-rated) lubricant** or lube-free chain design.

If No: Same contamination pathway issue as bearing lubrication. Evaluate lube-free stainless chain (polymer bearing design) for applications where chain lubricant management is difficult.

Yes	No	N/A
☐	☐	☐

Belt and timing drive components in washdown zones are specified for **moisture and chemical resistance** — not standard rubber compounds.

If No: Standard rubber belt compounds degrade under caustic sanitation chemicals. Application-specific compounds extend service life and reduce contamination risk from belt material breakdown.

Yes	No	N/A
☐	☐	☐

5. Maintenance Documentation (FSMA Records)

Bearing failures in product zones are **documented with date, location, failure mode, corrective action, and food safety risk assessment**.

If No: FSMA Preventive Controls require corrective action records. A bearing failure in a product zone without documentation creates a compliance gap.

Yes	No	N/A
☐	☐	☐

Lubrication events in product zones are **logged with date, lubricant type, and quantity applied**.

If No: Lubrication documentation is part of your Preventive Controls monitoring record. Undocumented lubrication events are a monitoring gap.

Yes	No	N/A
☐	☐	☐

Your food safety plan **identifies motion components as a potential chemical hazard source** and includes controls for lubricant contamination.

If No: Review your HACCP hazard analysis to include bearing and drive component lubrication as a chemical hazard pathway. Document your controls (H1 grease, lubed-for-life design, re-lube protocol).

Yes	No	N/A
☐	☐	☐

6. High-Risk Zone Identification

You have identified the **3–5 highest-risk bearing and drive applications** in your facility (highest contamination risk, most frequent failures, or hardest to access for sanitation).

If No: Prioritization is the first step. High-risk applications are typically: deboning lines, packaging lines, overhead conveyors in product zones, and any bearing position that has failed more than once in the last 12 months.

Yes	No	N/A
☐	☐	☐

Each high-risk application is **matched to a specification that accounts for the specific washdown, temperature, and chemical exposure conditions** of that position.

If No: Most repeat failures trace to components that were never matched to actual application conditions — just cross-referenced by dimension. Application-environment matching is the fix.

Yes	No	N/A
☐	☐	☐

Audit Results — What to Do Next

Count your "No" responses to identify action priority:

- 0–2 No responses** Strong compliance posture. Conduct an annual review and document findings in your food safety plan.
- 3–5 No responses** Moderate risk. Prioritize items in Sections 1 and 2 (lubrication and housing design) because they have the most direct FSMA implications. Create a 90-day remediation plan.
- 6+ No responses** Elevated risk. Conduct a full application review with an engineer before your next scheduled FSMA audit. High-risk items in Sections 1–3 should be addressed before any routine maintenance cycle continues without documentation.

Notes/Action Items

Use this space to document specific applications, locations, or action items identified during this audit.

Need help addressing items identified in this audit?

Solve engineers work with food and beverage maintenance teams to identify specification gaps, calculate the cost of repeat failures, and recommend application-matched solutions. The review is conducted at no cost — and the solution goes through your existing distributor.

Talk to an engineer: [SolveIndustrial.com/contact](https://solveindustrial.com/contact) | **24/7 support:** 800-763-4434

Most bearing brands sell you a component. Solve figures out what caused the failure.