

PPM

General Presentation

1 **Place**

2 **Validate**

3 **You are done !**

PPM is a video profile projector for small parts, perfect for all 2d dimensional controls.

PPM is a dimensional control station, robust and portable. PPM may be installed close to the spot where the part is manufactured or handled. Operating PPM is very simple, ultra-fast, and prevents all measurement errors.



Display
Once the part on PPM's glass plate, the system displays its image, together with all its dimensions.

Computer
The computer comes equipped with the KitNum toolkit - ready to operate.

Glass plate
Suits all flat surfaces and cross-sections of small profiles (L < 2 inches).

Console
Very robust housing, includes one FireWire camera (provides the high-rate, ultra-crisp video image), and one episcopic light source.

**No adjustment
No moving part
No risk of error**

PPM consists in a calibrated gauge, and a very robust measuring station featuring **KitNum**, Satimage's 2D dimensional measurement toolkit. **KitNum** itself consists in a video camera and a computer unit running SMI, **Satimage's** real time high accuracy vision software engine.

Since it is so easy to use, PPM will automate all 2D dimensional controls. PPM will boost the productivity of the dimensional checks in the shop, and will help monitor and improve the production quality. A full reading requires less than 5 seconds, whatever the number of dimensions to measure, and includes no risk of human error.

- Bavurex
- Brillo
- Diffuso
- KitNum
- PPM**
- Profilo
- Recta
- Slots
- Surflab 3D
- Tarodo
- WeldInspector



Satimage's Product Line

- Satimage's Machine Vision systems include two kinds of solutions :
- ▶ **Generic Measuring Machines.** They provide, in real time and with a high accuracy, some defined physical measurements. Numerous applications.
 - ▶ **Dedicated Systems.** Designed up to the finest details with the help and for the purposes of their users. Devoted to some specific manufacturing process.

PPM is a solution dedicated to the manufacturers of accuracy machined parts, of tubes, and of profiles.

Features

- Dimensional checkings
- Reads all dimensions at once
- Control report

- ▶ **No knob**, no tuning, no adjustment, no moving part, no risk of error
- ▶ **Views** the whole part
- ▶ **Automatically and instantly reads** all the dimensions to control
- ▶ **Instantly evaluates** the part's conformance to the tolerance intervals
- ▶ One screen **displays all the dimensions**
- ▶ **No limit** on the number of dimensions
- ▶ **Prints** the image of the part
- ▶ Builds and prints a **customizable control report**
- ▶ **Stores and manages** the archives of the readings
- ▶ A new control is **rapidly programmed**

Operation of PPM

To control a given part, the operator first selects the corresponding measuring program. Then he puts the part, with no particular precaution, on **PPM**'s glass plate.

Requiring no optical adjustment and no moving of the part, **PPM** controls the whole part within 3 seconds.



Basic model	Measurement time	Measurement field	Accuracy
PPM 50	3 seconds	50 mm x 40 mm	± 5 microns
PPM 100	3 seconds	100 mm x 80 mm	± 1/100 mm
PPM 200	3 seconds	200 mm x 160 mm	± 2/100 mm

Other models : please ask us !

More information at www.satimage.fr/en/ppm.html

PPM includes Satimage's KitNum automatic dimensional measurement toolkit.

- ▶ **Read** a part's dimensions fast and easily, track the evolution of your products, print detailed graphical reports.
- ▶ **Build a new measuring program** in minutes with PPM's interactive step-by-step online help system. Browse **PPM**'s tutorial and view additional information at: www.satimage.fr/en/ppm.html.
- ▶ **Browse the archives**, remotely make and print a control report, using your web browser from any computer connected to the local network.

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Consultation of the archives

PPM archives | Archives > tutorial 2 > 2 > 2007B11 > Fichier@PC.txt

- Capabilities table
- Production monitoring cards - Control cards
- Readings table
- Creation of the reports

Capabilities table

Designation	Minimum	Maximum	Average	Span	Std err	Cp	Cpk
Width (mm)	36.027	36.035	36.031	0.008	0.0030	43.72	40.34
Distance between centers (mm)	20.110	20.118	20.114	0.008	0.0023	28.54	12.28
Symmetry (mm)	0.422	0.654	0.569	0.232	0.0539	0.31	-3.09

Production monitoring cards - Control cards

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Client's Measurement Report logo

Control date : Jeudi, 26 avril 2007 11:54:18
 Reference of the part : tutorial 2
 Batch number : 2

	Reading	Minimum	Maximum	Conformity
Width (mm)	36.030	35.6	36.4	Compliant
Distance between centers (mm)	20.115	19.8	20.2	Compliant
Symmetry (mm)	0.603	0.0	0.1	Not compliant

PPM Measurement System

SATIMAGE

A robust and reliable measurement station, with no moving part, **PPM** fits the needs of the workshop for a dependable measuring machine. **PPM**'s particularly high user-friendliness at all levels protects users against errors.

No video adjustment. Automatic reading of the dimensions : the operator cannot introduce a reading error. If the part is out of tolerances, **PPM** alerts the operator and underlines the faulty dimension. Also eliminates any data transmission error.

Architecture

- ▶ **Housing** : robust, thick, steel structure, portable. Includes handles.
- ▶ **Optics** : episcopic and/or diasopic lighting.
- ▶ **Video** : B&W, 100% digital, FireWire (IEEE 1394) video camera.
- ▶ **Computer** : laptop or tower models available. FireWire input. Ethernet card. Includes an Apache web server. Internal hard disk