

3D Laser Scanning System - Scan 3D II

Patented Design
 Patent No.: 200520054113.6
 200520054112.1

German Advanced Technology

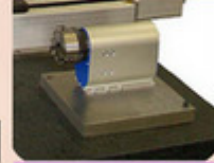


XYZ 3D Scanner



Rotary 3D Scanner

Options



4-Axis Fully Automatic Scanning Module

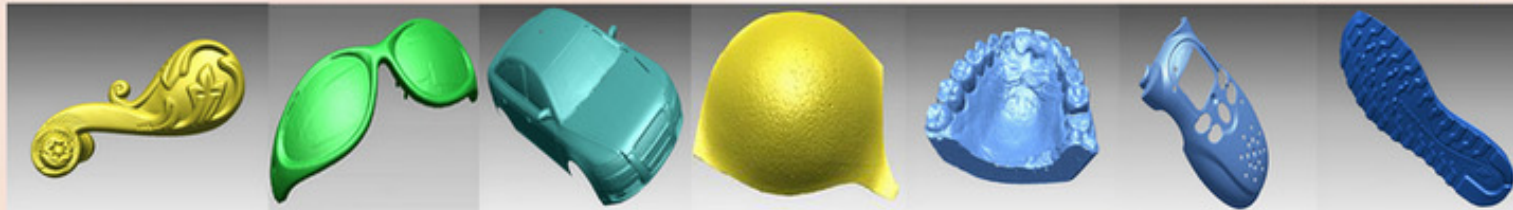


Scanning Head for CNC-Milling Center



Scanner Support Framework

Scan 3D Specifications					
Model	Scan 3D - High Speed	Scan 3D II - Precision	Scan 3D II - High Speed	Scan 3D II - High Speed+	Scan 3D II - Mini
Dimension	40(L) x 43(W) x 59(H) inch (several size available)				40(L) x 43(W) x 59(H) inch
Scan Volume	360x300+Laser Lengthx400mm ³ /460x400+Laser Lengthx400mm ³ /600x400+Laser Lengthx530mm ³				Diameter 220 x 400mm ³
Laser Type	Class II laser, 670nm, visible red spectrum				
Linear Repeatability	+/- 0.01mm				+/- 0.01mm / 0.01 Deg
Linear Accuracy	+/- 0.01mm				+/- 0.01mm / 0.01 Deg
Optical Resolution	+/- 0.05(Y) 0.10(Z) mm	+/- 0.03(Y) 0.05(Z) mm	+/- 0.05(Y) 0.10(Z) mm	+/- 0.08(Y) 0.15(Z) mm	+/- 0.10mm (Z) +/- 0.2mm (Rad)
Standard Deviation	<0.05mm	<0.03mm	<0.05mm	<0.08mm	<0.08mm
Stand-off Distance	150mm				
Laser Length	36mm	36mm	56mm	70mm	70mm
Scan Speed	18,000 pts/sec		30,720 pts/sec		30,720 pts/sec
Scan Software	Scan 3D				
Output Format	IGES, DXF, ASCII Point Cloud Format, OBJ, STL Triangle Surface Format				
Operating Voltage	220AC, 50Hz				



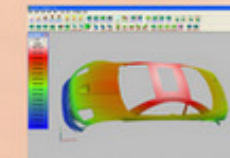
Frontier Advanced Technology Ltd.

創機科技有限公司

3D Laser Scanning



Speed up Product Development Process
 Increase Competitiveness



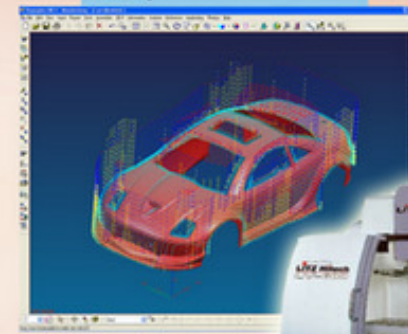
Multi-angle Scanning

- Advantages:
- Shorten the Product Development Period
 - Enhance the Product Design Quality
 - Support Rapid Prototypes Fabrication
 - Direct CNC Toothpath Generation
 - Support Computer-Aided Industrial Design System

Automatic Alignment and Merging



Toolpath Generation



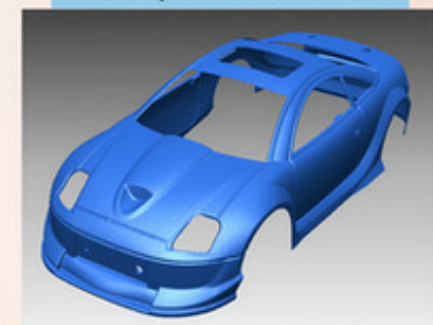
Work Flow of 3D Laser Scanning & Rapid Product Development



Building Rapid Prototypes



3D Computerized STL Model



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Remark: Product specifications, pictures and materials are only for reference, we reserve the right to make changes without notice.

Authorized Dealer



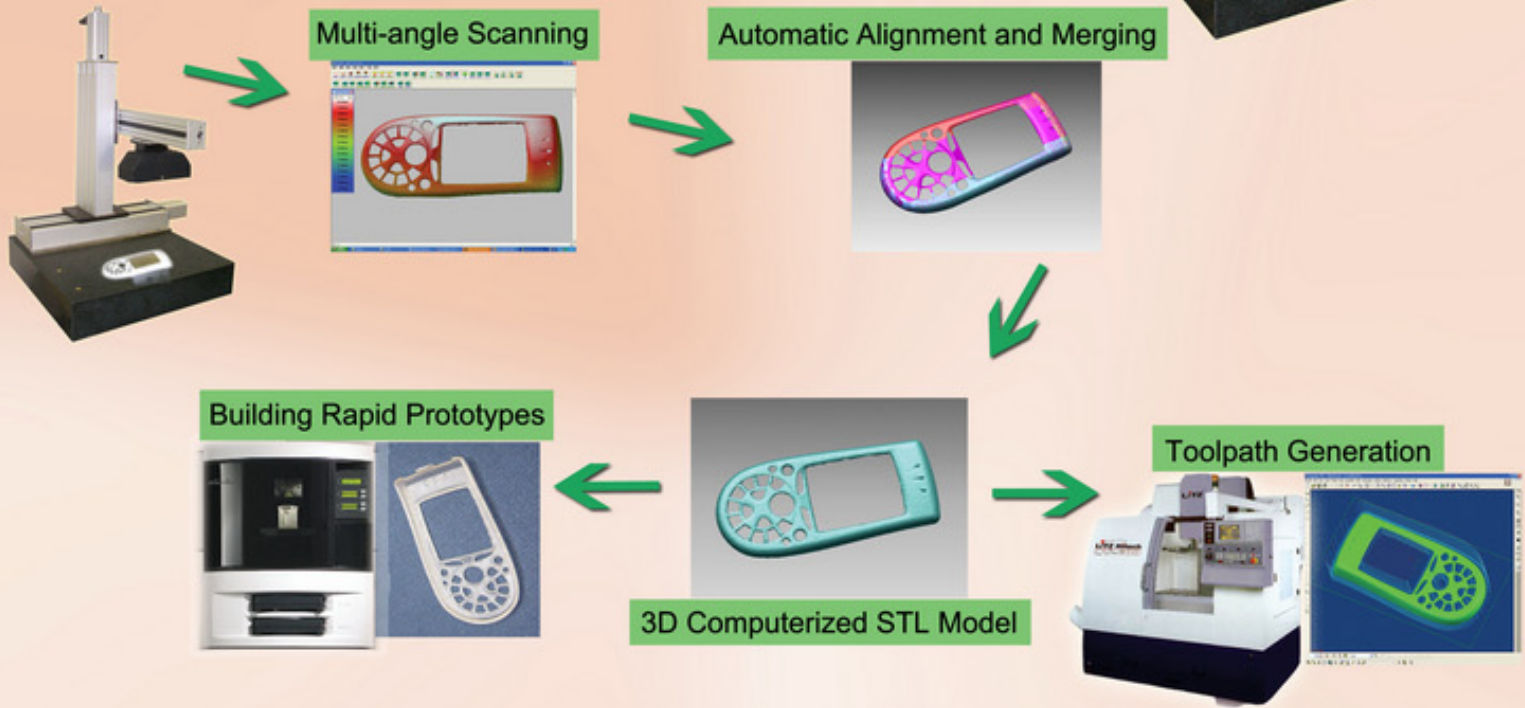
3D Laser Scanning System - Scan 3D II

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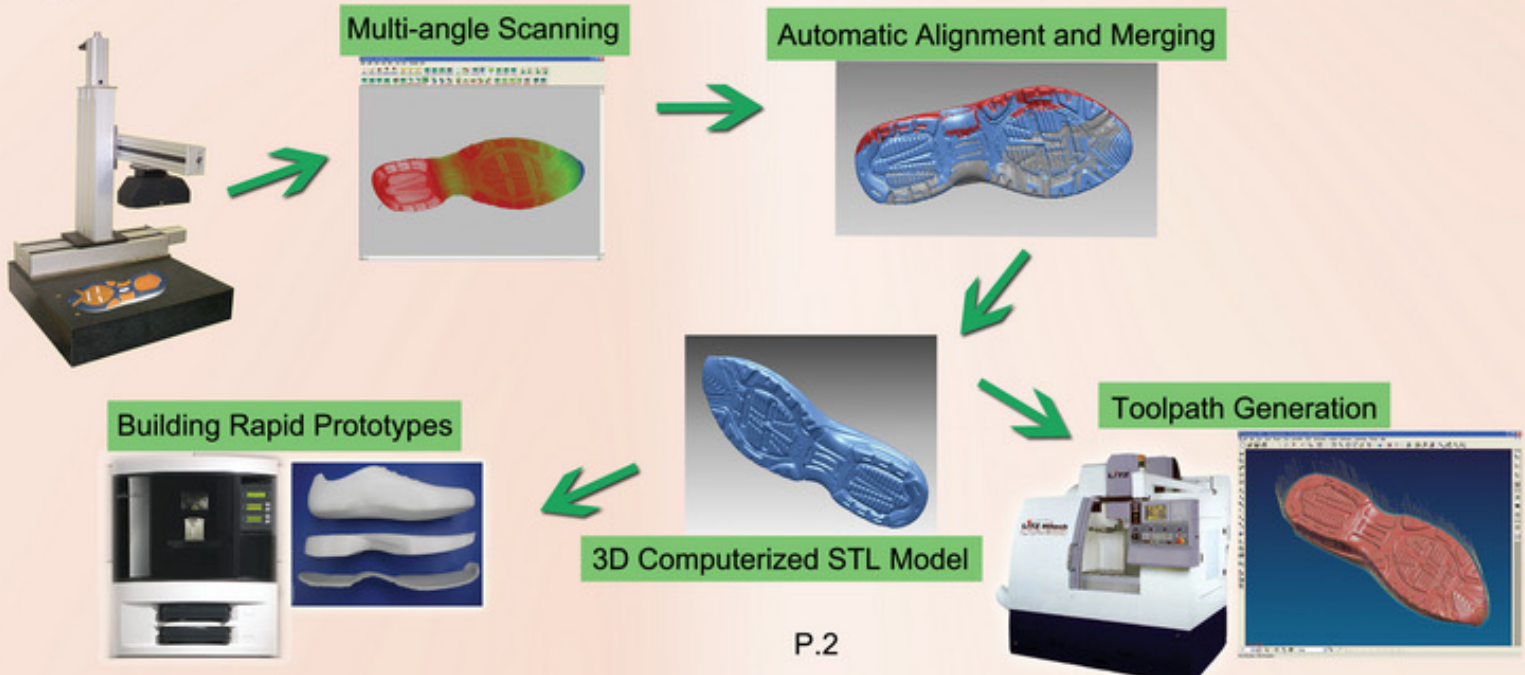
Scan 3D is an integrated laser scanning system that utilizes the latest advanced German optical measurement and numerical control positioning technology and components. Scan 3D can rapidly capture the 3D geometric shape data of a sample, e.g. scanning a spectacle in 20 minutes. User can make use of the captured data for direct copymill with a CNC milling machine or direct Rapid Prototype fabrication with a RP machine, no 3D modeling work required. The captured data can also assist product redesign and 3D modeling for production tooling manufacturing.

- High Speed Scanning
- Direct copymill with CNC milling machine
- 20 Times Faster Than Traditional XYZ 3D Scanner
- Output STL File for RP fabrication

Application Case 1:



Application Case 2:



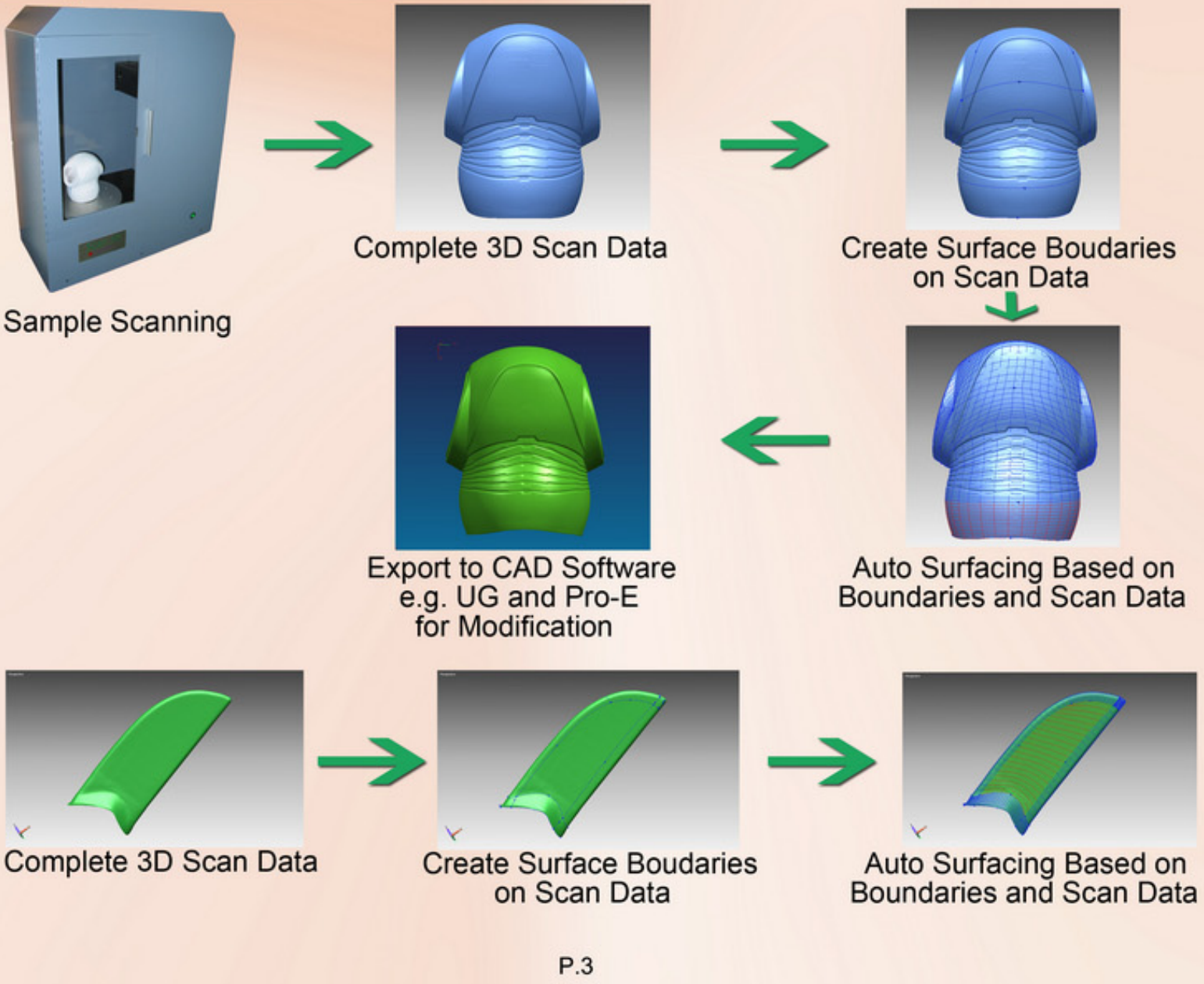
Product Features

- Extremely Fast 3D Scanning, Toy Scanning Only Takes 1 Minute
- 20X Faster Than Similar Type of 3D Scanners in China & Taiwan
- Direct CNC Tool Path Generation
- Output STL File for RP Fabrication
- Support Multi Export Format including IGES, DXF, STL, OBJ, XYZ
- Export to Master CAM, UG, Pro-E, SolidWorks or Other Software for Modification

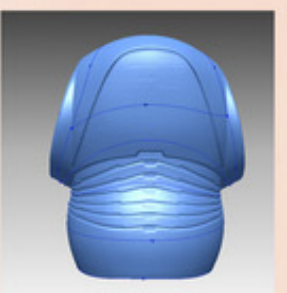
Product Characteristic

- Adopt German High Resolution & Hi Speed Laser Sensors and Laser Optics components
- Adopt German Imported XYZ Slides
- Adopt Japanese High Quality Close-Loop Control and motors
- Patented Technology,- Patented No. (200520054113.6), (200520054112.1)
- Support Multi-Language (English and Chinese) Easy Control Interface

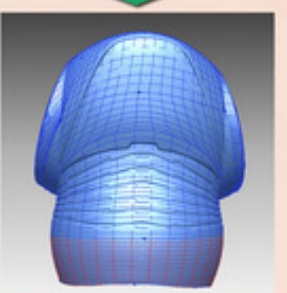
Support Fast IGES Surface Creation



Complete 3D Scan Data



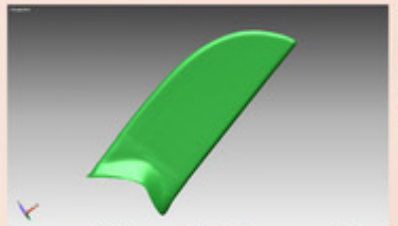
Create Surface Boundaries on Scan Data



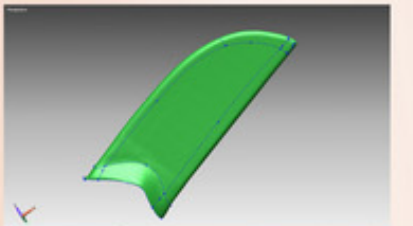
Auto Surfacing Based on Boundaries and Scan Data



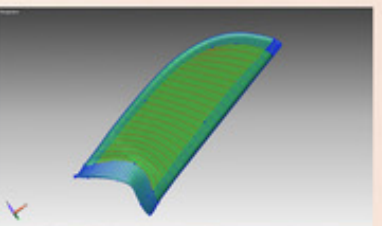
Export to CAD Software e.g. UG and Pro-E for Modification



Complete 3D Scan Data



Create Surface Boundaries on Scan Data



Auto Surfacing Based on Boundaries and Scan Data