



SAS 3D SPARK PVT LTD

All Dimensions Covered

About Us

We are located in Bangalore, S.A.S 3D Spark Pvt Ltd is an engineering firm specializing in 3D scanning solutions. Our engineers and management have been providing world class.

We offer 3D scanning, reverse engineering and quality inspection services to a variety of industries. We are committed to our clients and to delivering the highest quality data that meets their needs and budget. While S.A.S 3D Spark Pvt Ltd service goal is to provide top notch scan data and surface models, our foundational value is to help customers realize significant benefits by using 3D scanning, be it through our service offerings, sales of software and 3D scanners. Our teams of Engineer have extensive exposure and expertise in the field of Reverse Engineering, 3D Scanning & 3D Inspection and support our customers with the best service.

Our Resources

Leica Geomatic Systems (Laser Scanner & Terrestrial Scanner):

We possess Leica Laser Tracker & Leica Terrestrial Scanner for precise measurements for any large components or machinery and also, large platforms and measurements. The Leica Terrestrial Scanners offer complete scanning of the large areas, be it an Industrial Complex or a Heritage Structure or a large Defence Platform, we can scan it all.



Hexagon Absolute Arm :(7 Axis Portable Measuring Arm)

Hexagon Absolute Arm portable coordinate measuring machines are designed for industries that need to inspect, measure or reverse engineer work pieces on the shop floor or in the metrology lab. These portable CMMs are particularly well suited to inspect parts that are impossible to move to a stationary CMM. Hexagon Absolute Arm measuring equipment is used worldwide in the automotive, aerospace and general industrial markets.



Perceptron V5 Scanner

Coupled with Hexagon Portable CMM Arm, the ScanWorks systems combine the ease-of-use of portable movers with Perceptron's advanced 3D scanning technology. Our portable scanning solutions use non-contact, laser-based technology to generate 3D point cloud data at a rate of up-to 458,400 points per sec.



Geomagic Capture For Scanning:

The Geomagic Capture can be used for scanning of the smaller objects with accuracies of as high as 40 microns and with great detail. It is a very useful tool for Reverse Engineering of smaller components of upto 350x350x350 mm sizes.



Vision System:

We possess State of The Art Vision System for carrying out very precise measurements for very small parts, be it electronics, miniature parts, Rubber or small Plastic or Sheet Metal Parts. We can measure parts as large as 300x400 on this system with accuracies of 3-4 microns.



3D Printers

We possess a battery of 3D Printers and can Print Plastics upto 500x500x500 mm. We also have facility for SLA Printer upto 140x140x200 size.ate of The Art Vision System for carrying out very precise measurements for very small parts, be it electronics, miniature parts, Rubber or small Plastic or Sheet Metal Parts. We can measure parts as large as 300x400 on this system with accuracies of 3-4 microns.



Our Services

LASER TRACKER INSPECTION SERVICE

Onsite Inspection



We offer our clients with wide range of Measurement using Laser Tracker. These are ideal for making large size measurement in fast and accurate manner. The Laser Tracker makes use of Delcam power inspect measurement software, which enables CAD based measurement and analysis. Our Engineers have acquired expertise in various domains of measurements such as Aerospace, Steel plants (roller, caster, and strand alignments), Power plants, shipping (Shaft alignments).

- We are capable of 3D tracker and portable CMM probing to mark exact co-ordinates for the systems and rotables on a platform, be it a ship or a submarine or an aircraft or even a whole factory or any such complex objects with multiple decks and levels and complex piping, systems and devices.

Widely Used Area:

- Automobile
- Aerospace
- Steel Plants
- Ships etc

Terrestrial Scanning Service

We offer Terrestrial Scanning Service which delivers the highest quality 3D data and HDR imaging at an extremely fast scan rate of 1 million points per second at ranges of up to 270 meters. Unsurpassed range and angular accuracy paired with low range noise and survey-grade dual-axis compensation form the foundation for highly detailed 3D point clouds mapped in realistic clarity.



Whether capturing 3D geometry of civil infrastructure, creating an as-built representation of a large industry complex, reconstructing a crime scene or generating 3D data for integration into Building Information Modelling (BIM), you know you'll need an accurate long range scanning tool for your projects

Widely used area

- Power plants
- Chemical plants
- Naval platforms
- Industries
- Heritage Buildings
- Temples
- Other big statues

3D Laser & Structured Light Scanning:

3D scanning enables you to quickly capture accurate data of your parts for use in any manufacturing process. No matter the size of your objects or how many you have, S.A.S 3D Spark can help you to increase your productivity and efficiency

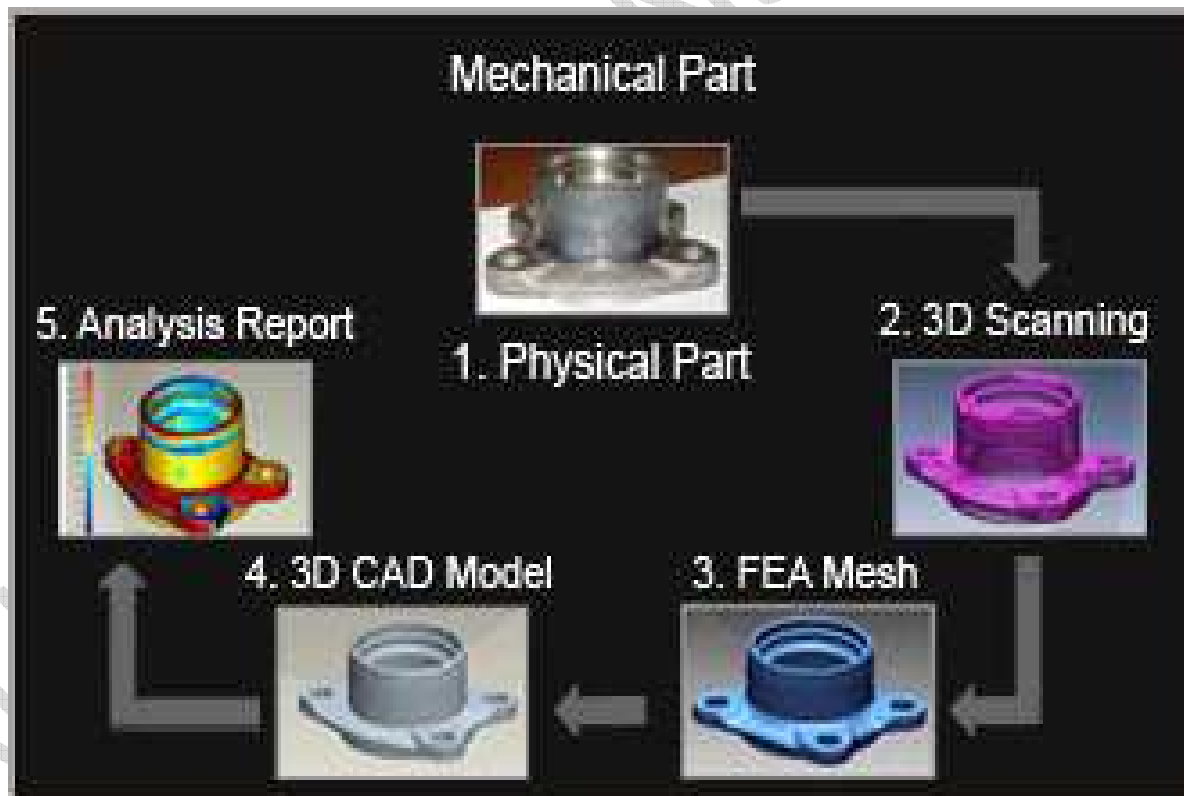
Onsite Portable CMM Inspection:

We provide our clients with services in Measurement and Inspection using Portable CMM. It can be easily carried and It can be set-up in a short time at given place. This is very effective and the only possible way to validate welding fixtures, checking gauges structural parts, dies, and jigs.

Reverse Engineering:

Reverse engineering using 3D scan data is the most efficient way to generate a CAD model from a physical object that has any kind of complex or freeform shape.

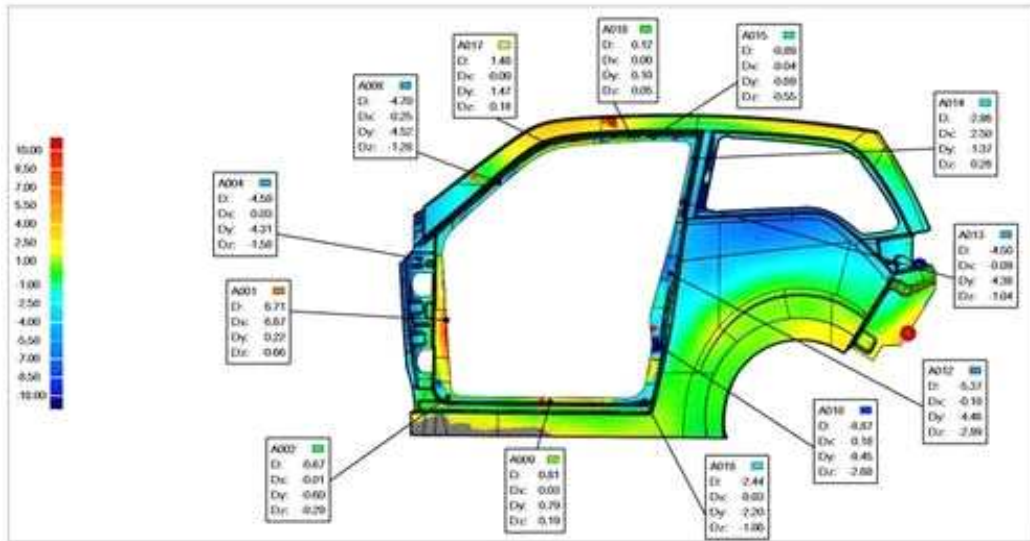
Reverse Engineering Services Workflow:



3D Inspection:

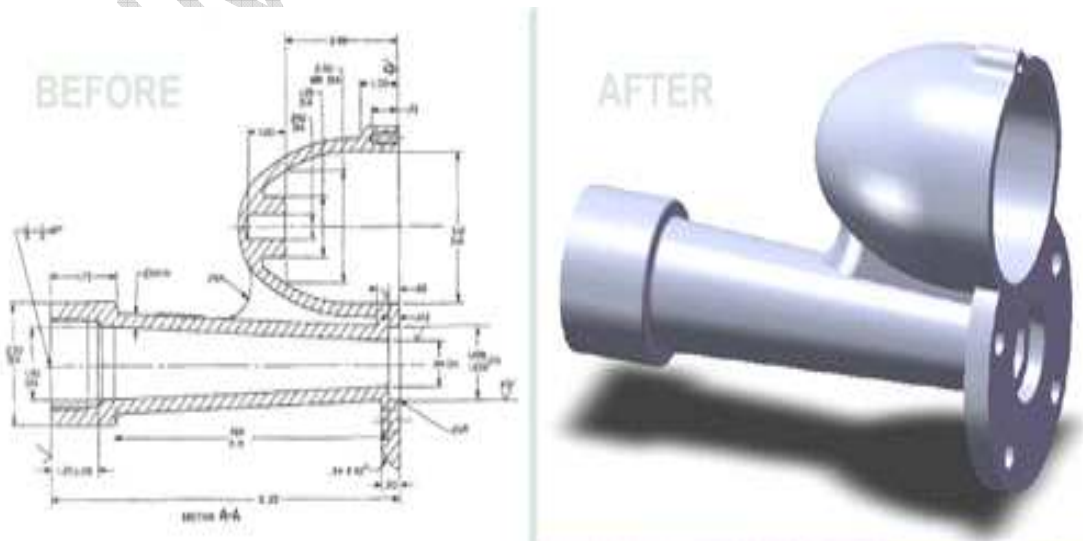
Quality inspection using 3D laser scanning is a fast and simple way to compare as-built physical parts to as-designed digital models, empowering you to easily discover surface deviations over an entire part, perform cross-section analysis, run GD&T reports, analyze turbine blades and more

Cad To Part Comparison



2D to 3D Modeling:

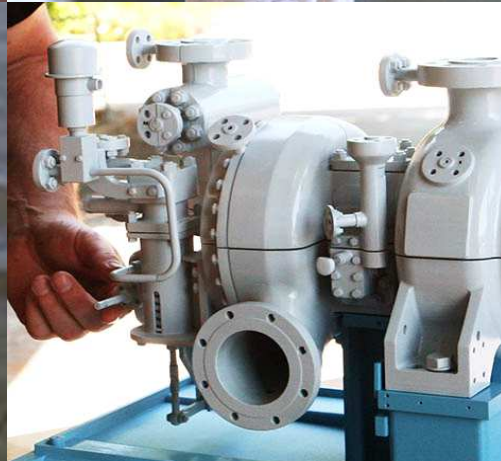
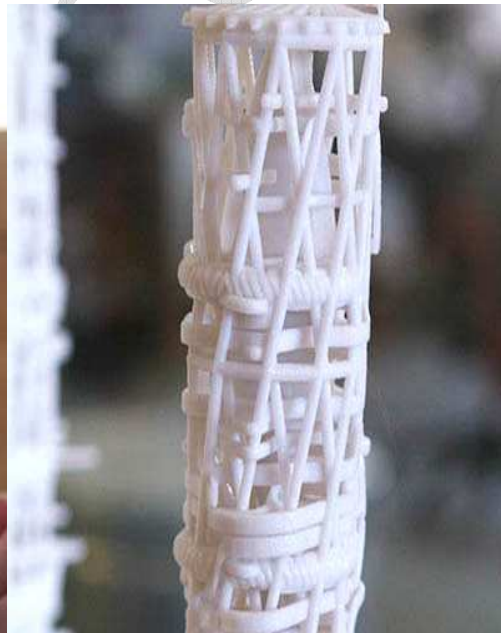
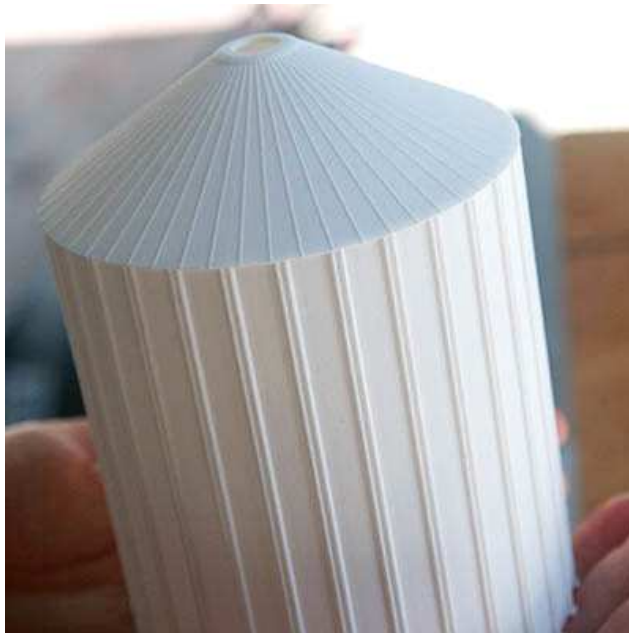
With your 2D drawings or sketches and design data we can create fully-functional 3D models of your parts and designs for rapid prototyping, CNC machining, 3D printing, presentation graphics, engineering analysis, and more. We support many diverse industries from consumer product design to medical devices to aerospace.



Additive Manufacturing & 3D Printing Services:

We have a variety of 3D Printers in-house as well syndicated to provide 3D Printing Services in the following Areas:

1. 3D Printed Small Assembly Jigs / Fixtures / Parts for Actual Use (in PLA, Polycarbonate, ABS or other materials).
2. 3D Printed Parts for Prototypes for new products.
3. 3D Printed Metal Parts for Special Applications.
4. 3D Rendering (physical) of Designs for Heritage Buildings, other structures or Engineering Assemblies.
5. 3D Printed Fun / Utility Objects for customers.
6. 3D Printed (Colour / Textured) human figurines as per customer request.



Our Sales

3D Desktop Blue Light Scanners: (Geomagic Capture)

Geomagic Capture is a family of powerful, integrated scanners and software systems for professional Scan-Based Design and quality inspection. They are available in six application-specific configurations, combining the best of Geomagic software with a compact, ultra-precise blue light LED scanner. Geomagic Capture and Capture Mini enable designers and engineers to incorporate real-world objects into CAD as a seamless part of their engineering workflow. Geomagic Capture scanners for quality inspection deliver precision scanning integrated with Geomagic's high-quality inspection tools in a seamless, push-button manner. With unprecedented performance and affordability, Geomagic Capture scanners usher in a new era of design-to-manufacturing productivity and utility.

Portable 'ROMER' Arm For CMM Inspection & Scanning

Hexagon is a world renowned multi-national brand for the ROMER Portable Arm based CMMs, coupled with 3D Laser scanners, among other products like fixed bed CMMs (DEA, Brown & Sharpe), Trackers (Leica). Vision Measuring Systems (Optiv). The ROMER portable CMMs are available for sizes ranging from 1,200 mm to upto 4500 mm. It has capability of 16 microns point repeatability and offers the best in Portable CMM measuring systems.



AICON SCANNERS

Stereo scanner

Measurement of the most delicate structures or minutest deviations at a maximum level of accuracy. Connection to a turntable or robot for automated scanning processes, Asymmetrical positioning of the cameras ensures optimum flexibility and reliability, even of object areas which are very difficult to access.

The fringe projection system works on the basis of the so-called miniaturized projection technique (MPT).

A white light scanner consists of various hardware and software components which are one or two digital cameras (measuring field and resolution depend on the respective application), a projection unit (comparable with a slide projector), plus a computer installed with a data acquisition and evaluation.



Widely used areas

1. Automotive Industry
2. Aviation and Aerospace Industry
3. Electronics Industry
4. Casting Industry
5. Tool and Mould Making Industry
6. Plastics & Rubber Industry

Perceptron 3D Laser Scanners:

For very exacting and special requirements, we can offer Perceptron V5 Laser Scanners coupled with ROMER Portable CMMs to enable higher points pickup rates (upto about 0.45 million points per second) with larger coverage (dual camera). They connect seamlessly with Romer Arms.



3D Printers (Pramaan- V2/V2+/V3):

We supply 'PRAMAAN' Brand of 3D Printers. These are robust looking 3D Printers with excellent built quality and, to top it all, it has the highest in its class build volume of upto 30x30x30cm which gives the owner the opportunity to 3D Print large objects at ease.

It has capability to print a variety of materials among PLA, ABS, Nylon etc. Pramaan 3D Printer comes with an LCD display that can show 11 different languages which can be preselected according to preferences. It can be used as a standalone printer thanks to the SD card, USB and Wi-Fi connectivity. It allows use of any brand filament to make the printing very price competitive. The brand has smaller printers for customers needing smaller sizes.

Pramaan-V3 - 3D Printer Technical Specifications:



- FFF technology based 3d Printer.
- Build Volume: 25x25x25 cm³.
- Layer Resolution: 100 microns.
- Nozzle Dia.: 0.4mm, Nozzle Type: J-Hotend.
- Filament used : 1.75mm.
- Software used with Pramaan 3d Printer:
- Printer interface: Pronterface.
- Slicing software: Slicer3r/Repetier Host



Vision Systems:

We are a reseller of 'OPTIV' Brand of Vision Measurement Systems from Germany. It offers a host of options for all price ranges from basic manual systems to fully computerized systems with 3D Probing facilities built in. The sizes vary depending on customer needs.



Software:

We are a reseller of specialized Reverse Engineering and 3D Inspection software of Geomagic 3D Systems Inc., USA. We not only offer the software, we also offer training and after sales support to our customers for these products. The following software are provided by us.

- **Geomagic Control** (Inspection/Measurement by Probing & Scanning).
- **Geomagic Wrap** (Scan Data and Nurb Surface Creation).
- **Geomagic Design X** (Scan based Parametric Reverse Engineering).

Contact Details:

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