



NeuViz
Computed
Tomography

128

Neusoft®



**Pressured to do more
with less?**

The NeuViz 128, the latest advance in Neusoft CT innovation, provides remarkable clarity and precision to expand the range of services you can provide while reducing operational costs.

Full-featured, low-dose, workflow optimized and designed with patient comfort in mind, the NeuViz 128 is the CT choice you've been missing.

Comprehensive Low-Dose Design

ClearView Iterative Reconstruction

Robust Cardiac Imaging

Quad Sampling

Micro-STAR Detector

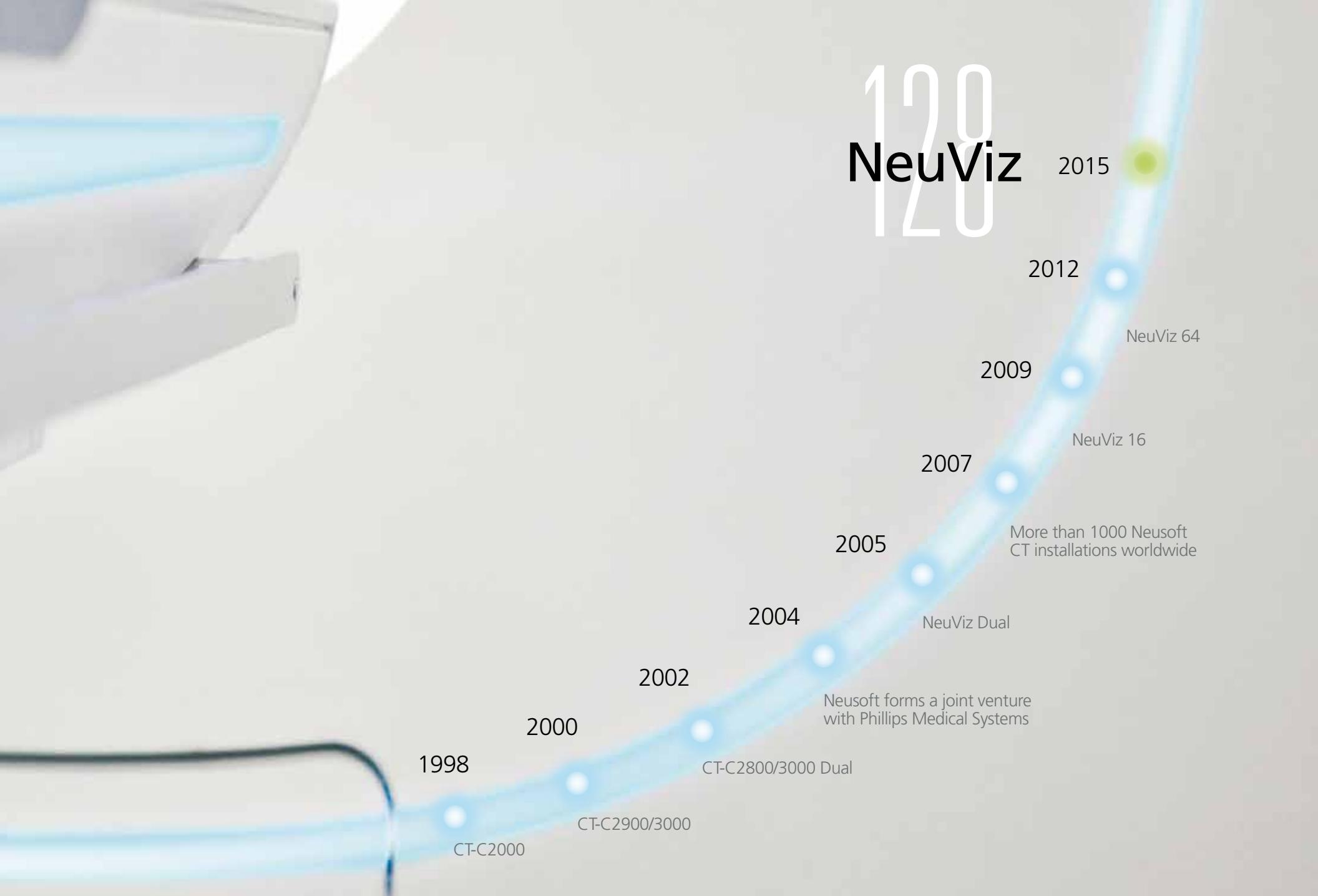
Metal Artifact Reduction

Patient-Centric Design

User-friendly Workflow

World Class Service & Support





120
NeuViz
120

2015

2012

NeuViz 64

2009

NeuViz 16

2007

2005

More than 1000 Neusoft
CT installations worldwide

2004

NeuViz Dual

2002

Neusoft forms a joint venture
with Phillips Medical Systems

2000

CT-C2800/3000 Dual

CT-C2900/3000

CT-C2000

1998

A History of Neusoft CT Innovation

Comprehensive Low-Dose Design



New Detector Design

Modular design delivers excellent x-ray conversion efficiency, enhancing low-dose imaging.



240° Exposure

Dose to the patient and attending physician is reduced.



Organ Safe

Reduces dose to radiosensitive organs — eyes, thyroid and breasts.



Pediatric Protocols

Protocols are designed specifically for pediatric anatomy.



ClearView

Iterative processing in projection and image spaces delivers dose reduction.



Dose Check

Fully implemented Dose Check ensures that a patient cannot be over radiated.



3D-Dose Modulation

Tube current is modulated based on the anatomy in the scan field to deliver an anatomically optimized dose.



ECG-Dose Modulation

Reduces tube current during non-imaging phases of the cardiac cycle to minimize patient dose.



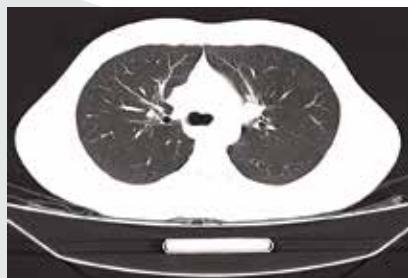
ClearView Iterative Reconstruction

Clinical Benefit: ClearView transforms noisy, low-dose images into high-quality studies that deliver improved diagnostic capacity.



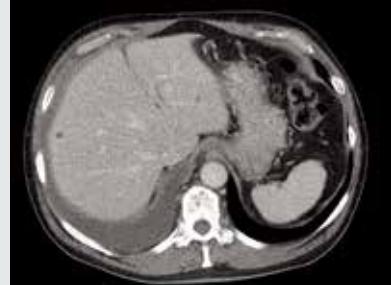
Examination Information							
Study ID: 352690							
Study Time: 04/18/2014 12:21:0							
Total DLP: 647.8mGy/cm							
Estimated Dose Saving: 22.9%							
Dose							
#	Series Description	Scan Mode	mA	kV	NTT (mm)	CTD (mm)	DLP (mGy·cm)
1	Scout	Surve	100	120	250/625	0.0	1.1
2	Head WD	Axial	275.1	130	32/625	18.1	488.8

BRAIN SCAN: Dose - 38.1 mGy



Examination Information							
Study ID: 586							
Study Time: 01/26/2014 08:37:33							
Total DLP: 55.5mGy/cm							
Estimated Dose Saving: 38.4%							
Dose							
#	Series Description	Scan Mode	mA	kV	NTT (mm)	CTD (mm)	DLP (mGy·cm)
1	AP Scout	Surve	104	120	250/625	0.0	9.2
2	Chest	Axial	88.8	80	34/625	1.5	52.3

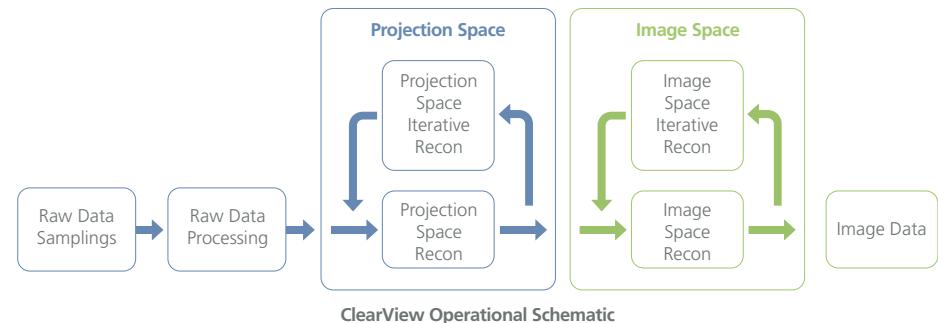
CHEST SCAN: Dose - 1.5 mGy



Examination Information							
Study ID: 5-20110291801							
Study Time: 2013-12-29 09:45:11							
Total DLP: 278.5mGy/cm							
Estimated Dose Saving: 15.2%							
Dose							
#	Series Description	Scan Mode	mA	kV	NTT (mm)	CTD (mm)	DLP (mGy·cm)
1	Surve	Ax	120	250/625	8.1	4.9	32
2	Initial	Axial	54.2	100	64/625	1.9	278.5

ABDOMEN SCAN: Dose - 9.6 mGy

By performing iterative image processing operations in both projection and image space, the noise and artifact that often accompany low dose acquisition can be removed. This is done without a reduction in image detail.



*Customers enjoy
superior image quality
at half the dose
of older CT systems.*

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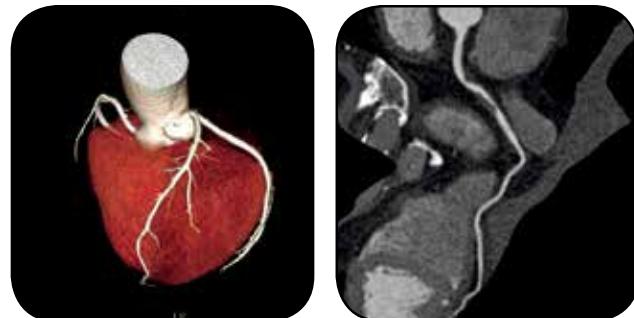
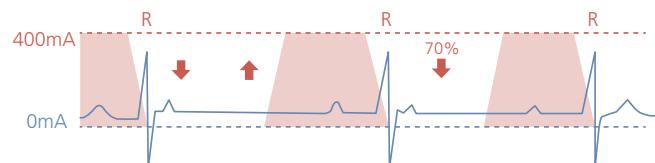
Robust Cardiac Imaging

By reducing the tube current during periods of the cardiac cycle when image data is not being acquired, patient dose can be significantly reduced.

Low-dose cardiac images can be acquired and then processed with ClearView reducing patient dose to $\leq 1\text{mSv}$.

Clinical Benefits:

The NeuViz 128 provides superior coronary artery visualization. Reduced KV cardiac scanning lowers patient dose. Adaptive multi-segment reconstruction improves temporal resolution for difficult cardiac rhythms.



Quad Sampling Technology

By dynamically moving the focal spot axially and longitudinally, sampling density is increased 400%. This allows for improved resolution, reduced artifact and extended scanning ranges.



Micro-STAR Detector

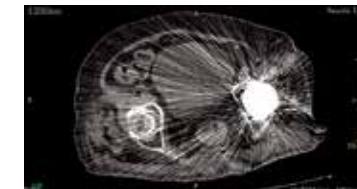
iHD (isotropic High Definition) enables the half-slice acquisition, which delivers 24 lp/cm isotropic resolution.



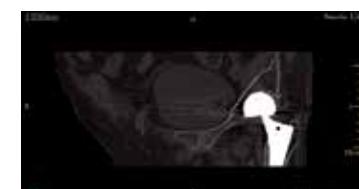
Metal Artifact Reduction

Effective integration of high resolution hardware and software results in superior image and diagnostic quality.

WITHOUT MAR+



WITH MAR+



120
120

Patient-Centric Features

Patient comfort is enhanced with supportive gantry padding and easily accessible emergency release controls.

A child-friendly digital display improves the scanning experience for pediatric patients.

The new scanner design delivers important information to the patient and the clinician.

Overall study times are reduced for patients by streamlined workflow and advanced scanning technology.



Full Functionality with Intuitive Workflow

The newly designed user interface improves clinician efficiency by guiding the user effortlessly through the examination.

- **Gantry LCD Monitor:** The integrated display panel and illuminated ring on the gantry provide real-time information on scan status.
- **Control Panels:** The bold new design of the control panels includes larger knobs which are easier to operate.
- **Control Box:** Ergonomic design for easier operation for improved workflow.
- **User interface** guides the healthcare provider through the study using a "guided tool bar."
- **High-speed data acquisition and transmission** increases patient throughput.



Quick, easy-to-use post processing and diagnostic software applications.

- MPR/CMPR, 3D/SSD, MIP/MinIP/AIP/VE/VR
- SAS on supported injectors, Bolus Tracking
- Networking 100/1000 Mbps
- Auto Voice and Film
- Volume Calculation
- Vessel Analysis
- ClearView IR
- Calcium Scoring
- Bone Removal
- Neuro DSA
- ECG gating
- Dental Analysis*
- Brain/Body Perfusion*
- Lung Density and 3D Lung Nodule Analysis*
- Coronary Artery and Cardiac Function Analysis*
- Neusoft Virtual Colonoscopy*
- Tumor Evaluation*
- CCT*
- Retrospective and Prospective Cardiac Imaging
- Organ Safe
- Quad-Sampling
- Pediatric Protocols
- Adaptive Multi-Segment Reconstruction
- Shape Filter
- Advanced Detector Design
- Improved, Intuitive User Interface
- High-Speed RF Data Transmission

* may be optional

Technical Specifications

SPECIFICATIONS		NeuViz 128
Minimum room size scan & operator combined		285 sq/ft
Minimum ceiling height		6' 7"
Gantry dimension (L x W x H)		7' 2" x 3' 1" x 6' 3"
Main power requirement		100 KVa
Aperture		72cm
Scan field		50cm
Tilt		plus/minus 30°
Rotation times		.375, .5, .6, .8, 1.0, 1.5, 2.0
Partial rotation times		0.25s, 0.32s, 0.39s, 0.52s, 0.65s, 0.97s, 1.3
Temporal resolution		62.5ms
Focus-to-isocenter distance		570mm
Focus-to-detector distance		1040mm
Detectors		64
Slices		128
Number of detector elements		672 x 64
Total channels per slice		1344
Number of projections		4640
Sequence acquisition modes		128 x .625, 64 x .625, 32 x .625, 16 x .625, 8 x .625, 4 x .625, 2 x .625
Spiral acquisition modes		128 x .625, 64 x .625, 32 x .625, 16 x .625
Detectors		99.9% x-ray conversion efficiency, afterglow <= 2 us
X-ray tube		CTR2280
Tube current range		30mA~667 mA
Voltage		80,100,120,140 kV
Heat storage		8.0 Mhu
Cooling rate		931 KHU/min
Focal spot (mm)		0.6x1.2 (Small); 1.1x1.2 (Large)
Filter		Al Equivalent Tube: 1.5mm Al
Beam-limiting device		Equivalent to 6.68mm Al
Generator		80kW

SPECIFICATIONS		NeuViz 128
Maximum table load		204.12kg/450 lb standard; 299.3kg/660 lb optional
Table feed speed		1mm/s-160mm/s
Verticle table/travel range		430mm-970mm
Verticle travel speed		9 mm/s-15 mm/s
Scannable range		1770mm
Host computer		Intel DUAL Core Xenon processor technology; 2.40 Ghz
Display		1,280 x 1,024 resolution
Image storage		500 GB; 960,000 uncompressed images
Additional storage		CD-R, DVD, USB drive
Scout length		50-1770mm
Scan times		1.5-18s
Scout views		AP, Lateral, Dual
Axial reconstructed slice thicknesses		0.625, 1.25, 2.5, 5, 10mm
Dynamic multi-scan		Multiple continuous scans without table movement
Spiral acquisition reconstruction slice thicknesses		0.625, 0.8, 1, 1.25, 1.5, 2, 2.5, 3, 4, 5, 6, 7, 8, 9, 10mm
Slice increment		0.1-2 mm
Maximum scan time		100 seconds
Scan length		1770mm
Pitch		.13-2.0mm
Real-time display		Yes
Scan field		50cm
Recon field		5-50cm
Recon matris		512x512, 768x768, 1024x1024
HU scale		-32,768 to +32,676
Recon speed		30 images/second
Cine display rate		30 images/sec
Full DICOM support		Yes
Low-contrast resolution		4mm @ 3HU; 19.8 mGy
High-contrast resolution		0%MTF 17lp/mm

North America | Sales | Service | Support

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Neusoft Medical Systems USA is aligned with the most reputable medical equipment distribution partners in the USA so that you can learn about Neusoft advantages from a trusted adviser.

Remote diagnostic capabilities and North America-based service engineers bring expertise to you immediately, and proactively detect issues before problems can cause downtime and patient inconvenience.

Our North American parts depots, supported by a global logistics network, are ready to promptly respond to your service needs.



Neusoft

Contact Neusoft Medical Systems USA today
to learn more about the NeuViz 128 and FREE software upgrades
for the life of your scanner.

Call 1-866-520-2626

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