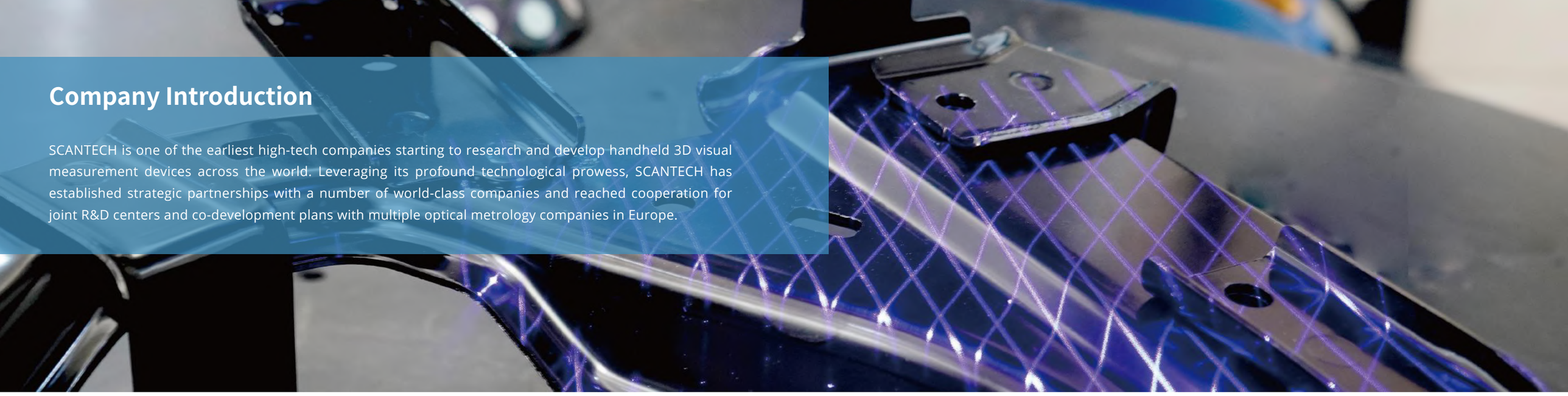
SCANTECH™

**SCANTECH (HANGZHOU) CO., LTD**
Building 12, No.998, West Wenyi Road, Yuhang District, Hangzhou,
Zhejiang Province, China
Tel: 0086-571-85852597 Fax: 0086-571-85370381
E-mail : info@3d-scantech.com
Website : www.3d-scantech.com


Innovation Meets Digitization

SCANTECH™



# Company Introduction

SCANTECH is one of the earliest high-tech companies starting to research and develop handheld 3D visual measurement devices across the world. Leveraging its profound technological prowess, SCANTECH has established strategic partnerships with a number of world-class companies and reached cooperation for joint R&D centers and co-development plans with multiple optical metrology companies in Europe.

## Handheld 3D Scanner

**SIMSCAN**
**Small Is the Brand-New Big**



## Composite 3D Scanner

**KSCAN**
**Experience Diverse Ultimate from Metrology Measurement**



## Global 3D Scanner

**AXE**
**Measuring An Ultra-wide 3D world**



## 3D Software

**SCANVIEWER**
**Integrated Scan & Inspection 3D Software**



## Tracking 3D Scanner

TRACKSCAN

T-PROBE

E-TRACK

**TRACKSCAN**
**Intelligent 3D Tracking with Unrivaled-fast Measurement**



## AutoScan 3D System

**AUTOSCAN-K**
**Highly Safe and Effective Automatic Inspection System**



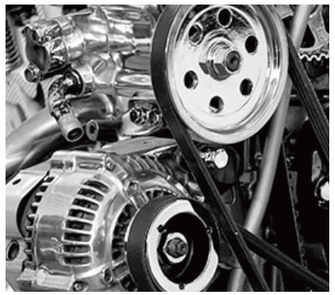
**AUTOSCAN-T**
**Unmanned Automatic 3D Inspection Solution**

# 3D Scanning Application

SCANTECH provides full high accuracy 3D measuring solutions according to the specific requirements of different industries. Our solutions are adapted to all kinds of areas such as aerospace, auto, transport, 3D printing, 3D visualization, home decoration, etc.

Aerospace

Automotive



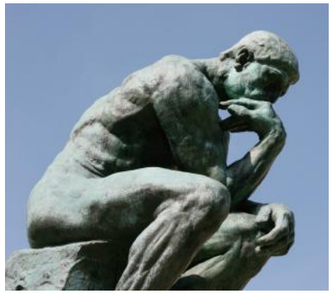
Manufacturing

Mold

Health Care

Energy

VR Showcase



Antique & Sculpture

Education & Research

# Comprehensive 3D Digitalization Expert

Providing customized advanced 3D digitalization solutions based on different measuring requirements from different industries.

**Reverse Engineering**
Create full concept CAD models or substitute part.

**Quality Control**
Identify the deviation from CAD data quickly.

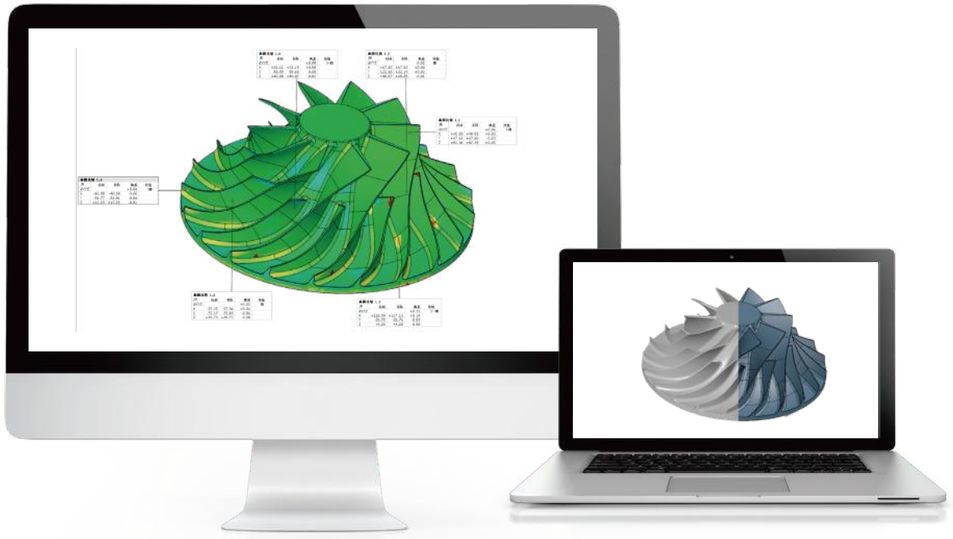
**Finite Element Analysis**
Provide reliable 3D data to FEA and CFD, solving complex manufacturing problem.

**3D Visualization**
Finish 3D modeling in a short time for the VR/AR showcase online.

**Product Development**
Offer precise 3D data to improve the efficiency of designing, assembling, manufacturing as well as quality control.

**3D Printing**
Simplify the 3D rebuilding process for 3D printing.

**Automated 3D Inspection**
Automated real-time inspection, real-time feedback for intelligent, efficient production.



# SIMSCAN

SIMSCAN, the only hand-sized 3D scanner in the market so far, is a disruptive innovation of the traditional 3D scanners' structure and a revolutionary product in 3D optical metrology industry.

No matter in narrow spaces, or under huge objects, SIMSCAN performs high-quality 3D scanning without any restriction of working environment. Metrology-grade measurement system helps capture every detail and construct 3D model in a very short time. Designed under minimalism, the metal shell enables SIMSCAN to achieve a balance between weight and performance.

## Single-handed Control

- Weighted only 570 g and sized by 203 × 80 × 44 mm.
- SIMSCAN brings unparalleled simpleness for scanning anything with one hand.

## Ultra-portable

- No matter in narrow spaces, or under huge objects, the remarkable portability of SIMSCAN enables it to proceed 3D measurement anywhere and anytime.

## Detail, Everywhere

- Under hyperfine scanning mode can reach 0.025 mm resolution
- Every detail is nowhere to hide, even for scanning complex surface.

## Smooth 3D Experience

- 11 crossed blue lasers, 1,350,000 measurements/s and 410*400 mm scanning area bring smooth and efficient 3D digitizing experience.

## Toughest Ever

- Revolutionary full metal shell provides solid protection.
- Aerospace-grade materials ensure extraordinary durability.

## Aesthetic Design

- With ergonomic design, SIMSCAN fits perfectly in your palm.
- Truly realizing a perfect fusion of aesthetics and practicality.

reddot

Reddot award 2021 winner



## Technical Parameter

| Type | | SIMSCAN |
|---|---|---|
| Scan mode | Ultra-fast scanning | 11 blue laser crosses |
| | Hyperfine scanning | 7 blue parallel laser lines |
| | Deep hole scanning | 1 extra blue laser line |
| Laser lines in total | | 30 |
| Accuracy | | 0.020 mm |
| Scanning rate | | Up to 2,020,000 measurements/s |
| Scanning area | | 410 mm × 400 mm |
| Laser class | | Class II (eye-safe) |
| Resolution | | 0.025 mm |
| Volume accuracy | | 0.020 mm + 0.040 mm/m |
| Volumetric accuracy(With MSCAN-L15) | | 0.020 mm + 0.015 mm/m |
| Stand-off distance | | 300 mm |
| Depth of field | | 250 mm |
| Output formats | | pj3,asc,igs,txt,mk2,umk,stl,ply,obj |
| Open formats | | pj3,pjs,asc,igs,txt,mk2,umk,refxml,stl,ply,step |
| Operating temperature range | | -10°C - 40°C |
| Interface mode | | USB 3.0 |
| Dimensions | | 203 mm × 80 mm × 44 mm |
| Weight | | 570 g |
| Patents | | CN204329903U,CN104501740B,CN204854633U,CN204944431U,CN204902788U,CN105068384B,CN105049664B, CN204902784U,CN204902785U,CN106403845B,CN110030946B,CN111833392A,CN212300269U,CN211904059U, CN211696268U,CN306053019S,CN212606697U,CN111932465A,CN111694665A,CN306321502S |

KSCAN

KSCAN-Magic composite 3D scanner opens up the first introduction of infrared laser + blue laser technology with five standard working modes.

Its unparalleled scanning speed, accuracy,detail, scanning area, and depth of field greatly optimize the 3D measurement workflows and accelerate the product time-to-market. To obtain data on hard-to-reach or complex surfaces, KSCAN-Magic series can be equipped with portable CMM K-Probe, providing a comprehensive 3D digital solution for precision measurement.

## Innovative Infrared Laser

- Innovatively adopt infrared laser scanning technology.
- Ultimate scanning area reaches 1440 mm × 860 mm.
- Achieve precise wide range measurement with ease.

## Effortless Efficiency

- 41 laser lines deliver ultra-fast scanning rate of 1,350,000 measurements/s.
- Switch scanning modes flexibly.
- Satisfy different application needs, dramatically improving working efficiency.

## Extreme-clear Details

- Hyperfine scanning mode accurately obtains complete data for complex objects.
- Easily capture every detail with resolution of 0.010 mm.

## Single Laser Line Scanning

- Single laser line scanning mode accurately captures 3D data of inaccessible positions.

## Metrology-grade NDT Measuring

- 0.020 mm of scanning accuracy and 0.030 mm/m of volume accuracy.
- Deliver ultra-high precision NDT for the aerospace industry.

## No Fear of Harshness

- Support super-high work adaptability in harsh environment.
- Realistically restore the precise 3D data of reflective and black surface.

## Personalized Adjustment

- 925 mm depth of field.
- Freely adjust the working distance based on the performance of details,efficiency and scanning area.

## Massive Functions

- Built-in photogrammetry system, intelligent edge detection, contact probing and pipe measurement.
- Fulfill diverse application needs.



## Technical Parameter

| Type | | KSCAN-Magic II | KSCAN-Magic | KSCAN20 |
|---|---|---|---|---|
| Scan mode | Ultra-fast scanning | 13 blue laser crosses | 11 blue laser crosses | 7 red laser crosses |
| | Hyperfine scanning | 7 blue parallel laser lines | | 5 blue parallel laser lines |
| | Large area scanning | 11 parallel infrared laser lines | | - |
| | Deep hole scanning | 1 extra blue laser line | | 1 extra red laser line |
| Accuracy | | 0.020 mm | | |
| Scanning rate | | Up to 1,650,000 measurements/s | Up to 1,350,000 measurements/s | Up to 650,000 measurements/s |
| Scanning area | | 1440 mm × 860 mm | | 550 mm × 600 mm |
| Photogrammetry system | Scanning area | 3760 mm × 3150mm | | 2500 mm × 3000 mm |
| | Depth of field | 2500 mm | | |
| Laser class | | CLASS II (eye-safe) | | |
| Resolution | | 0.010 mm | | |
| Volume accuracy | Work alone | 0.010 mm + 0.030 mm/m | | 0.020 mm + 0.035 mm/m |
| | Work with 1m reference bar | 0.010 mm + 0.020 mm/m | | 0.020 mm + 0.020 mm/m |
| | Work with MSCAN-L15 | 0.010 mm + 0.015 mm/m | | 0.020 mm + 0.015 mm/m |
| Stand-off distance | | 500 mm | | 180 mm |
| Depth of field | | 620 mm | | 200 mm |
| Portable CMM K-Probe | Single point repeatability | 0.030 mm | | |
| | Tracking frequency | 60 hz | | |
| Intelligent edge inspection module | Edge accuracy | 0.030 mm | | |
| Pipe inspection module | Output formats | YBC / LRA / compensation value | | |
| Output formats | | .stl, .ply, .obj, .igs, .stp, .wrl, .xyz, .dae, .fbx, .ma, .asc or customized | | |
| Operating temperature range | | -10 ~ 40 ℃ | | |
| Interface mode | | USB 3.0 | | |
| Patents | | CN204329903U, CN104501740B, CN104165600B, CN204988183U, CN204854633U, CN204944431U, CN204902788U, CN105068384B, CN105049664B, CN204902784U, CN204963812U, CN204902785U, CN204902790U, CN106403845B, CN209197685U, CN209263911U, CN106500627B, CN106500628B, CN206132003U, CN206905709U, CN107202554B, CN209310754U, CN209485295U, CN209485271U, CN305446920S, CN209991946U, US10309770B2, KR102096806B1 | | |

AXE

AXE-B17 3D scanner utilizes optical measurement technology with a scanning speed of 2,000,000 measurements/s, quickly capturing 3D data of the object and getting precise deviations on the geometric surface.

With global initiative built-in photogrammetry system, AXE-B17 outputs ultra-large scanning area and metrology-grade measurement accuracy. Getting rid of limitations like size, shape, material and complexity of the object, AXE-B17 can freely choose working modes of efficient unrivaled-speed scanning and accurate deep hole scanning. It generates high precision 3D inspection of medium to large-sized projects without the aid of extra devices.

## Extreme-fast Response

- 17 crossed blue laser lines enables extreme fast and precise response with 2,000,000 measurements/s, offering extraordinary work efficiency.

## Flexible Switching

- Working modes are capable of freely switching based on scanning needs: efficient unrivaled-speed scanning; accurate deep hole scanning, dealing with intricate positions like deep holes and dead angles.

## Unprecedented Patent

- The global initiative built-in photogrammetry system is tailored for measuring medium to large-sized objects, with 0.030 mm/m of volumetric accuracy.

## Ultra-wide Vision

- Ultra-wide scanning area of 860 mm × 600 mm allows an optimal and smoother 3D scanning experience.




## Technical Parameter

| Type | | AXE-B17 | AXE-B11 |
|---|---|---|---|
| Laser source | | 17 blue laser crosses(+1 extra bule laser line) | 11 blue laser crosses(+1 extra bule laser line) |
| Deep hole scanning | | Support | |
| Accuracy | | 0.020 mm | |
| Measurement rate | | 2,000,000 measurements/s | 1,300,000 measurements/s |
| Scanning area | | 860 mm × 600 mm | 550 mm × 600 mm |
| Scanning area (photogrammetry) | Scanning area | 3760 mm × 3150 mm | 2500 mm x 3000 mm |
| | Depth of field | 2500 mm | |
| Laser class | | CLASS II (eye-safe) | |
| Resolution | | 0.025 mm | |
| Volume accuracy | Work alone | 0.020 mm + 0.030 mm/m | 0.020 m m+ 0.035 mm/m |
| | Work with 1m reference bar | 0.020 mm + 0.020 mm/m | 0.020 mm + 0.020 mm/m |
| | Work with MSCAN-L15 | 0.020 mm + 0.015 mm/m | 0.020 mm + 0.015 mm/m |
| Stand-off distance | | 300mm | |
| Depth of field | | 500mm | |
| Output formats | | .stl, .ply, .obj, .igs, wrl, .xyz, .dae, .fbx, .ma, .asc or customized | |
| Operating temperature range | | -10~40°C | |
| Interface mode | | USB 3.0 | |
| Patents | | CN204329903U, CN104501740B, CN104165600B, CN204988183U, CN204854633U, CN204944431U, CN204902788U, CN105068384B, CN105049664B, CN204902784U, CN204963812U, CN204902785U, CN204902790U, CN106403845B, CN209197685U, CN209263911U, CN206905709U, CN107202554B, US20200225030A1, US10309770B2, KR102096806B1 | |

# TRACKSCAN

TrackScan-P42 adopts intelligent optical tracking measurement technology and high-quality optical equipment, carrying out ultra-high precision dynamic 3D measurement without markers.

By freely switching multiple working modes, TrackScan-P42 caters to different scanning situations. The equipped wireless portable CMM T-Probe precisely captures high-precision 3D data of gaps, hole positions, grooves and complex surface. By working with robot-arm, TrackScan-P42 can also realize intelligent online automated 3D inspection.

### Intelligent Tracking Without Markers

- Deliver instant scanning without markers, greatly improving work efficiency and decreasing cost.

### Unrivaled-fast & Detail-maker

- 17 crossed blue laser lines enable ultra-fast scanning rate of 1,900,000 measurements/s.
- 7 parallel blue laser lines work for detail capturing.
- Single blue laser line aims to fast obtain 3D data of inaccessible area.

### Strong Anti-interference Capability

- Easily capture 3D data for shiny and black surface.
- Strong anti-interference capability of environment, vibrations and thermal variations.

### Wireless Portable CMM

- Designed for getting precise 3D data of holes and hidden points.
- High single point repeatability of 0.030 mm.

### Extendable Measuring Volume

- Measuring range is dynamically extended by adjusting the position of E-Track while the accuracy is maintained.

### Wide Scanning Area

- E-Track dual cameral sensors reach wider measurement area and dynamically track the parts.

### Accurate Composite Positioning

- Support modes of camera tracking and marker tracking.
- In the blind area of E-Track, the scanner can recognize the markers to keep working.

### Aerospace-grade Materials

- Shaped of integrated design and made from aerospace-grade carbon fiber materials, strong and durable.



## Technical Parameter

| Type | | TrackScan-P42 | TrackScan-P22 |
|---|---|---|---|
| Scan mode | Ultra-fast scanning | 17 blue laser crosses | 7 red laser crosses |
| | Hyperfine mode B | 7 blue parallel laser lines | |
| | Deep hole scanning | 1 extra blue laser line | |
| Accuracy | | 0.025 mm | 0.030 mm |
| Measurement rate | | 1, 900,000 measurements/s | 480,000 measurements/s |
| Scanning area | | 310 mm × 350 mm | 275 mm × 250 mm |
| Laser class | | Class II (eye-safe) | |
| Resolution | | 0.020 mm | |
| Volumetric accuracy | 9.1 $m^3$ | 0.064 mm | |
| | 16.6 $m^3$ | 0.078 mm | |
| Volumetric accuracy (With MSCAN-L15 photogrammetry system ) | | 0.044 mm + 0.015 mm/m | |
| Portable CMM T-Probe | Single point repeatability | 0.030 mm | |
| Part size range (recommended) | | 200 ~ 6000 mm | |
| Stand-off distance | | 300 mm | |
| Depth of field | | 320 mm | |
| Output formats | | .stl, .ply, .obj, .igs, wrl, .xyz, .dae, .fbx, .ma, .asc or customized | |
| Operating temperature range | | 5 ~ 40 °C | |
| Interface mode | | USB 3.0 | |
| Patents | | CN204329903U, CN104501740B, CN104165600B, CN204988183U, CN204854633U, CN204944431U, CN204902788U, CN105068384B, CN105049664B, CN204902784U, CN204963812U, CN204902785U, CN204902790U, CN106403845B, CN209197685U, CN209263911U, CN106500627B, CN106500628B, CN206132003U, CN211121096U, US10309770B2, KR102096806B1 | |

# AUTOSCAN－K

AutoScan-K series, an automatic 3D inspection system, can realize non-contact and non-destructive inspection using machine vision technology. While ensuring extra-high accuracy, it can effectively carry out online batch scanning and inspection. Featuring 24-hour constant operation, AutoScan-K 3D system helps enterprises reduce manufacturing costs, accelerate product time-to-market and increase return on investment.

Equipped with multiple working modes, AutoScan-K 3D system can adapt to the measurement in various industrial scenarios. Meanwhile, based on cutting-edge machine vision algorithms, it can precisely control the movements of the robot, realizing efficient and automatic batch inspection.

## Automatic Whole-process Inspection

- AutoScan-K automatically conducts batch 3D scanning and inspection for data comparison.
- Generate inspection reports, after scanning routes and measurement process are set for different products.

## Safe and Reliable NDT

- AutoScan-K truly achieves non-contact and non-destructive intelligent testing.
- Safe, reliable, and applicable in different workshop environment.
- Industrial intelligent rotary tables make efficient and blind-angle-free inspection possible.

## Secondary Development

- The secondary development allows operators to control the system by calling the SDK interface.

## Personalized Operation

- Multiple measurement modes are offered depending on the characteristics of different workpieces.
- To meet different inspection requirements, the workpieces can be clamped from multiple angles to set inspection routes.

## Precise and Effective Measurement

- Inspect workpieces with different sizes, weights and pieces made from different materials.
- High density data scanning with the speed of up to 1,650,000 per second.
- Precise 3D inspection in harsh industrial environment with resolution up to 0.010 mm and volume accuracy up to 0.030 mm/m.

## Intelligent Rotary Table

- The industrial intelligent and automatic rotary tables adapt to various fixtures and clamps.
- Without attaching markers on the object, quick and reliable clamping can be achieved to greatly simplify the preparation workflows before 3D scanning.

## Technical Parameter

| Type | | AutoScan-KM II | AutoScan-KM | AutoScan-K20 |
|---|---|---|---|---|
| Scan mode | Ultra-fast scanning | 13 blue laser crosses | 11 blue laser crosses | 7 red laser crosses |
| | Hyperfine scanning | 7 blue parallel laser lines | | 5 blue parallel laser lines |
| | Large area scanning | 11 parallel infrared laser lines | | - |
| | Deep hole scanning | 1 extra blue laser line | | 1 extra red laser line |
| Accuracy | | 0.020 mm | | |
| Scanning rate | | Up to 1,650,000 measurements/s | Up to 1,350,000 measurements/s | Up to 650,000 measurements/s |
| Scanning area | | 1440 mm × 860 mm | | 550 mm × 600 mm |
| Photogrammetry system | Scanning area | 3760 mm × 3150mm | | 2500 mm × 3000 mm |
| | Depth of field | 2500 mm | | |
| Laser class | | CLASS II (eye-safe) | | |
| Resolution | | 0.010 mm | | |
| Volumetric accuracy | Work alone | 0.010 mm + 0.030 mm/m | | 0.020 mm + 0.035 mm/m |
| | Work with 1m reference bar | 0.010 mm + 0.020 mm/m | | 0.020 mm + 0.020 mm/m |
| | Work with MSCAN-L15 | 0.010 mm + 0.015 mm/m | | 0.020 mm + 0.015 mm/m |
| Depth of field | | 925 mm | | 620 mm |
| Output formats | | .stl, .ply, .obj, .igs, .stp, .wrl, .xyz, .dae, .fbx, .ma, .asc or customized | | |
| Operating temperature range | | -10 ~ 40 °C | | |
| Interface mode | | USB 3.0 | | |
| Patents | | CN204329903U, CN104501740B, CN104165600B, CN204988183U, CN204854633U, CN204944431U, CN204902788U, CN105068384B, CN105049664B, CN204902784U, CN204963812U, CN204902785U, CN204902790U, CN106403845B, CN209197685U, CN209263911U, CN106500627B, CN106500628B, CN206132003U, CN206905709U, CN107202554B, CN209310754U, CN209485295U, CN209485271U, CN305446920S, CN209991946U, US10309770B2, KR102096806B1 | | |

# AUTOSCAN－T

AutoScan-T42 automated 3D system is a new upgrade for intelligent automatic inspection. It is specially designed for automated quality control in shop-floor conditions, facilitating enterprises to achieve the optimum matching between cost and efficiency.

AutoScan-T42 conducts non-destructive scanning without attaching markers. Its seamless connection with production line greatly contributes to the reduction the workload. The military-grade manufacturing quality presents strong anti-interference and high adaptation to complex and harsh workshop environment. It can be extensively used in national defense, energy, 5G, mold manufacturing, etc., users can easily operate the system owing to one-click start, offline programming, and compatibility with 3D software.

## Work Seamlessly with Production Line

- Based on automatic optical tracking and seamlessly integrated into production line.
- Designed for online batch inspection.
- Enhance iterative efficiency of the production process greatly.

## Multiple Configurations

- Conjunction with handheld 3D scanner, portable CMM, MSCAN photogrammetry system, rotary platforms, and guide rails,
- Realize simultaneous optical tracking and scanning and personalized solutions..

## Speed up Precise Inspection

- Adoption of blue laser and synchronous tracking technologies,
- Reach up to 1,900,000 measurements/s and accuracy of 0.025 mm.
- Efficient and flexible automated manufacturing can be achieved without being affected by external factors.

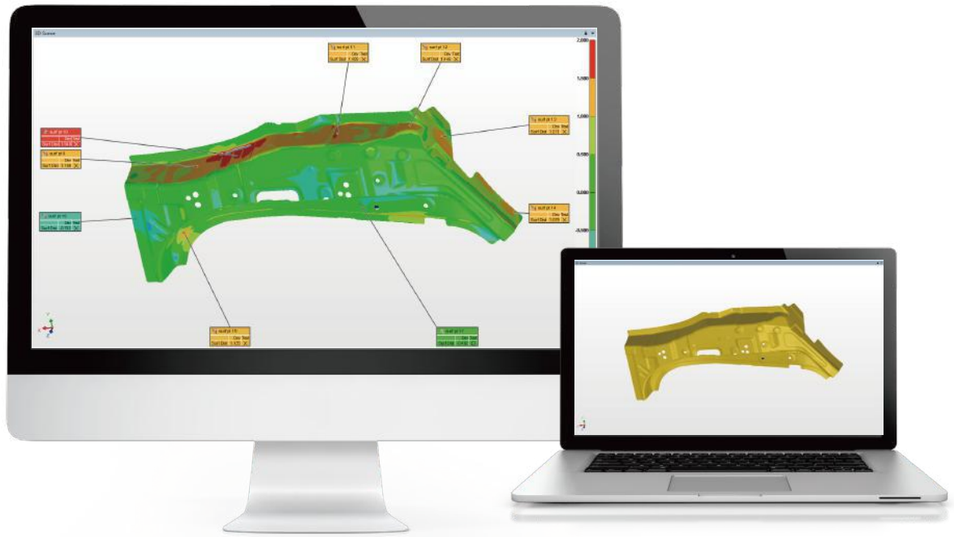
## Military-grade Quality

- Being insusceptible to temperature, vibration, dust, etc.
- Military-grade design presents superior adaptability in harsh industrial environment.




## Technical Parameter

| Type | | AutoScan-T42 | AutoScan-T22 |
|---|---|---|---|
| Scan mode | Ultra-fast scanning | 17 blue laser crosses | 7 red laser crosses |
| | Hyperfine mode B | 7 blue parallel laser lines | |
| | Deep hole scanning | 1 extra blue laser line | |
| Accuracy | | 0.025 mm | 0.030 mm |
| Measurement rate | | 1，900,000 measurements/s | 480,000 measurements/s |
| Scanning area | | 310 mm × 350 mm | |
| Laser class | | CLASS Ⅱ (eye-safe) | |
| Resolution | | 0.020 mm | |
| Volumetric accuracy | 9.1 $m^3$ | 0.064 mm | |
| | 16.6 $m^3$ | 0.078 mm | |
| Volumetric accuracy (with MSCAN-L15 photogrammetry system ) | | 0.044 mm ＋ 0.015 mm/m | |
| Part size range (recommended) | | 200 ~ 6000 mm | |
| Stand-off distance | | 300 mm | |
| Depth of field | | 320 mm | |
| Output formats | | .stl, .ply, .obj, .igs, wrl, .xyz, .dae, .fbx, .ma, .asc or customized | |
| Operating temperature range | | 5 ~ 40 °C | |
| Interface mode | | USB 3.0 | |
| Patents | | CN204329903U, CN104501740B, CN104165600B, CN204988183U, CN204854633U, CN204944431U, CN204902788U, CN105068384B, CN105049664B, CN204902784U, CN204963812U, CN204902785U, CN204902790U, CN106403845B, CN209197685U, CN209263911U, CN106500627B, CN106500628B, CN206132003U, CN211121096U, US10309770B2, KR102096806B1 | |

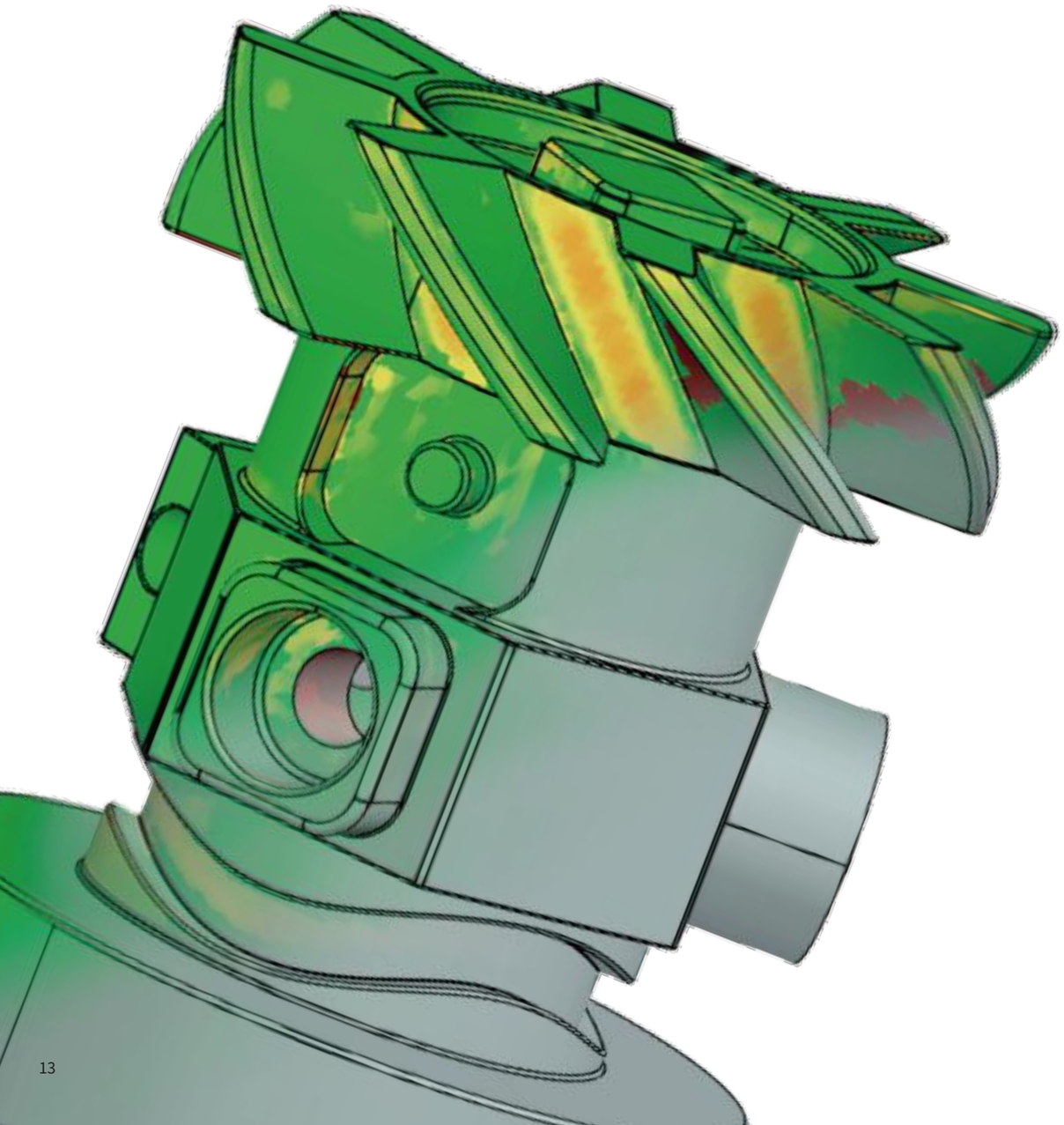


# SCANVIEWER

## Integrated Scan & Inspection 3D Software

ScanViewer is a free & powerful 3D software,  including inspection and scanning functions such as Distance, GD&T and Color map.

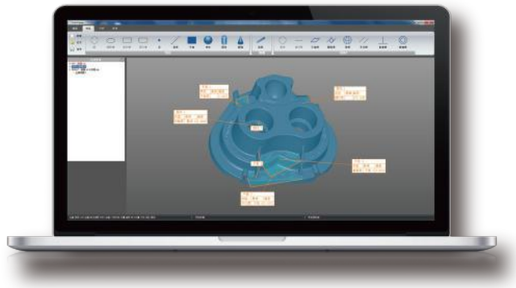
Scanned data can be used for rapid prototyping, reverse engineering, inspection comparison, 3D display, etc.





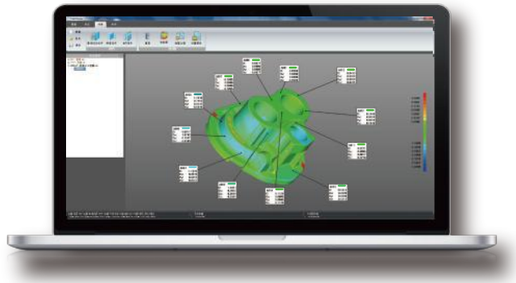
## Characteristics

ScanViewer penetrates all aspects of product R&D, design and production



### GD&T

Users can directly create features, feature analysis, distance measurement, dimension analysis and geometric tolerance according to scanning data.



### Color Map

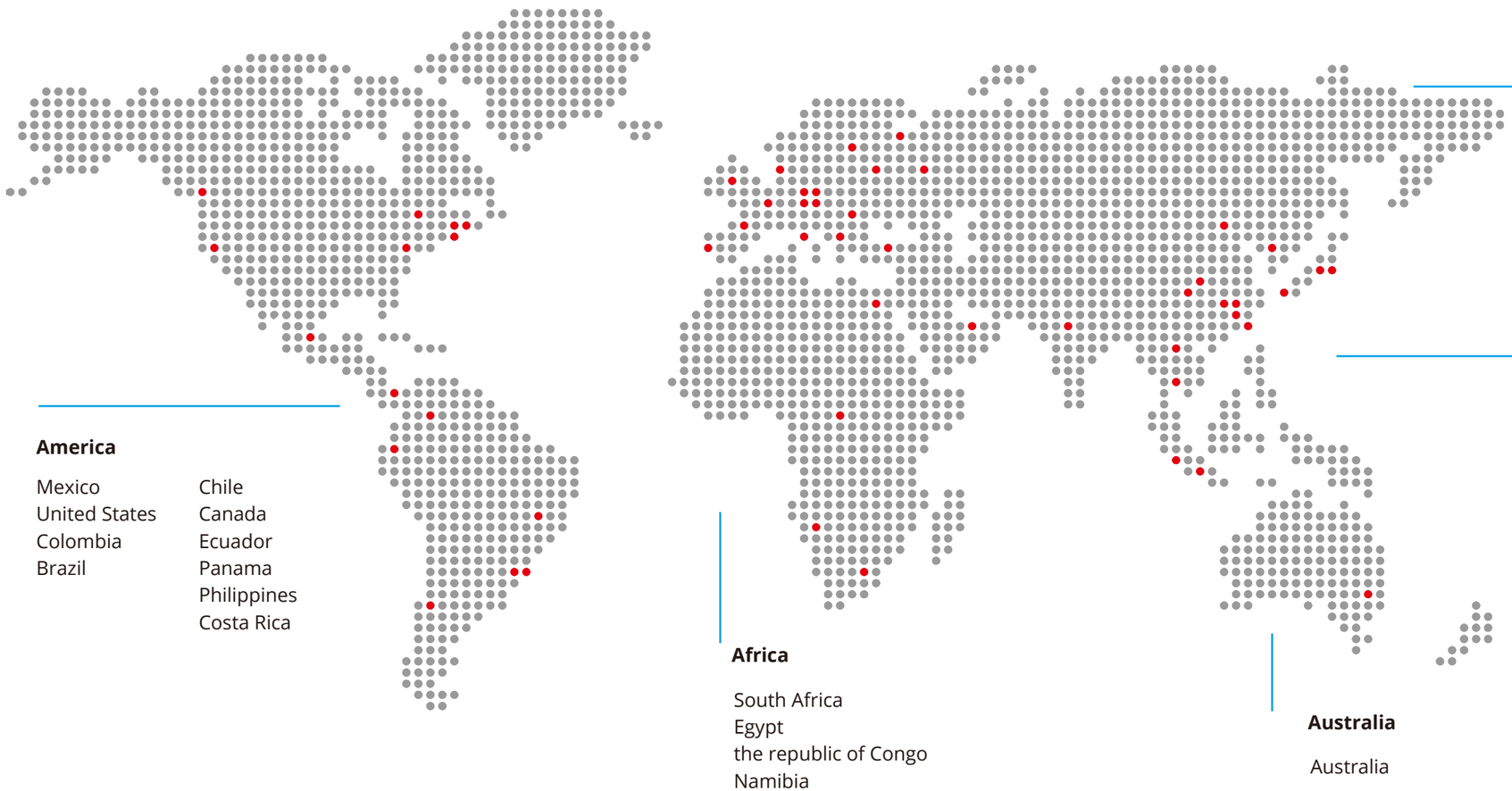
Multiple alignment function is available to merge scanning data & CAD file for inspection, quickly generating report for easy analysis and adjustment.

### Pipe Inspection

ScanViewer includes professional pipe inspection function that can directly export YBC/LRA data to eliminate deviations of pipe bender.

# Worldwide Customers

SCANTECH products are sold to more than 50 countries and regions, serving over 5000 enterprises such as NASA, COMAC, BMW, Volkswagen, GM, Apple, Huawei, Siemens, JCB and Sany.



**America**

Mexico
United States
Colombia
Brazil
Chile
Canada
Ecuador
Panama
Philippines
Costa Rica

**Africa**

South Africa
Egypt
the republic of Congo
Namibia

**Australia**

Australia

**Europe**

Italy
Portugal
Belgium
Germany
France
Finland
Norway
Hungary
Croatia
Turkey
Romania
Denmark
Switzerland
Poland
United Kingdom
Russia
Netherlands
Spain
Czech Republic

**Asia**

China
UAE
Vietnam
India
Korea
Thailand
Japan
Singapore
Bahrain
Pakistan
Malaysia
Uzbekistan
Saudi Arabia
Indonesia