

LICENSING OPPORTUNITY: NON-CONTACT MEASURING TOOL FOR PRECISION MEASUREMENT

DESCRIPTION

Problem

Traditional measurement tools often require direct contact with objects, which can lead to inaccuracies due to surface deformation or contamination. In industries like aerospace, electronics, and medical device manufacturing, even minor measurement errors can lead to costly defects. This invention eliminates the need for physical contact, ensuring more reliable and repeatable measurements. It also speeds up the measurement process, reducing downtime and improving productivity. The probe enhances quality control by providing highly precise data without damaging sensitive materials.

Invention

This invention introduces a non-contact measuring tool designed for precise measurement of objects without physically touching them. It uses advanced optical and sensor technologies to capture accurate data on an object's dimensions and surface characteristics. The tool enhances measurement reliability by eliminating errors caused by physical contact, such as deformation or contamination. It is particularly useful in industries requiring high-precision measurements, such as manufacturing and quality control. The technology improves efficiency and accuracy in measuring delicate or complex surfaces.

BENEFITS

Commercial Application

This technology can be widely used in manufacturing, aerospace, automotive, electronics, and medical device industries. It is ideal for inspecting precision-engineered components, ensuring they meet strict quality standards. The probe can be integrated into automated production lines for real-time measurement and defect detection. It also has applications in research and development, where precise measurements are crucial for innovation. Additionally, it can be used in metrology labs for high-accuracy inspections.

Competitive Advantage

- Non-contact measurement eliminates errors caused by physical interaction.
- Higher precision and reliability compared to traditional measurement tools.
- Faster measurement process, improving efficiency in production environments.
- Versatile applications across multiple industries requiring high-accuracy measurements.
- Reduced risk of damage to delicate or sensitive materials during inspection.

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