



EXTR

EXTR One|EXTR Two|EXTR 30

- 3D modeling expert
- 3D Scanner original equipment

Global LEADER

**From Zhejiang University CAD
Microsoft Asia Research**

Formbuilder



- **Metrology-Grade precision & Low cumulative error**

High precision as $0.01\text{mm}+0.02\text{mm/m}$!

Plus photogrametric precision as $0.01+0.015\text{mm}$!

- **High data speed & Silk-smooth scanning experience**

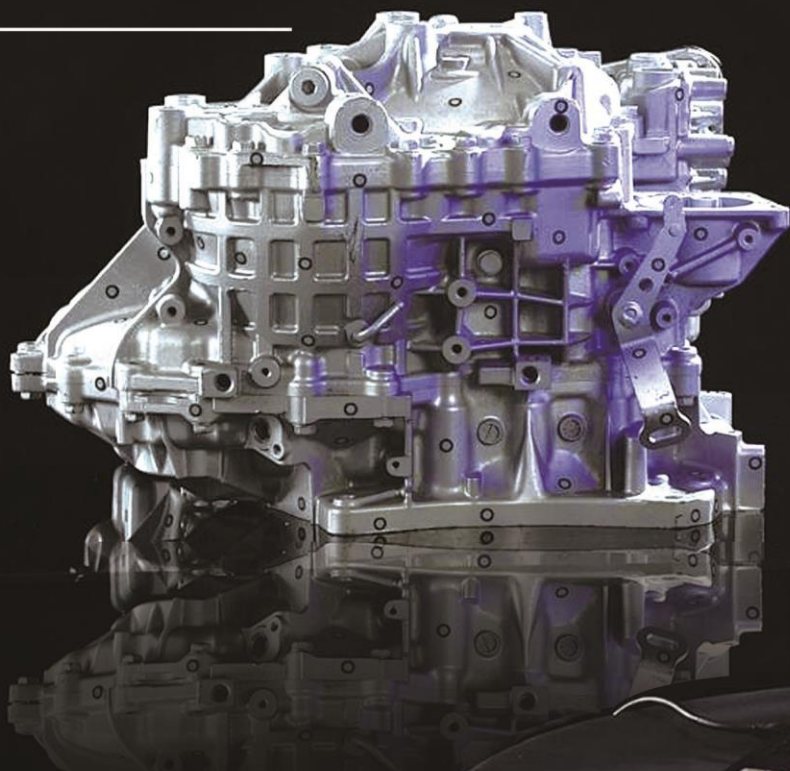
2.1M points/sec & 30 laser lines

- **Stable Repeatability**

Reliable Measurement, consistent results even for mutiple scanings of the same item!

- **Neat For Complex Workpiece**

Built for all scenarios , the more complex workpieces, the better performance of scanning.



High Robustness

Apply to various materials,
Easily handle high brightness objects.



Compatible to Many
Support all mainstream reverse softwares



Simple Processes
Only four steps for the full-size scanning with produced drawings ready to use



Excellent quality inspection
Doubled quality and drawing efficiency,
Significantly reduce the production cost



Easy Operation
Crystally clear instruction of all cases. User-friendly operation interface without effort to learn.

Application Scenarios



Automotive



Transportation



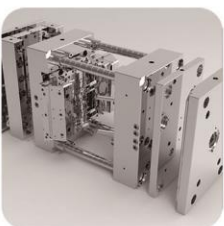
Aerospace



Mechine



Manufacturing



Mold manufacturing



Healthcare



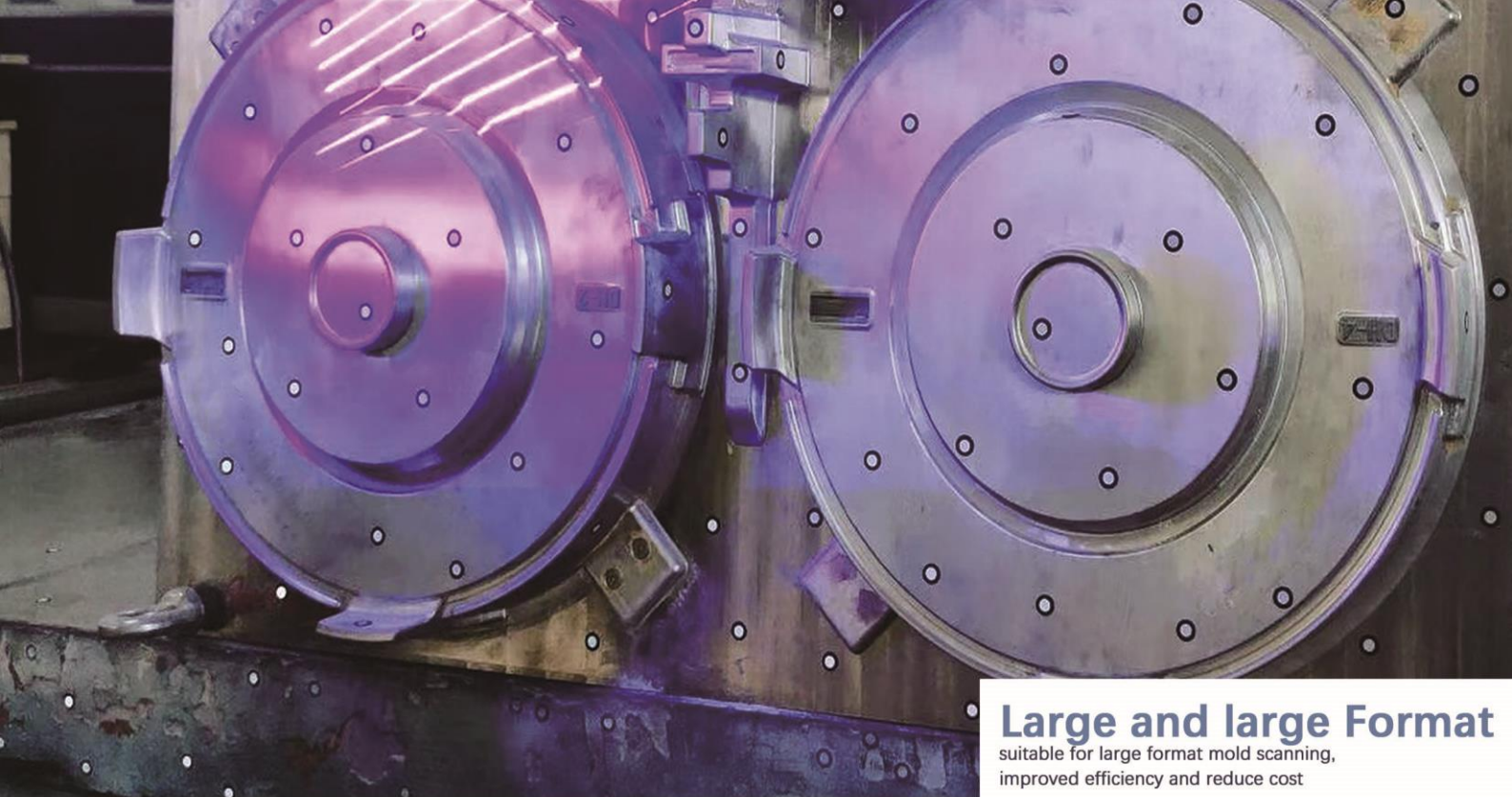
Training and Research



Antique Repair and Restoration

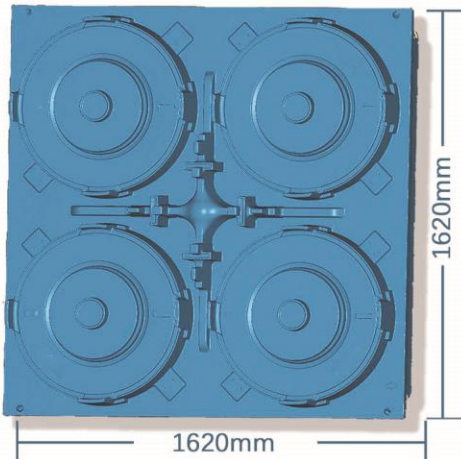


XR



Large and large Format

suitable for large format mold scanning,
improved efficiency and reduce cost



Full scale quality inspection



Mass quality inspection



Automated quality inspection
with robots



Multiple DG&T quality
inspection capabilities



Free setting of global and
local tolerances

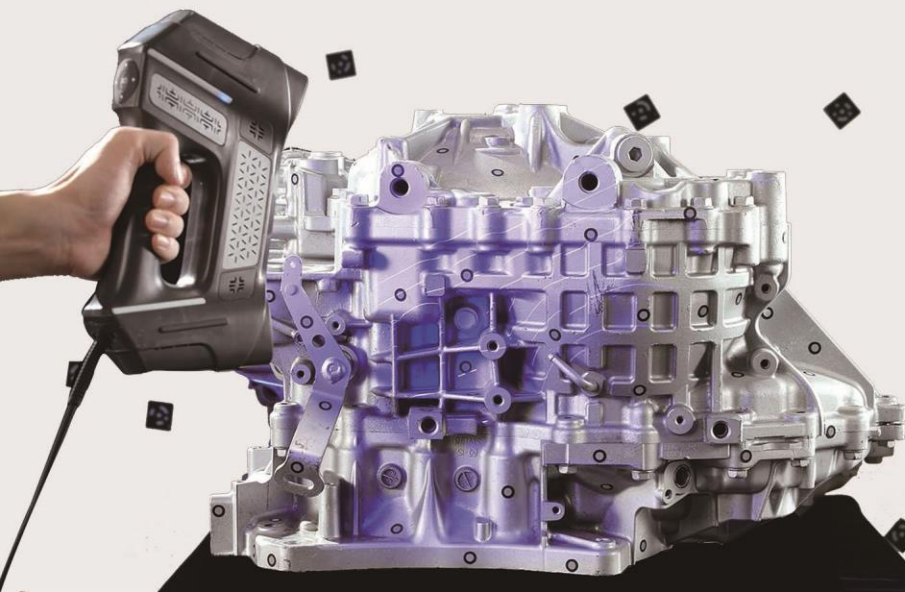
Excellent photogrammetric error control capability

High accuracy, high and stable repeatability

$0.01\text{mm} \pm 0.015\text{mm/m}$

Greater cumulative error control

photogrammetry up to 0.01mm
medium and large parts(max):0.02mm



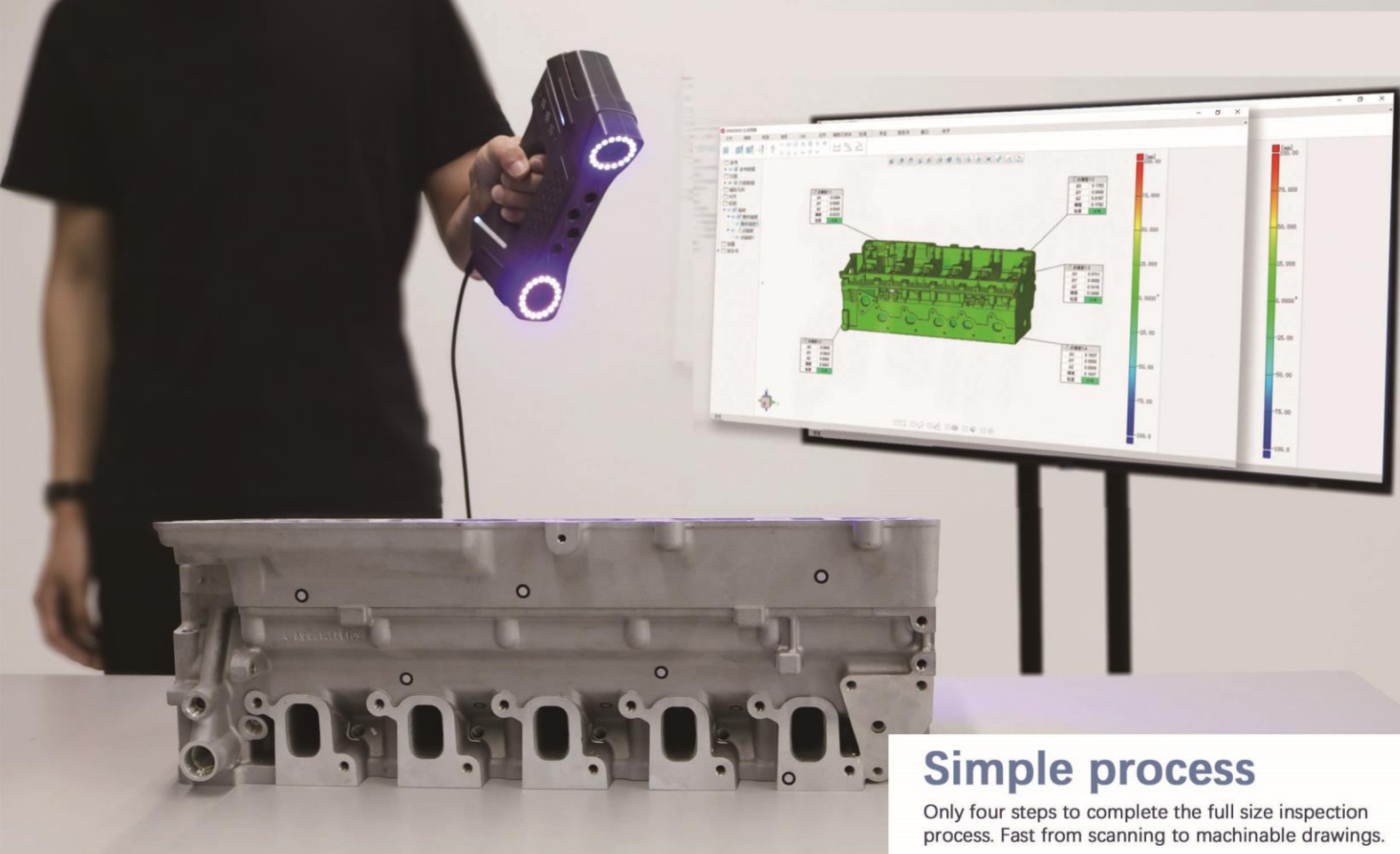
True test: 1000.1mm

deviation: 0.0053mm

实测值	1000.1053
偏差	0.0053
参考值	1000.1
	1000.1 ±0.02

实测值	299.993
偏差	-0.007
参考值	300
	300 ±0.02

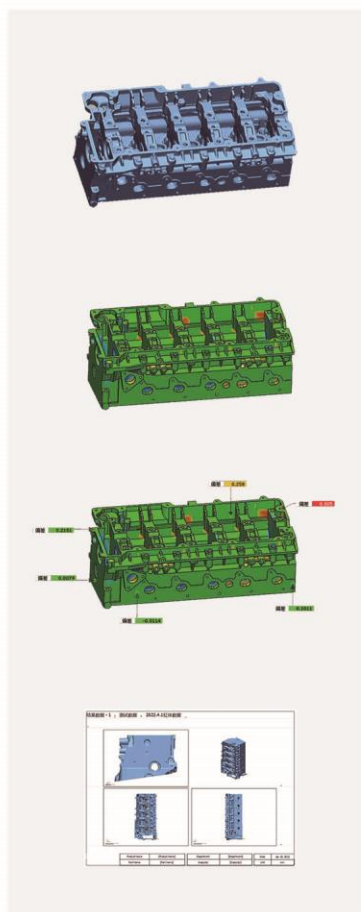
True test: 300 mm
deviation: 0.007mm



Simple process

Only four steps to complete the full size inspection process. Fast from scanning to machinable drawings.

Overall-size QC Process



Step 1

Import data

STL data , CAD data and more compatible to mainstream softwares and formats

Step 2

One-click Data alignment

Automatic alignment of CAD and STL data with one click. support automatic alignment of 321 ,RPS, etc

Step 3

Colorful overall-size quality inspection

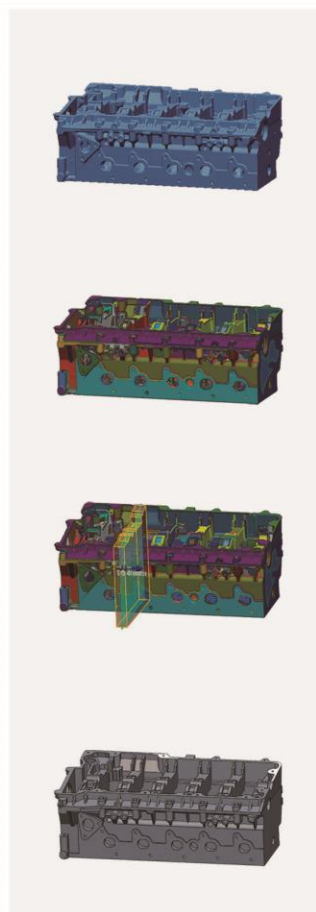
The global tolerance and regional tolerance can be set as use.

Step 4

One-click output

Customized report formats and test content , support batch and automated quality inspection

Scanning to drawings ready to process



Step 1

Scan to get data

First scan the object to get high precision STL, after data alignment, optimization and smoothing, at the end, repair to obtain high precision mesh method

Step 2

Feature Extraction

Mesh based on curvature

Step 3

Reversed Capture of CAD surface

Get drafts and parameters from grids for reverse modelling

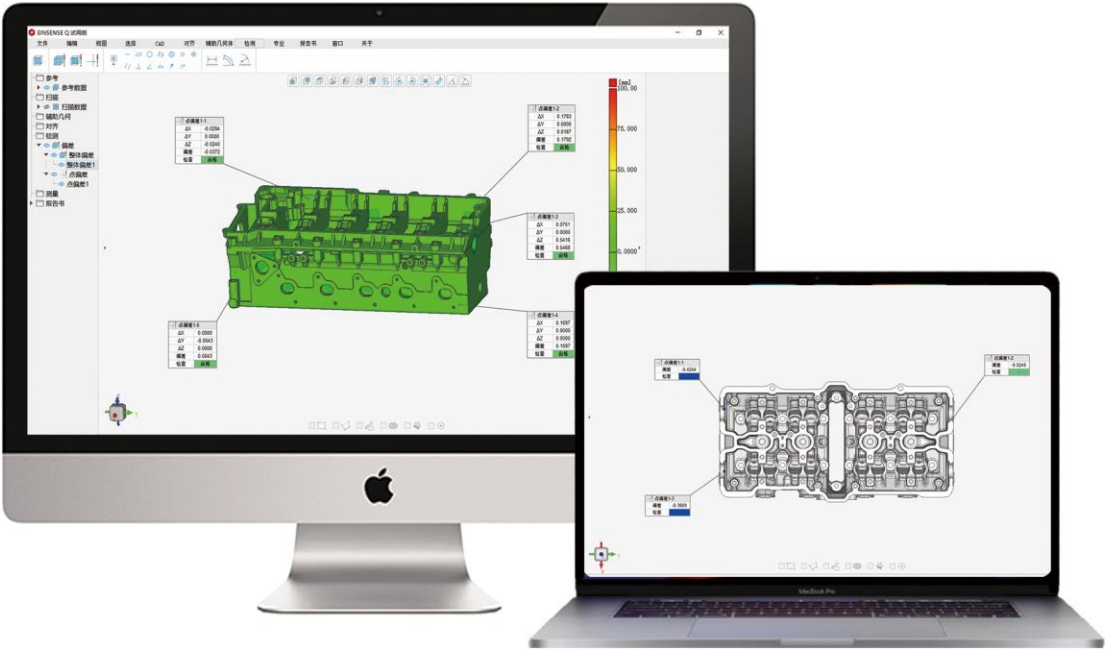
Step 4

Generate 3D CAD drawings

Support UG(solidworks/Catia, high quality CAD data in STP,X_T and other formats for mainstream software such as Pro-E

Technical Specifications

Model	EXTR-one	EXTR-30	EXTR-22
Depth of field(DOF)	620mm		
Scan mode	High-speed scanning, large-area scanning , deep-hole scanning, fine scanning (optional)		High-speed scanning, wide-area scanning, deep-hole scanning,dark and bright mode
Light source	14 beam crossed laser lines +1 laser line beam	30 beam crossed laser lines +1 laser line beam	22 beam cross laser line +1 beam laser line
Laser class	Class2(Eye-safe)		
Scan speed	1650000m/sec	2100000m/sec	2020000m/sec
Highest resolution	0.03mm		0.025mm
Maximum scanning area	1440mm*860mm		
Scanning method	Laser scanning(safety laser)		
Accuracy	0.01mm	0.01mm+ -0.02mm/m	0.01mm
Volumetric accuracy	0.010mm+0.020mm/m 0.01mm+ -0.15mm/m (with photogrammetry)		0.010mm+0.020mm/m
Connection standard	USB3.2		USB3.0
Operating temperature range	-10℃—40℃		
Stand-off distance	300 mm		
Output formats	.ply,.obj,.vtk,.stl,.off,.ma,.txt,.asc,.neu,.xyz,.scv,.pn,.pv,.pov and support customized format		



Our customers



BOSCH



CHERY



Red Leaf



长城汽车



雅迪



爱玛



Karasawa
唐泽车闸



CNITECH



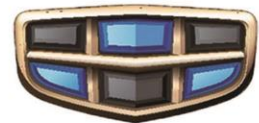
华源凯马



CFMOTO



sivantos



新日

开启**智能**电动新时代!



CYCLONE
赛科龙

SIEMENS



COMBED



KaiTeRobot
凯特机器人



珠峰
ZF-KY



磊蒙机械