



Precision Measurement Discovery Worksheet

Helping You Eliminate Variation, Improve Quality, and Streamline Inspection

Company Name: _____

Primary Contact Name: _____

Title / Department: _____

Date: _____

1. Current Inspection Process

What equipment or tools are used today for part inspection?

- ☐ Calipers / Micrometers ☐ Height Gages ☐ Indicators / Test Stands
- ☐ Optical Comparator ☐ Vision System ☐ Manual CMM ☐ Automated CMM
- ☐ Portable Arm ☐ Blue Light Scanner (Interferometry) ☐ Handheld Laser Scanner ☐ Tracker
- ☐ Custom Hard Gaging ☐ Outsourced Inspection ☐ Other: _____

What are the key limitations or pain points with your current approach?

2. Business Drivers & Objectives

What are you hoping to achieve with improved measurement solutions?

- ☐ Reduce inspection time or increase throughput
- ☐ Improve accuracy or reduce variation
- ☐ Automate manual or repetitive tasks
- ☐ Reduce scrap, rework, or customer returns
- ☐ Enhance product documentation and traceability
- ☐ Support compliance with standards (e.g., ISO 9001, AS9100, ISO 13485, IATF 16949, ITAR)
- ☐ Eliminate outsourcing or third-party inspection costs
- ☐ Enable real-time production feedback or SPC
- ☐ Reverse engineering or part validation
- ☐ Other: _____

3. Parts & Features of Interest

What parts or components are you primarily inspecting?

What materials are being measured?

- ☐ Steel Magnetic ☐ Steel Non-Magnetic ☐ Aluminum ☐ Plastic ☐ Composite ☐ Other: _____

What type of finish on part?

- ☐ Turned or Milled ☐ Ground ☐ Polished ☐ Coated ☐ Other: _____

What are your inspection volumes?

- ☐ Prototypes ☐ HMLV (High Mix Low Volume) ☐ LMHV (Low Mix High Volume)

What measurement features or tolerances must be analyzed?

- ☐ Dimensional tolerances

- ☐ GD&T features (e.g., position, flatness, straightness, profile)

- ☐ Surface finish or form

- ☐ Complex/freeform geometry

- ☐ Internal or hidden features

- ☐ Other: _____

Typical tolerances:

- ☐ $\pm 0.005"$ ☐ $\pm 0.001"$ ☐ $\pm 0.0005"$ ☐ Tighter: _____

4. Reporting, Data & Compliance

Can you share a copy of your current inspection report for reference?

If you could improve your current reporting, what would you change or add?

Do you require inspection reports for:

- ☐ First Article Inspection (FAI)

- ☐ PPAP (Production Part Approval Process)

- ☐ Customer or internal quality audits

- ☐ Other: _____

What formats or systems do your reports/data need to connect with?

- ☐ PDF / Excel

- ☐ SPC Software (e.g., Prolink, Minitab)

- ☐ ERP / MES Integration

- ☐ Other: _____

Is real-time data feedback to manufacturing required?

- ☐ Yes ☐ No ☐ Not Sure

5. Compliance & Standards Requirements

Which industry standards or regulatory requirements are applicable to your operations?

- ☐ ISO 9001 (Quality Management)
- ☐ AS9100 (Aerospace Quality Management)
- ☐ ISO 13485 (Medical Devices Quality Management)
- ☐ IATF 16949 (Automotive Quality Management)
- ☐ ITAR (International Traffic in Arms Regulations)
- ☐ Other: _____

6. Environment & Workflow

Where will the equipment be used?

- ☐ Quality Lab ☐ Production Floor ☐ Mobile Use / Cart-Based

Any environmental conditions to consider?

- ☐ Temperature fluctuation
- ☐ Dust, vibration, oil, coolants, or particulates
- ☐ Limited space or power
- ☐ Other: _____

Do you require:

- ☐ Shop-floor ruggedization
- ☐ Mobility between workcells
- ☐ Integration with automation / robotics

7. Current vs. Ideal State

What is your average inspection time per part or lot?

How many people are involved in your inspection process?

What does an ideal process or outcome look like for your team?

Any known quality issues or inspection bottlenecks affecting production?

8. Future Needs & Scalability

Are you expecting growth in part volume or product mix?

- ☐ Yes ☐ No ☐ Maybe — explain: _____

Do you want a solution that can scale with your production? (e.g., expandable throughput capacity, automation-ready, upgradable hardware/software)

9. Project Timing & Budget

Is this a funded project?

- ☐ Yes ☐ No ☐ Working on budget approval

Project timeline:

- ☐ Immediate Need
- ☐ Within 3 Months
- ☐ 3–6 Months
- ☐ 6–12 Months
- ☐ Long-Term Planning

10. Stakeholders & Decision Process

Who else is involved in evaluating or approving this investment?

Are there specific KPIs or ROI metrics your team needs to hit?

- ☐ Scrap / Rework reduction
- ☐ Cycle time improvement
- ☐ Labor cost savings
- ☐ Compliance / audit readiness
- ☐ Other: _____

11. Integration, Setup & Use Considerations

What is more important, ease of use or flexibility?

Is start-up applications assistance desired? Including startup production part program(s) and/or fixturing?

Is a custom operator interface required for quick launch of part programs?

Is a complete turnkey system desired?

Other considerations? _____

☒ MSI Viking will use this information to recommend the right solution and, if needed, prepare a business case that supports your investment goals – from cost savings and improved throughput to better quality and compliance.