

# WELCOME TO INNOVATE 3D SCANNING

# **"WE DESIGN YOU DESIRE"**

# INNOVATE 3D SCANNING

Innovate 3d Scanning is where ingenuity and vision combine to provide

solutions & critical project support. Innovate cad/cam is a solution provider, Design, Reverse egg Class A surfacing, all types of complete 2D & 3D inspection & CAE Services, Sheet Metal Progressive Tool Design, Draw & Forming Analysis Company with valuable capabilities. The company has provided solutions & services to companies & organizations in a variety of industries: Automobile, Automotive Lighting, medical device & medical equipment, consumer electronics, manufacturing 3D Bluelightscanning

We focus on profiling our company as a partner with a high quality design perception combined with a strong drive towards innovation. Our expertise is to integrate styling and production activities and providing our clients with a full range of design solutions. These services include creative research, feasibility studies, product/project engineering. 2D/3D design devlopment and prototyping.

Mission of INNOVATE 3D SCANNING to provide our clients with the best design solutions possible created within the clients set borders, sprung from our creativity and translated into visual emotion

#### **OUR SERVICES.**

**INNOVATE 3D SCANNING** offers a complete design service, ranging from initial market research through to final design specification, renderings and full 3D modelling services.

We create unique solutions for the Automobile, Medical, home appliances, defense, aero space, etc sector with dedicated individuals with a proven capability in making a diffrence with expertise spanning automotive industrial design.

#### **AUTOMOTIVE DESIGN & STYLING**

with end-to-end solutions dedicated to customers. We focus on providing quality designs while fulfiling the design requirements

#### **INDUSTRIAL DESIGN**



we provide clients with new concept designs sketches and improve aesthetics so as to enhance the incomposition functionality and market demand of a product.

#### **3D MODELLING AND VISUALIZATIONS**

For us 3D modeling visualization is the technical art of developing a mathematical wire frame representation of any design or product

#### **DESIGN CONSULTANCY**

our consultancy goals focus on helping our clients gain a powerful competitive advantage by launching innovative producs that satisfy real customer needs.

#### We have STEINBICHLER L3D Blue light Scanner Germany Based technology



**Specification**: - In this scanner we have measurement 3 volume

Volume	point spacing	noise	accuracy
1. 70x70	0.07mm	0.003mm	0.005mm
2. 200x200	0.07mm	0.003mm	0.008mm
3. 400x400	0.07mm	0.003mm	0.014mm





Our **COMET SERIES** product line utilizes blue light technology to capture images with high accuracy requirements in half the time it takes a Coordinate Measuring Machine (CMM). Blue light technology provides an organized data set with speeds up to 16 million points in as little as two seconds. With interchangeable field of view lenses you can measure a large variety of part sizes with just one system.

### **Blue Light Scanning Overview**

Innovate 3D has blue light 3D scanners (also known as structured-light 3D scanners) that capture a digital 3D scan of a physical object in seconds. White light 3D scanners offer the following advantages over laser scanners: Faster scan times Produce dense and accurate data Higher detail levels Takes the full view of the object with full field scanning Safe for people, even to the naked eye For more information on the differences between a laser scanner and white light scanner, please visit the blog post: <u>http://innovate3dscanning.com</u>

### **Geometry Acquisition Post Processing**

### Step 1

The 3D scanner directs a series of reference patterns onto an object. The light deflects onto the object's surface. The scanner captures these images to calculate the object's depth and surface information. Step 2

The 3D scanner's triangulation engine processes the images to acquire the data needed to create a 3D model. Automated 3D capture drastically reduces the time and cost in capturing complex physical measurements.

### Step 3

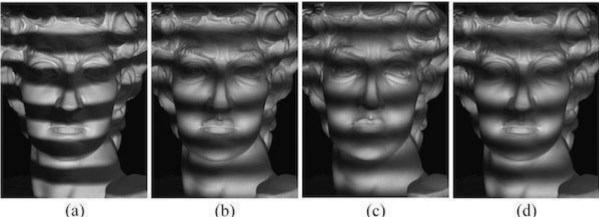
Consider using Geomagic or polyworks for advanced 3D scanner data post-processing. These software packages are very helpful for 3D inspection and reverse engineering application.



# The company has provided solutions & services in a variety of industries: Automobile, Automotive Lighting & medical etc. We provide best precision measurements through CMM-Model No.- HERA 10.07.07, having measurement Volume upto:1000mm X 700mmX 700mm at CMM FACILITY, Sec- 88, phase-II,

# Noida.

## **3D BLUE LIGHT SCANNING**



(a)













(f)

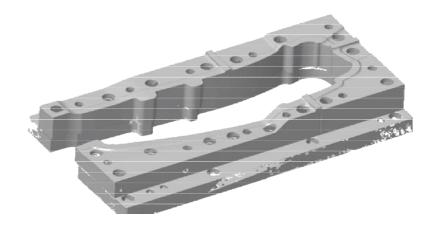


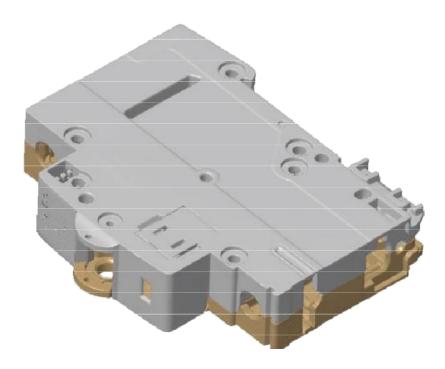
(g)



(h)

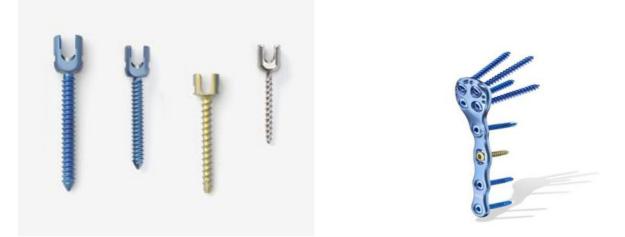








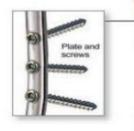
### MEDICAL PART DESIGN



### **Example: Rods, Plates and Screws**

- Rods are used for alignment and support of long and large bones
- Plates hold together loose pieces of bone and support smaller bones
- Screws hold plates and rods in place

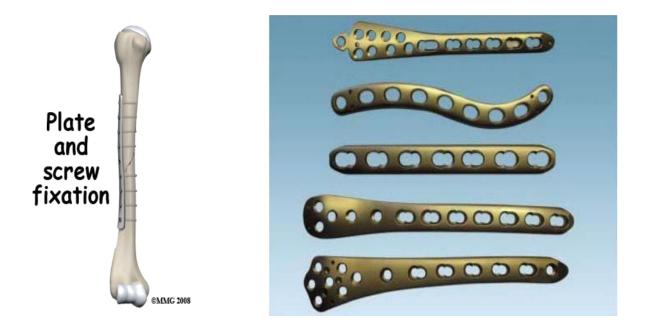
To stabilize a long bone fracture, a plate and screws outside the bone or a rod inside the bone may be used

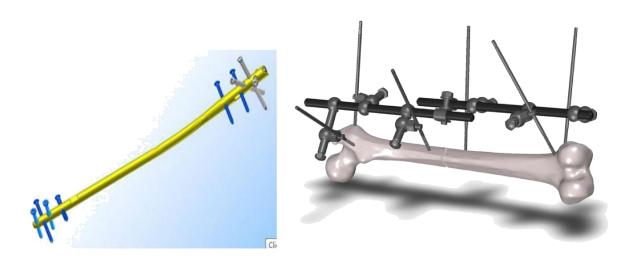




\*ADAM









### **AUTO PARTS DESIGNING**



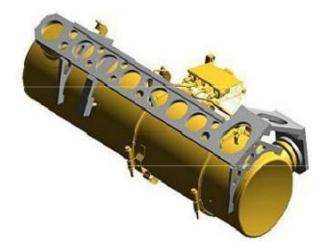




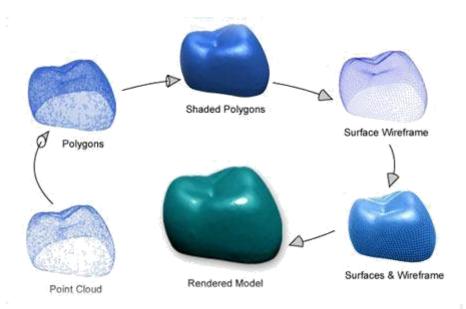
### 3D DESIGNING & REVERSE ENGINEERING

Multiple systems Design Engineer with significant Experience in Automotive Interior-Exterior product Design and data management. Experienced as well on plastic component design. Extensive experience on NX & IMAGEWARE solid & surface modelling. Also utilizing **STEINBICHLER SCANNER** to support Reverse engineering & surface design All the communications with the client for the new development project. We managed all the designs and data for the customer and was responsible for all data transfers and progress report to management **Responsibility:** Using Designer directions & sketches

for the trim development according to Customer









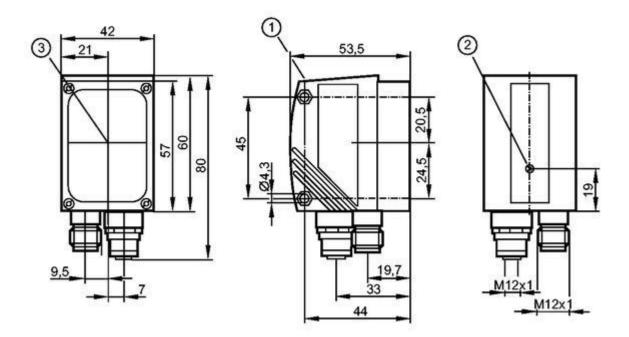


### **2D INSPECTION**

**Geomagic** is powerful, easy first article inspection software for both contact and noncontact 3D measurement devices. It lets you measure and compare parts to CAD models to find and fix manufacturing defects before they become major problems.

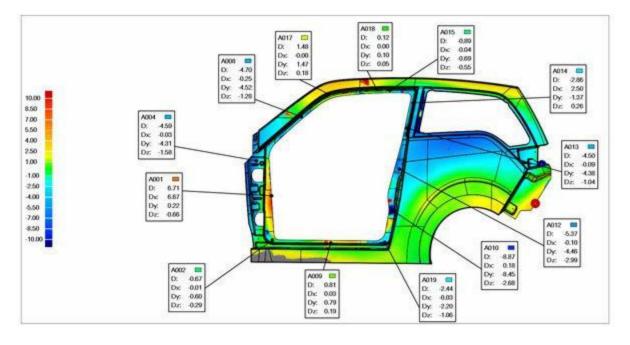
**Keep a Detailed History of Every Inspection** You don't have to guess why a part passed or failed, because every inspection is recorded by Geomagic Verify. Via a detailed history tree, you can see the date of measurement, reason for pass/fail, conditions of measurement and more.

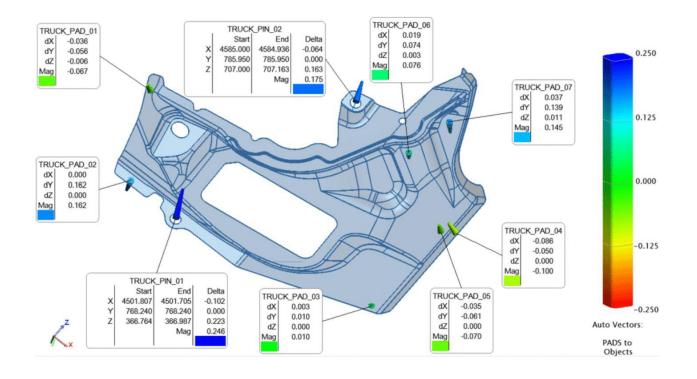
2D inspection with all GD&T Parameters



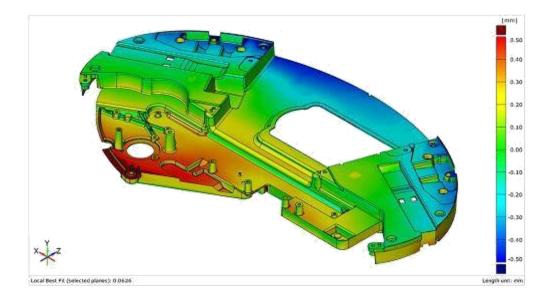


**3D INSPECTION** 







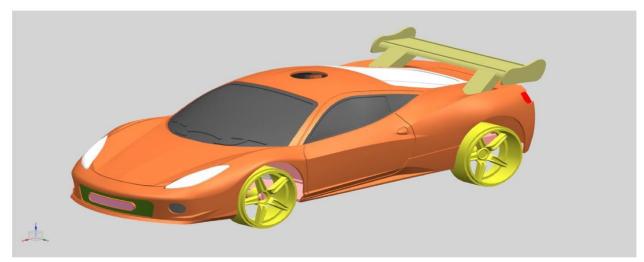


A completely new way of thinking is needed for the Inspection and functional analysis of small injection-Molded components and assemblies. Today, non-Conventional hardware and software tools are used in a unique combination, yielding better and easierto understand results when dimensional inspection is done on small and complex geometric forms. **3D** inspection with all **GD&T** Parameters and full Six degree of freedom locks alignment as per customer requirement



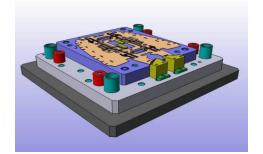
### **CONCEPT DESIGNING**





Scope in the Industry:

TOOL DESIGNING





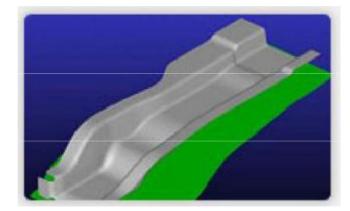
Generally, injection molds are used for processing Thermoplastics Thermosets Elastomers

# Sheet Metal Progressive Tool Design, Draw & Forming Analysis

FTI is the world's leading developer of computer aided engineering software for design and simulation of sheet metal forming. FTI has developed a suite of products to analyze product formability, die design, and process feasibility. These solutions have resulted in millions of dollars of savings for our customers. The speed and ease-ofuse of the software provides an excellent method of identifying potential engineering changes and cost improvements before completing the part or tooling design.

#### FASTBLANK

Fast and accurate blank development from 3D geometry Identify material thinning and gathering condition Reduce material cost and trials in prove out stage Solve parts with undercuts / negative drafts



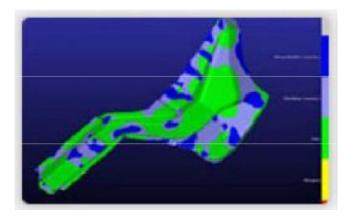


#### **BLANKNEST**

Automatically nest for best material utilization layouts. Quickly an accurately estimate material req. and cost

Evaluate multiple nesting scenarios.

Determine total cost per blank like cost, material etc. Nest two different parts together



### FASTFORM

Forming analysis Identify splitting, wrinkling, thinning with part / dieface Apply manufacturing process conditions Fast, easy to use Automatic meshing Automatic and manual tipping Predict springback with or without trimming Solve tailor welded parts

### COSTOPTIMIZER

Identify product design changes that can save 10 to 15% in material cost Evaluate and compare multiple costing scenarios

### FASTINCREMENTAL



# **INNOVATE 3D SCANNING**

A-149, Ground Floor, Anand Nagar Opp. Inderlok Metro Station New Delhi -110035 Contact :- +91-9899358136 +91-9899358138 Phone - 011-65653525

EMAIL: innovate3dscanning@gmail

### <u>.com</u>

web:<u>http://innovate3dscanning.com</u>

THANK YOU FOR YOUR BUSINESS