



TO CONSIDER BEFORE BUYING A VIDEO MEASURING MACHINES

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What is your part tolerance?

Divide this value by 10, and you will get the value of accuracy and repeatability that should be there in the Video Measuring machine.

2

Where will you install the same?

Do you need a machine that will always sit at the end of a production line, or do you need more space or a dedicated room or place which supports a temperature, dust, and vibration-controlled environment?

3

What size(s) are the objects you need to measure?

Some objects are small enough to be put into a machine, while others are simply too large or heavy. Your largest part size will help you decide about the measuring range you require on the machine, and the smallest dimensions will help you determine the magnification you need.



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4 What shape(s) are the objects you need to measure?

Does your object have internal geometry that you need to measure? Bore, holes, threads, and other complex geometry cannot always be measured by certain types of dimensional inspection equipment or without certain accessories. Opt for a touch probe if 3D measurement is a necessity.

6 Does your equipment need to be automated?

If you need to inspect more than 100 parts per day, look for the CNC option; otherwise, the manual Vision measuring machine is good enough. We can automate some dimensions, but not all of it can be. If this is an important factor for your application, make sure it is a high priority in your purchasing decision.

8 What is required to maintain the equipment? And what is Annual Maintenance and recurring cost

The video measuring machine should sustain some temperature variation and few dust particles as per the Indian conditions. Cleanroom for such instruments is very expensive. High-precision measurement equipment needs to be regularly maintained and periodically calibrated. Does the manufacturer has required staff with the skills to do this, or can you outsource it?

5 How fast do you need results?

Measuring the occasional first piece is different from inspecting every component that comes off a production line. It is essential to know how quickly you will need results to purchase a machine capable of meeting your needs.

7 Who will be using the equipment?

It must be user-friendly. You should consider ease of use if you are weighing multiple options. Will you need to hire new staff or train employees to use this new equipment? Does your budget support that?

9 How durable and reliable is the equipment?

Dimensional inspection equipment is an investment. It is important to compare multiple manufacturers and work with an expert who has the experience to solve your measurement challenges amongst all of them.

10 Up-gradation of the machine?

Upgradation of the machine in terms of software should ideally be free, but even if it costs, it should be economical sometimes; upgrades are more expensive than the software itself. You should also know the hardware upgrade cost before finalizing the video measuring machine. same machine to auto edge detection (video measuring machine) of replacing the profile projector to video measuring machine which takes more money or time

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Deep Cavity measurement

Surface illumination is from sides that sometimes may affect the image clarity in deep cavity components. Coaxial light can help proper image on deep cavity measurement.

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Geometrical tolerances?

Do your drawings have GD&T tolerances? If yes, then go for the Vision Measuring machine with software that has all the tolerance measurements according to ASME Y 14.5 standard.

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Availability of spares and service support?

Buying a Video measuring machine can be easy, but you need good support for the spares (ask about the consumables and their cost) and service support time range.

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Features that you need:

Reverse engineering compatibility with the CAD software that you are using in-house is essential. Also, apart from basic 2D and 3D measurement features like automated and customized report generation, comparison of data, graphical representation of data, store the data and images, and programming measurement of multiple parts must also form criteria for deciding.

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What is your budget?

Perhaps one of the most critical factors is your budget; however, be sure to weigh all of the above before you make a decision.

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