

TXScanner/TOSCANER series : Installation dimension, Weight, Utilities

Model	Installation dimension	Weight	Utilities
TXS-30900FD	W2900 × D2800 × H1300mm (including shield box, PC and incidental equipment)	Approx. 800kg (Shield box) Approx. 60kg (PC, rack etc.)	Shield box : Single-phase AC 100V, 50/60Hz, 2kVA 1 line Grounding : 1 line
TXS-31300FD	W2900 × D2800 × H1300mm (including shield box, PC and incidental equipment)	Approx. 800kg (Shield box) Approx. 60kg (PC, rack etc.)	Shield box : Single-phase AC 100V, 50/60Hz, 2kVA 1 line Grounding : 1 line
TXS-32300FD	W4500 × D3500 × H1800mm (including shield box, PC and incidental equipment)	Approx. 3900kg (Shield box) Approx. 60kg (PC, rack etc.)	Shield box : Single-phase AC 100V, 50/60Hz, 4kVA 1 line Grounding : 1 line
TXS-33000FD	W4500 × D3500 × H1805mm (including shield box, PC and incidental equipment)	Approx. 4500kg (Shield box) Approx. 60kg (PC, rack etc.)	Shield box : Single-phase AC 100V, 50/60Hz, 4kVA 1 line Grounding : 1 line
TOSCANER-24500twin / AV	W5000 × D5000 × H2360mm (including shield box, PC and incidental equipment)	Approx. 9000kg (Shield box) Approx. 40kg (PC, rack etc.)	Shield box : Three-phase AC 200V, 50/60Hz, 17kVA 1 line Shield box : Single phase AC 100V, 50/60Hz, 4kVA 1 line Grounding : 1 line Grounding : 1 line
TOSCANER-34500FD	W5000 × D5000 × H2360mm (including shield box, PC and incidental equipment)	Approx. 8000kg (Shield box) Approx. 40kg (PC, rack etc.)	Shield box : Three-phase AC 200V, 50/60Hz, 17kVA 1 line Shield box : Single phase AC 100V, 50/60Hz, 4kVA 1 line Grounding : 1 line Grounding : 1 line

*The information and data contained in this material are subject to change without prior notice due to design changes or other reasons.
*For detailed specifications of dimensions, mass, and utilities of each device, please contact our sales department.

Technical Center

- With seasoned expertise, the engineers are ready to provide optimum consultation and solutions.
- The Technical Center supports the customer in a wide range of industries in tests, inspections and experiments.
- The Technical Center is located 3 minutes on foot from Kita-fuchu Station on the Musashino Line of East Japan Railway(JR).
- Get off the Keio Bus at Toshiba-mae Bus Stop on the Keio Bus Line after taking the bus at Fuchu Station on the Keio Line from Shinjuku, Tokyo.



 Safety Precautions

- Please read this catalog carefully before selecting and purchasing an X-ray inspection system. Incorrect selection and use of an inspection system outside of the specification may cause a fire, electric shock, or a radiation injury. If you have any questions, please contact Toshiba IT & Control Systems Corporation or its branch.
- System transport, installation, wiring, operation, maintenance servicing, checks, discarding and other work should be undertaken by persons who are well versed in the installation method and related laws and regulations of X-ray inspection systems and who understand the principles and functions of radiation equipment. Otherwise a fire, electric shock, radiation injury or bodily injury may result.
- Please read the instruction manual and other relevant documents carefully before starting work for correct handling of your system.
- Follow the radiation-hazard regulations, health and labor standards authorized in your state before installing your system.

Limitation of liability

- Toshiba IT & Control Systems Corporation will not be responsible for damage caused by an earthquake, a fire through no fault of Toshiba IT & Control Systems Corporation, an act by a third party, other accident, intentional or unintentional error, incorrect use or use under abnormal conditions by the customer.
- Toshiba IT & Control Systems Corporation will not be responsible for incidental damage caused by the use of or inability to use this product, such as losses of business profits and interruption of business.
- Toshiba IT & Control Systems Corporation will not be responsible for damage caused by noncompliance with descriptions of the instruction manual.
- Toshiba IT & Control Systems Corporation will not be responsible for damage caused by malfunction or other reason due to combination of the system with other equipment.

Toshiba IT & Control Systems Corporation

Inspection System Sales Department

17F, 6-24-1, Nishi-Shinjuku, Shinjuku-ku, Tokyo 160-0023, Japan
TEL: +81-3-4574-6877 FAX: +81-3-3344-1033

<https://www.toshiba-itc.com/en/hihakai/>



For more information, please contact:

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NCAT-TG004E_2(2208)

X-ray CT Scanner

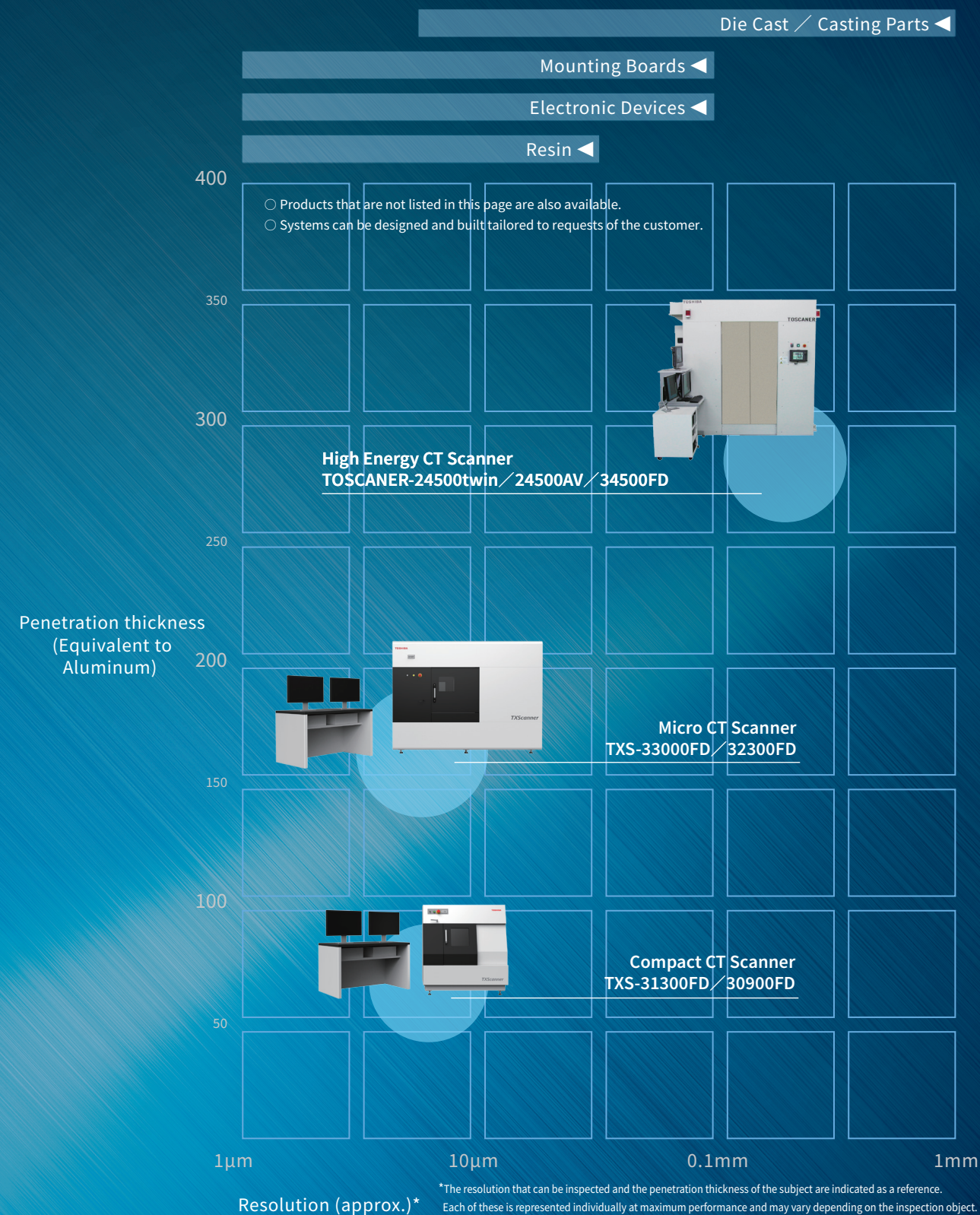
General Catalog



Toshiba IT & Control Systems Corporation

Industrial X-ray CT Scanner

Providing the cutting edge technology
for various fields



Most powerful tools from high-efficiency research
and development to quality assurance

Immediately after the discovery of X-rays at the end of the 19th century,
TOSHIBA was quick to start the development of the X-ray generation and application technologies
and has supplied CT Scanner systems used in a wide range of fields actively.
TOSHIBA IT & Control Systems corporation contributes to the industry by providing reliable products fully utilizing
the wide range of advanced system technology and service network of the TOSHIBA group.

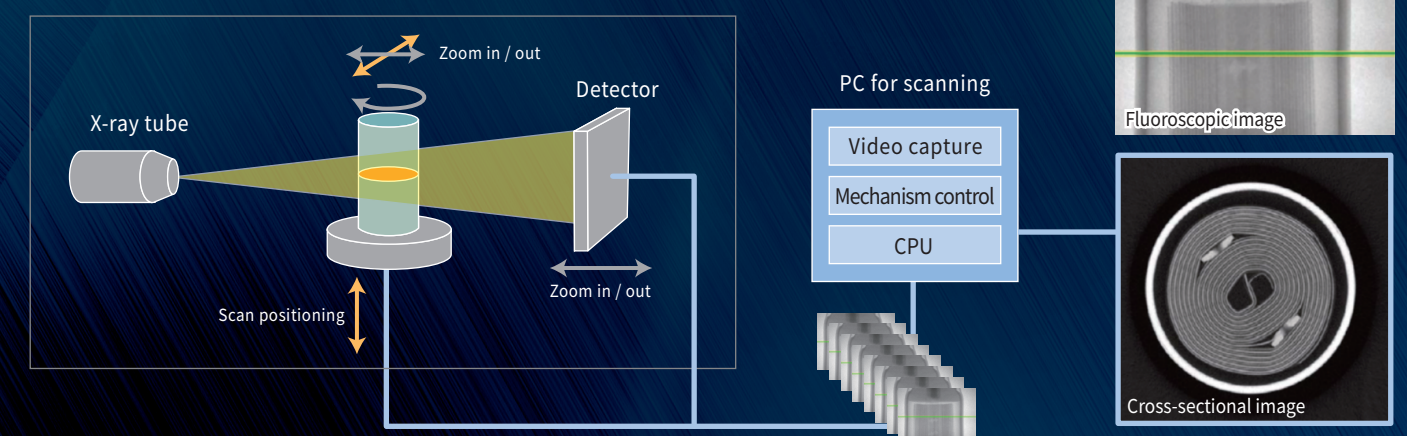
Industrial CT Scanner TXScanner / TOSCANER Series

- The series of the apparatus to meet the various needs.
- With the experience of many years of X-ray applied technology, we can provide custom specification.

Features

- High resolution and image quality** — Adoption of high-performance X-ray generator and the detector according to the application, equipped with a high resolution image reconstruction software.
- TOSHIBA original excellent operability** — For beginner, TOSCANER series have the scanning conditions which are capable of shooting the high quality imaging.
* Auto centering function: Automatically calculates the rotation center position of the object from the X-ray projection data.
- Fine adjustment-table** — Object rotation center can be adjusted while looking X-ray image at high magnification scan.
- Slice collimator.** — Collimator reduces unwanted scattered X-ray and improves the contrast and image quality.
- High-speed reconstruction (option)** — Images can be displayed on the double-oblique screen within 10 seconds of completion of data collection.
- Digital engineering (option)** — Analysis, evaluation and simulation are possible by data converted for 3D printer and 3D-CAD.

The Configuration of X-ray CT



TX Scanner Series

Compact Micro CT Scanner

TXS-31300FD／TXS-30900FD

Applications small electronic parts, resins, molded parts and rubbers etc.

Features

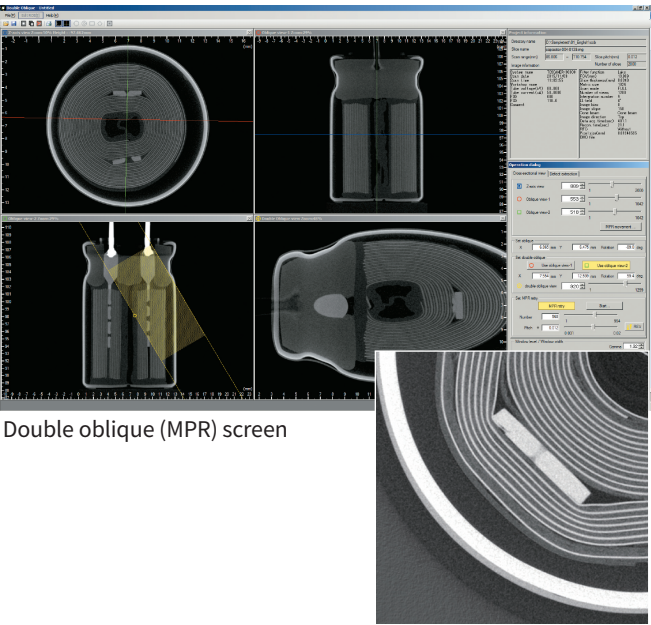
- The X-ray generator can be selected between 130kV and 90kV types.
- Flat panel detectors are used for clear images.
- Smart mode provides easy and user-friendly operation.
- Equipped with image sharpening function TXCorrection.



Images



Example of analysis



Type	Compact Micro CT Scanner	
Model	TXS-31300FD	TXS-30900FD
X-ray generator	130kV	90kV
Focal spot size	5μm	
Detector	FPD*	
Spatial resolution	5μm	
Max. scanning area	φ130mm×H150mm	
Slice mode	single / cone beam / multi	
Scan mode	Half / full / offset	
Option	UPS / Digital engineering / PC for image processing / High-speed reconstruction / printer	
Leakage dose	Less than 1μSv / h	
Application	Electronic devices, Mounting Boards, Aluminum die cast, Battery, Resins, Fiber etc.	

*FPD : Flat Panel Detector

TX Scanner Series

Micro CT Scanner

TXS-33000FD／TXS-32300FD

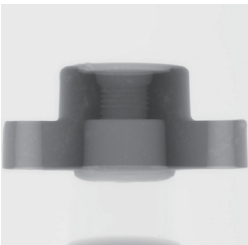
Applications small electronic parts, mounting boards, aluminum die cast, battery, molded parts, resin, fiber etc.

Features

- Available with a 230-kV or 300-kV X-ray generator.
- Flat panel detectors are used for clear images.
- Smart mode provides easy and user-friendly operation.
- Equipped with image sharpening function TXCorrection.
- Safe and easy to maintain.



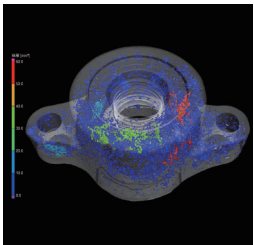
Aluminum die cast



X-ray fluoroscopic image

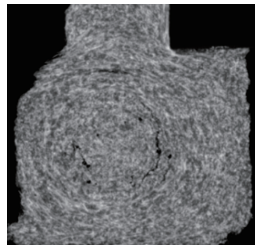


3D image created from X-ray CT images

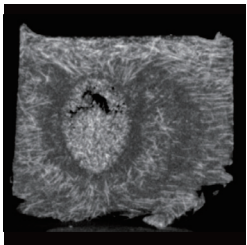


Example of measurement : judgement of voids

GFRP



Central part

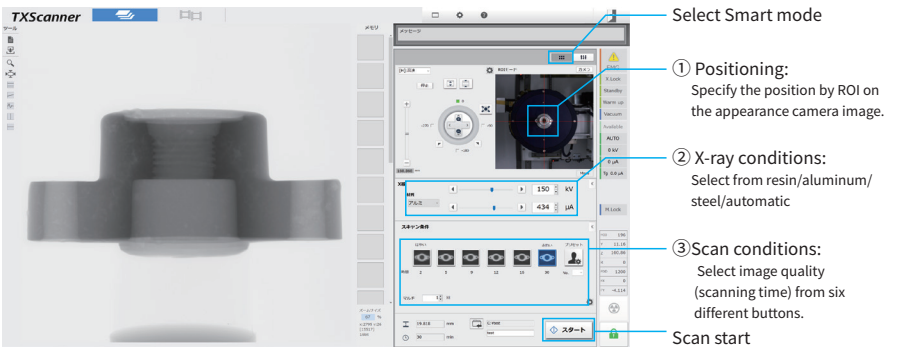


Near injection port

The operation screen can be switched between Smart Mode (easy operation) and Expert Mode (detailed operation).

●Smart mode

Conventional complicated parameter settings are unnecessary. Anyone can easily perform CT imaging in three steps.



Type	Micro CT Scanner	
Model	TXS-33000FD	TXS-32300FD
X-ray capability	300kV	230kV
Focal spot size	4μm	
X-ray detector	FPD* 8 inch /16 inch (selectable)	
Resolution	5μm	
Max. scanning area	8inch : φ280mm×H320mm(W scan : φ420mm) 16inch : φ420mm×H320mm	
Slice mode	Single / Cone beam / Multi	
Scanning mode	Half / full / offset / (W scan is available in case of 8 inch FPD)	
Option items	UPS / Digital engineering / PC work station for image processing / High speed data reconstruction and others	
Leakage dose	2μSv or less	1μSv or less
Application field	Electronic components, Printed circuit boards, Aluminum die castings, Batteries, Moldings, Resins, Fibers and others	

*FPD : Flat Panel Detector

TOSCANER Series

High Energy CT Scanner

TOSCANER-24500twin / 24500AV / 34500FD

Applications medium or large sized aluminum die cast, iron parts, castings, tire etc.

Features

Twin detector type

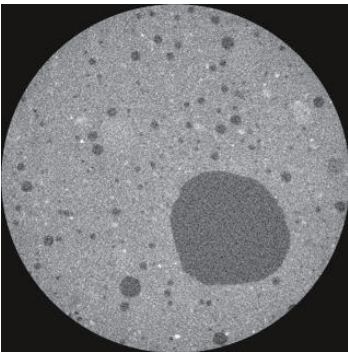
- While maintaining the image quality of the TR (Translate / Rotate) scanning method, continuous cross section images can be scanned in a conventional ratio of two to three times the speed. (15 sec / scan at the fastest)
- Equipped with a variety of scan mode : Single / Twin / Multi etc.

Flat panel detector type

- With RO (Rotate only) scanning method, up to 1,024 slices at one rotation can be taken. (30 sec / scan at the fastest)
- Observing the fluoroscopic image in real time and also specifying the slice position, CT scan is possible.
- Volume data can be displayed within few seconds with high-speed reconstruction function.

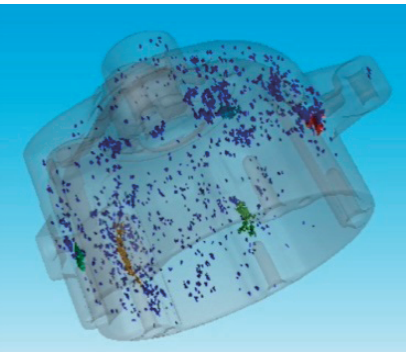
Combined type (Combined Line sensor and Flat Panel Detector)

Images

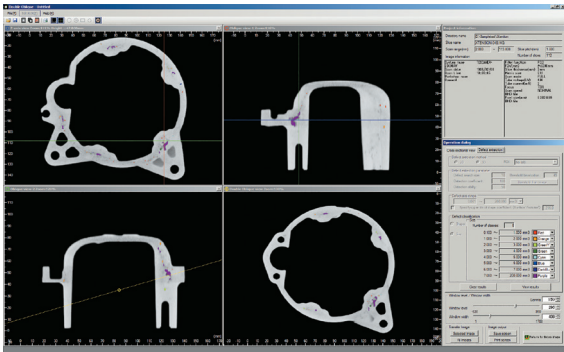


Enlarged image of concrete

Example of analysis



3D defects extraction



Double oblique (MPR) screen



TOSCANER-34500FD

Type	High Energy CT Scanner		
Model	TOSCANER-24500twin	TOSCANER-24500AV	TOSCANER-34500FD
X-ray generator	430kV		
Focal spot size	0.4 / 1.0mm selectable		
Detector	Line sensor (twin)	Line sensor	FPD* 16"
Spatial resolution	0.1mm		
Scanning method	Translate / Rotate		Rotate only
Max. scanning area	Standard : $\phi 600\text{mm} \times \text{H}600\text{mm}$ Option : $\phi 700\text{mm} \times \text{H}1000\text{mm}$	$\phi 600\text{mm} \times \text{H}600\text{mm}$	
Slice mode	single / twin / triple	single	single/ cone beam / multi
Scan mode	Half / full / double full / triple full		Half / full / offset
Option	UPS / Digital engineering / PC for image processing / printer		UPS / Digital engineering / PC for image processing / High speed reconstruction / printer
Leakage dose	Less than $2\mu\text{Sv} / \text{h}$		
Application	Concrete, medium or large sized aluminum die cast, iron parts, casting etc.		

*FPD: Flat Panel Detector

Digital Engineering

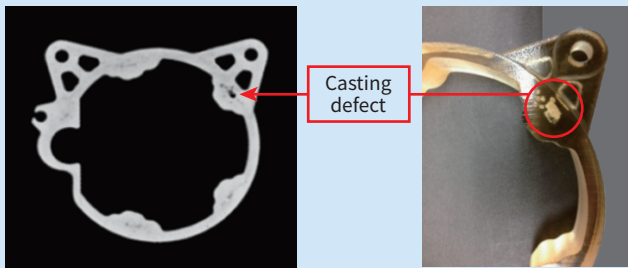
By combining the evaluation and analysis software*, the field of application of three-dimensional measurement spreads further.

X-ray CT scanner is a perfect tool for three-dimensional measurement.

*Option

Applications

Defect extraction, shape measurement



Drawings created from the actual thing

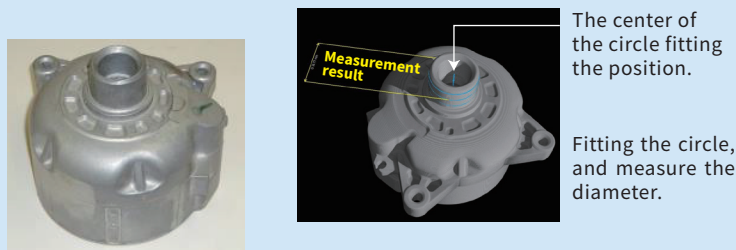
Making Drawings is possible by scanning the actual thing and converting the data.

Duplicate of actual thing

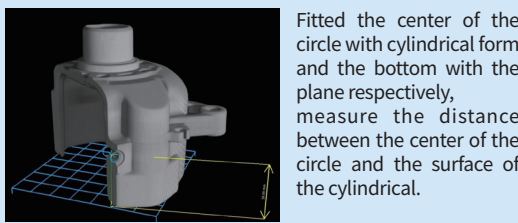
The actual thing scanned by CT, replication with 3D printer is possible.

Replication by 3D printer using the STL data
By converting to STL data, model shape confirming and evaluating is available.

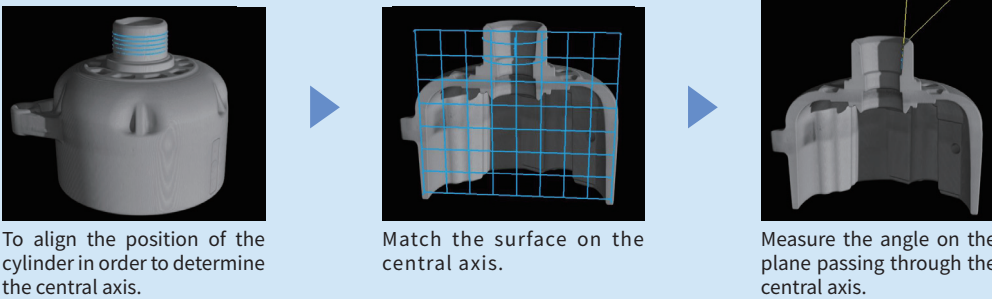
Measurement of diameter



Measurement of dimensions



Measurement of angle



Sample test of fiber orientation and CAE analysis

Provided by Nagoya Municipal Industrial Research Institute.

Micro CT scans the scope (field of view 5mm) of weld position of the injection molded product and can observe the orientation of the resin (flow direction).

