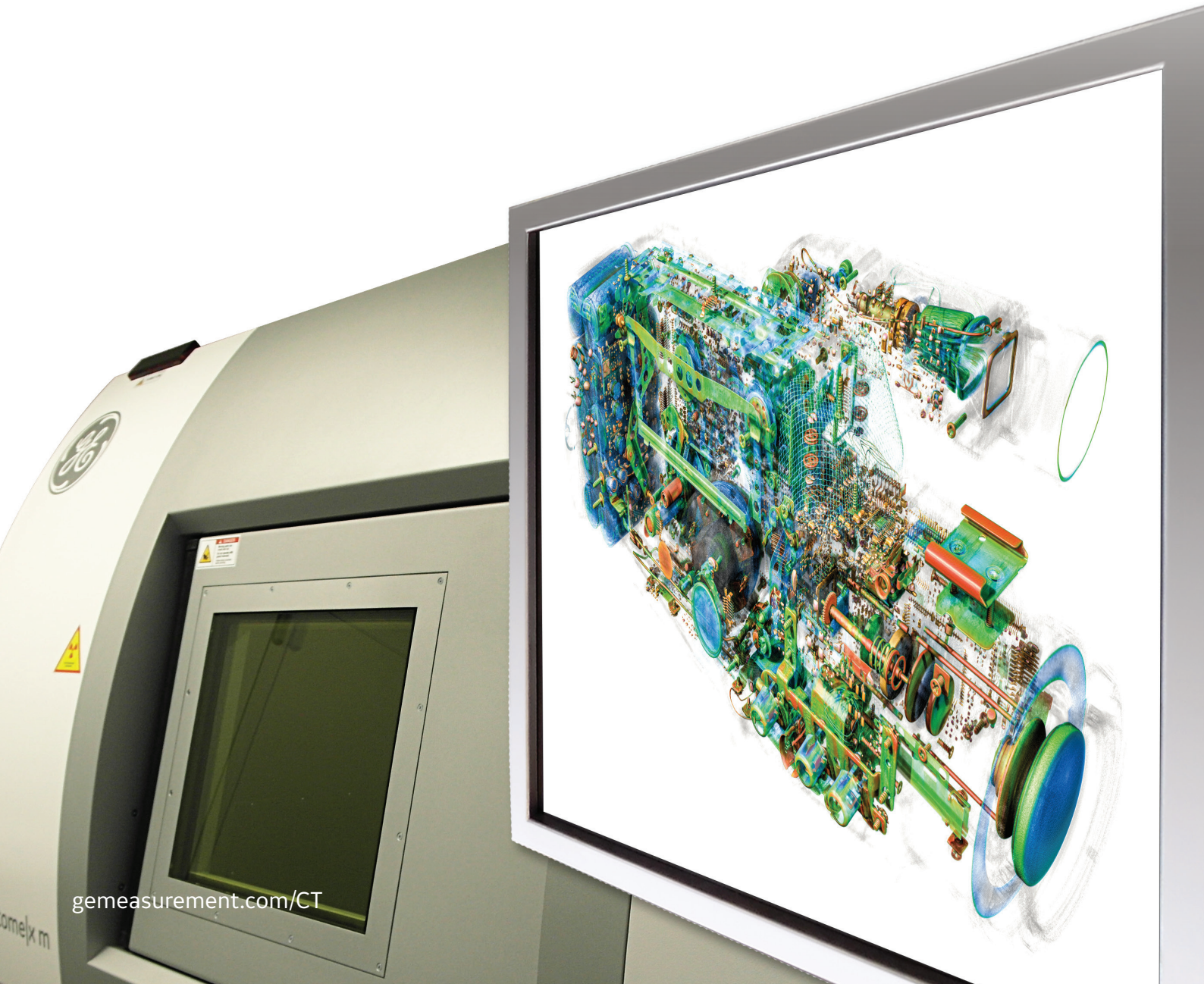




GE
Inspection Technologies

Industrial Computed Tomography Innovations

Premium performance for premium quality and speed.



gmeasurement.com/CT

omejx m

Premium CT technologies. Faster than ever before.

Every industrial CT user wants reproducible 3D product information, and everyone wants that information as fast and as accurate as possible.

At GE, we are making that dream a reality by leveraging our proprietary innovations to create premium CT solutions that reduce overall inspection times from hours to just minutes—all without compromising the quality of the results.

So you can meet your specific inspection needs while boosting your productivity and your efficiency.



Proprietary innovation



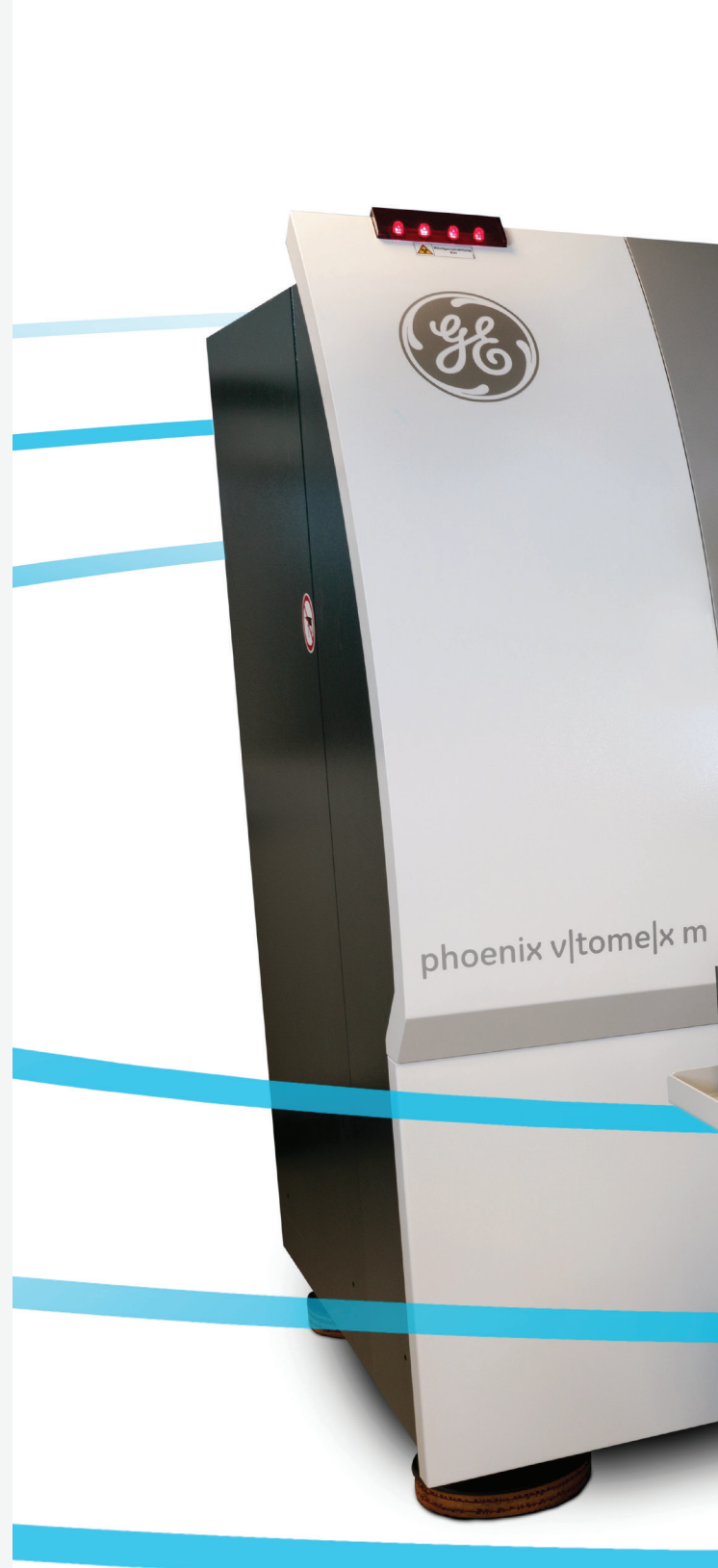
Fully automated workflows



Lower operational costs



More precise inspections



The revolutionary phoenix v|tome|x m combines a unique bundle of proprietary GE innovations to dramatically increase inspection throughput and quality.



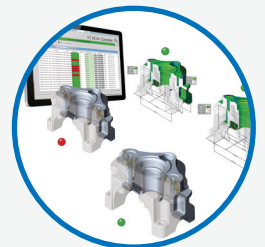
scatter|correct



dynamic 41 digital
detector



high-flux|target



3D speed|ADR



production|edition
collaborative robot

Find the right machine for your industrial CT needs.

We offer a variety of products with several optional features to meet your 3D metrology or failure analysis needs.

🎯 x|plore precision CT line

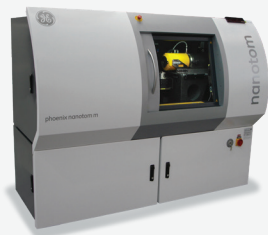
Inspect with greater speed and precision than ever before with our x|plore precision CT line, the most powerful X-ray microfocus CT systems for NDT and 3D metrology and analysis.

⚙️ x|plore production CT line

With our x|plore production CT line, you can increase scanning speed without compromising image quality and bring 3D inspection right to the production floor.

Research and Development

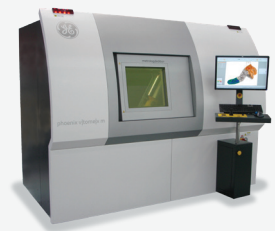
Quality and



nanotom m 180

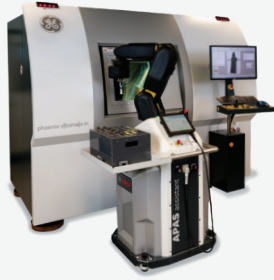


v|tome|x L 300 | 450



v|tome|x m 300

Application	Composites, plastics, electronics, bio, geo, metrology	AM, castings, composites, bio, geo, metrology		AM, castings, composites, electronics, metrology
Advantages	high resolution nanoCT®	Maximum flexibility		Versatile premium precision
Max. CT scan size (h x Ø)	250 x 240 mm Ø	600 x 900 mm Ø	1000 x 1300 mm	400 x 420 mm Ø
Max. Sample weight kg / lbs	3 kg / 6.6 lbs	50 kg / 110 lbs	100 kg / 220 lbs	50 kg / 110 lbs
Max. Detail detectability	0.2 µm			< 1 µm / 0.2 µm nanoCT®



v|tome|x m 300



v|tome|x c



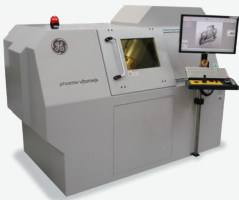
speed|scan CT64

Automate to accelerate

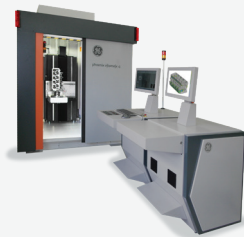
These high-volume production systems can come with optional automated robot loading. Paired with other optional features, it can bring your scan time down to just 45 seconds.

Metrology

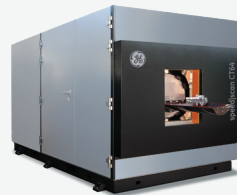
Parts and Manufacturing



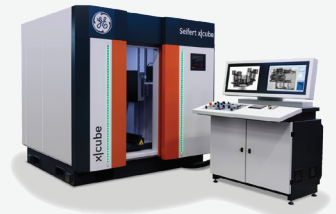
v|tome|x s 240



v|tome|x c



speed|scan CT 64



x|cube 160 | 320

Composites, plastics, AM, small castings	Large castings, AM, composites, metrology	Large castings, composites, drilling cores	AM + castings 2D inspection	
Price / performance ratio	Powerful, highly automated	Highest throughput	Highly automated, opt. CT	
420 x 400 mm Ø	500 x 1000 mm Ø	888 x 500 mm Ø		
10 kg / 22 lbs	50 kg / 110 lbs	50 kg / 110 lbs	100 kg / 220 lbs	300 kg / 660 lbs
< 1 µm / 0.2 µm nanoCT®	≥ 100 µm	≥ 300 µm		

Unmistakable precision. Unprecedented speed.

State-of-the-art fan beam CT scans take hours. Our proprietary scatter|correct, dynamic 41 digital detector, and high-flux|target reduce scanning time to just 1.5 minutes.

scatter|correct

Reduce scan time from 60 minutes to just 6 with artifact-free precision.

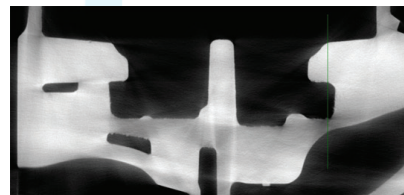
For decades, scanning took hours because applying extremely slow fan beam CT was the only way to reduce scatter radiation without reducing quality. But now, with GE's patented scatter|correct technology, you can scan large sample batches much faster—without compromising quality. This unique functionality combines the low-artifact, high precision performance of fan beam CT with the increased speed of cone beam CT to improve the precision of failure analysis and 3D metrology inspection tasks with up to 100 times higher throughput.



Conventional fan beam CT
2 hrs. scan time



scatter|correct optimized
9 min. scan time



Conventional cone beam CT
9 min. scan time

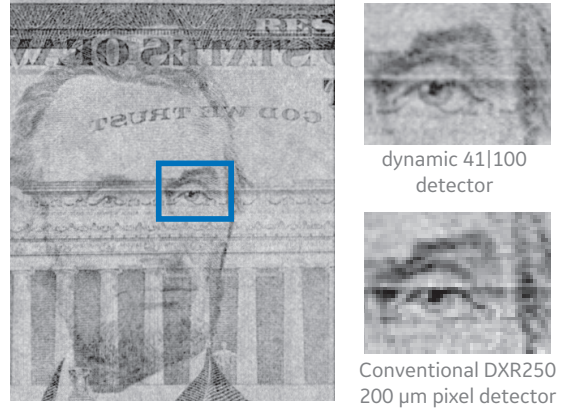
scatter|correct
(Saves 54 mins)

Average scan time with convent

dynamic 41 digital detector

Reduce scan time from 6 minutes to 3 with increased detector sensitivity.

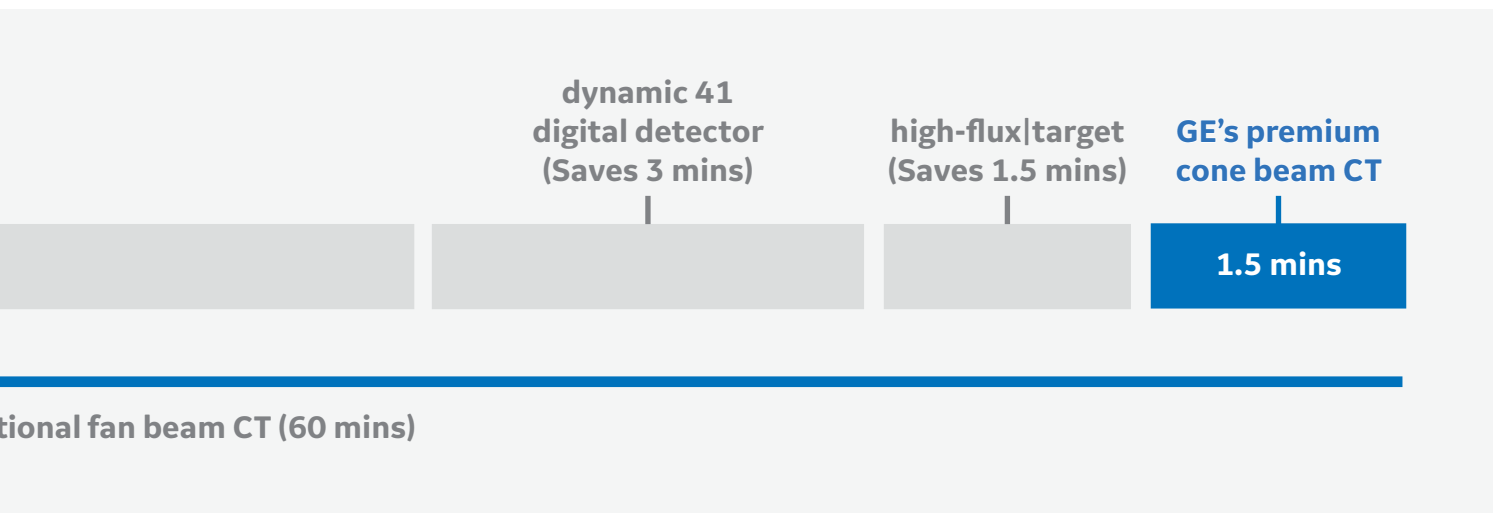
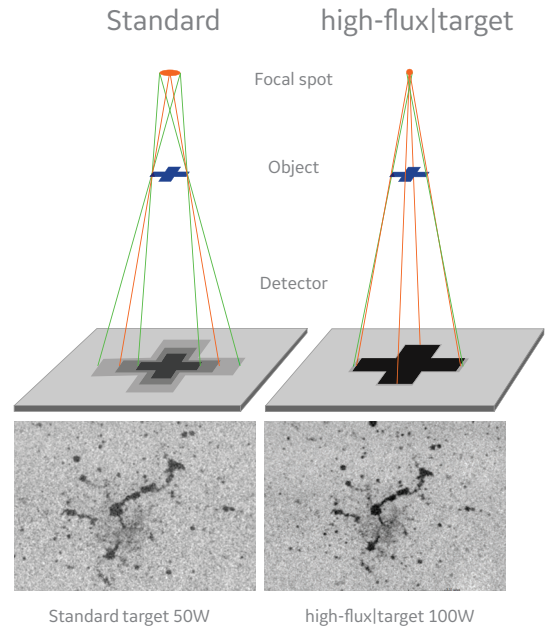
The dynamic 41|100 and 41|200 detectors are the first in GE's next-generation industrial X-ray flat panel detector platform. They combine increased detector sensitivity, faster frame rates, a larger imaging area, and adaptive imaging modes to help make 2D radiographic and 3D CT inspections more efficient and productive.



high-flux|target

Reduce scan time yet again to just 1.5 minutes with doubled CT speed or resolution.

Throughput-optimized, high-power CT scans once required larger focal spots to prevent the target material from melting. But a larger focal spot meant lower image sharpness—and precision. GE's high-flux|target, with optimized thermal conductivity, allows for higher power on a smaller focal spot for up to 2 times throughput at the same high resolution. It provides better CT quality with less image noise to improve speed or accuracy.



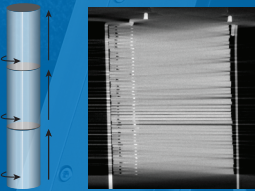
Continuing the innovation.

Our latest innovations help you get the most out of your CT systems by enabling you to scan larger parts with even greater speed and accuracy.

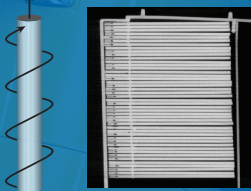
helix|CT

Scan longer parts faster, and with better quality. This acquisition technique reduces artifacts observed in Feldkamp reconstructions, enabling better results on horizontal surfaces and preventing stitching artifacts at the same high magnification. Helical sample rotation scans capture the upper and lower sections of a sample to provide a clearer image, eliminating the need to combine the results of several partial scans and stitch them together afterwards.

Circular Scan -
Feldkamp artifacts

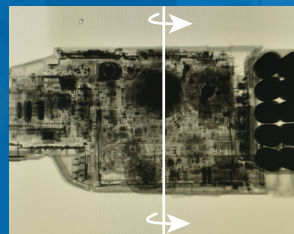


Helical Scan -
high independent quality

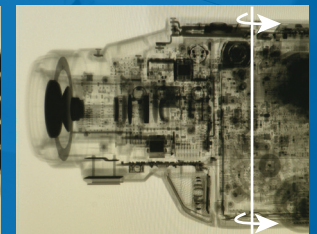


offset|CT

Scan larger parts more accurately. Until now, compact CT systems with larger 16" detectors, like the v|tome|x m and v|tome|x c HS, were not able to scan parts that exceeded a certain diameter. But with the new offset|scan, these compact CT systems have smaller footprints and can scan bigger parts than ever before, or the same size parts with higher resolution.



Conventional mid rotation CT scan: Sample is too large even for a 16" detector



offset|CT scan: Sample can be scanned even with much higher resolution

ruby|plate & true|position

Improve inspection methodology and accuracy with true|position calibration workflow and ruby|plate calibration phantom. These features work together to allow users to quickly and easily determine the system's geometry at any point, ensuring the ability to automatically correct any deviations and maintain conformance with VDI 2630 measurements. This means faster setup times for CT scans with higher measurement accuracy.

Customized CT solutions.

	nanotom m	v tome x s	v tome x m	v tome x c	v tome x L
Production			speed ADR collaborative robot	speed ADR quick-pick manipulator	
3D Metrology	temp. stabilized cabinet direct measuring system easy calib calibration object	easy calib calibration object	temp. stabilized cabinet direct measuring system ruby plate true position VDI 2630	temp. stabilized cabinet direct measuring system easy calib calibration object VDI 2630	temp. stabilized cabinet direct measuring system easy calib calibration object
Premium	tensile stage temperature stage	high-flux target offset CT helix CT	dynamic41 100 scatter correct high-flux target metrology edition	dynamic41 100 scatter correct offset CT	dynamic41 100 scatter correct high-flux target
Advanced	diamond target helix CT	dual tube: + 180 kV high-power nanofocus tube 16" DXR250 detector	dual tube: + 180 kV high-power nanofocus tube offset CT helix CT	dynamic41 200 helix CT	dual tube: + 180 kV hp nano-focus tube or + 300 kV micro- focus tube
Basic	180 kV nanofocus tube	8" DXR250RT detector single microfocus tube	dynamic 41 200 detector single microfocus tube	LDA line detector	dynamic 41 200 detector single 300 kV microfocus tube or 450 kV minifocus tube

 x|plore production CT line

 x|plore precision CT line



Automation meets accuracy.

The future is now, and it's fast. Our industrial CT portfolio provides the ease of use, repeatability, and reproducibility you need to reduce waste caused by defects and ensure productivity and control. With these highly automated systems, scan time is reduced to just 45 seconds.

quick|pick manipulator

This optional manipulator for automated blade inspection allows fully automated CT evaluation of large batches with the phoenix v|tome|x c HS. It offers industry-leading sample size, flexibility, and maximum penetration power for high-absorbing samples.

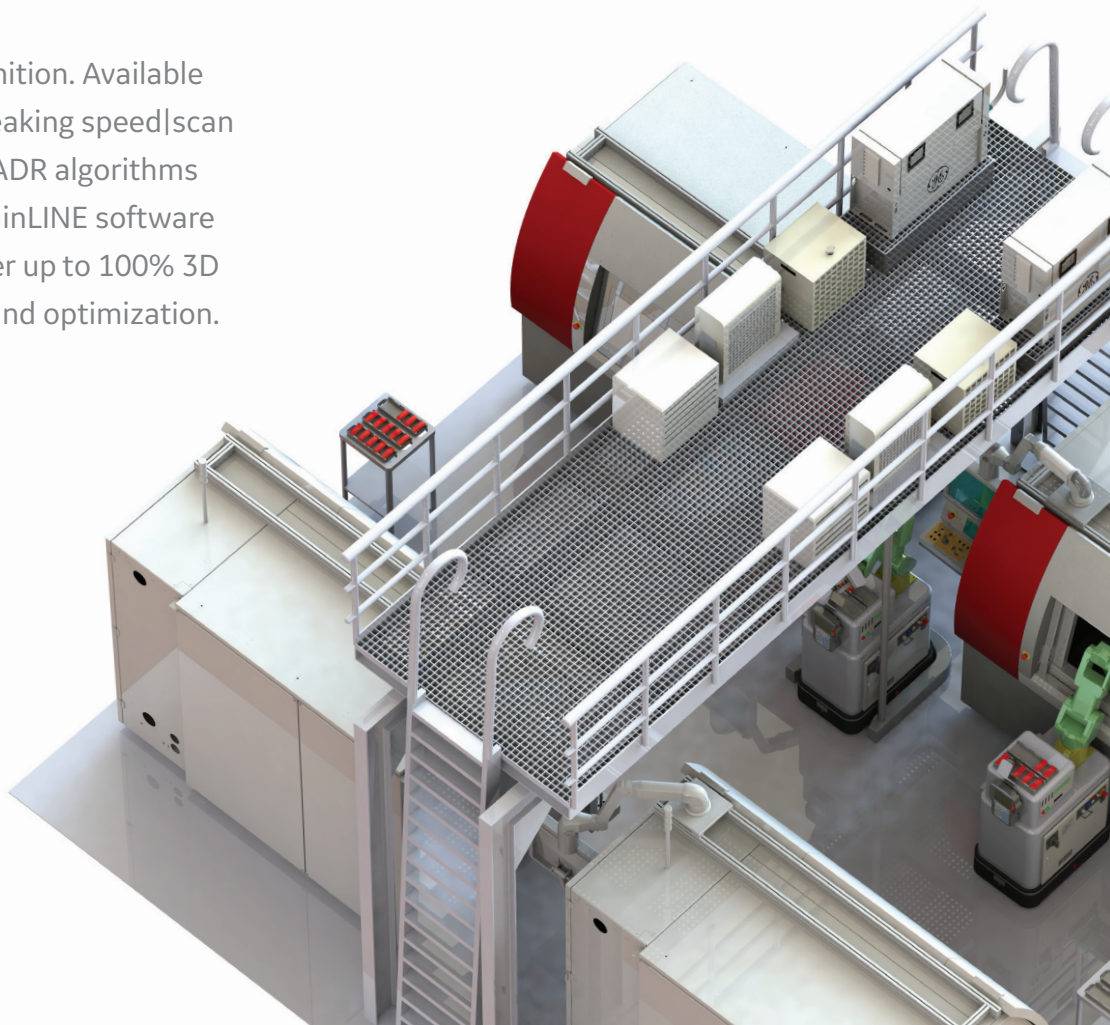
production|edition collaborative robot

An optional collaborative robot make the phoenix v|tome|x scanners an efficient 3D inspection tool—offering fully automated high-throughput CT inspection.

3D speed|ADR

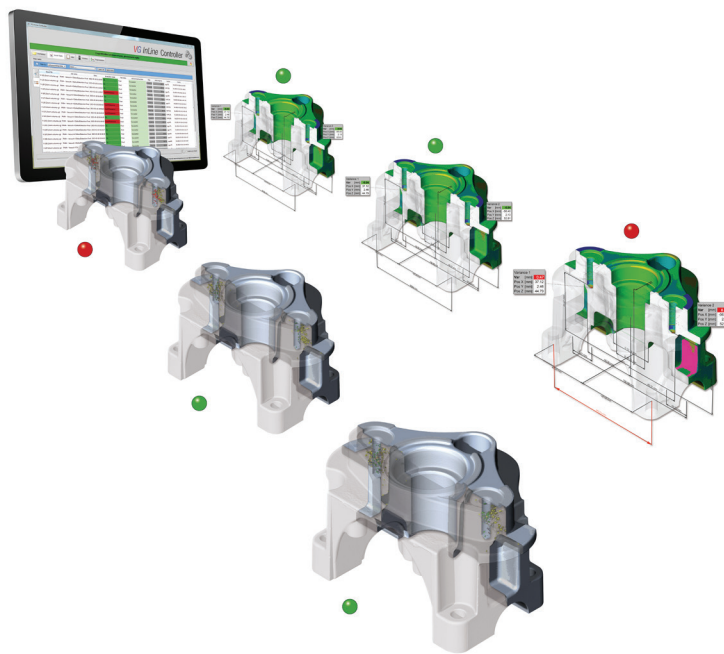
For automated defect recognition. Available exclusively for the groundbreaking speed|scan CT 64, GE's powerful speed|ADR algorithms combine with the leading VGinLINE software by Volume Graphics to deliver up to 100% 3D production process control and optimization.

Now, one operator can run multiple CT systems at the same time, with little training—reducing time spent by up to 5 times.



Revolutionizing digital inspection.

GE's innovative x|plore CT line is designed to increase throughputs without compromising quality. From producing higher resolution scans at higher speeds with our x|plore precision CT line, to bringing inspection to the production floor with our x|plore production CT line, we are committed to helping your operation become more efficient than ever before.



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