

# Grain System Automation Readiness Checklist

Use this checklist to evaluate where your grain operation can save the most time and reduce risk.

## 1. Grain Monitoring & Visibility

- Temperature cables installed in all major bins
- Moisture sensors or automated moisture sampling in place
- Remote access to bin data (web or mobile app)
- Automatic alerts for hot spots, moisture spikes, or fan failures
- Inventory levels tracked through load cells or bin sensors

## 2. Aeration & Conditioning

- Aeration fans connected to automated control systems
- Fans run based on weather data or programmed parameters
- Automated grain-turning schedules (or plans to implement)
- Data logging for temperature and moisture trends

## 3. Grain Handling System Design

- Conveyors/legs equipped with modern controls and sensors
- Automatic start/stop sequencing to reduce manual oversight
- Safety interlocks in place to prevent equipment overload
- Remote monitoring of motors, belts, and bearings
- Flow metering or weighing integrated into the system

## 4. Grain Storage Management

- Consistent recordkeeping for each bin (moisture, temp, lot data)



- Digital logs instead of manual notebooks
- Bin conditions reviewed daily (or automated alerts already replacing daily checks)
- Pest management tied to sensor data or activity logs
- Clear, documented SOPs for loading/unloading each storage unit

## 5. Maintenance & Reliability

- Preventive maintenance schedule followed each season
- Critical spare parts on hand (bearings, belts, sensors)
- Equipment monitoring tied to predictive alerts
- Regular calibration of sensors and scale systems
- Documented troubleshooting workflows

## 6. Safety & Labor Efficiency

- Reduced need to climb bins for inspections
- Remote control eliminates unnecessary manual interventions
- Lockout/tagout procedures in place and used
- Team trained on new automated systems
- Clear division of labor that reduces repetitive tasks

## 7. Integration & Long-Term Planning

- Systems share data across platforms (monitoring → aeration → inventory)
- Future expansion considered in current grain system layout
- Wireless or wired networks robust enough for sensor growth
- Backup power or fail-safes for critical equipment

# Score Yourself

Count each checked box:

- **30–40 checks:** Your operation is highly automation-ready and already saving significant time.
- **18–29 checks:** Strong foundation — a few upgrades could deliver major gains.
- **0–17 checks:** You have big opportunities to reclaim labor hours and reduce risk with targeted automation.

