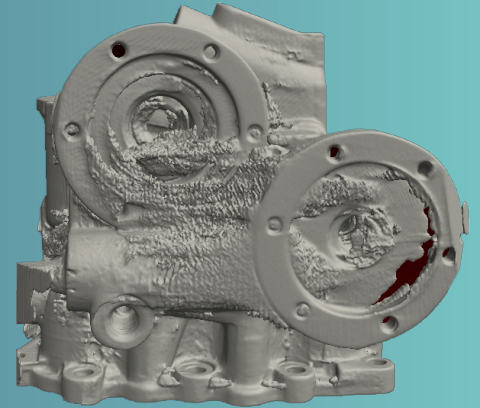


WITH VAREX

**GREAT IMAGES WITH
VAREX MICROFOCUS
IMAGING CHAIN**



WITHOUT VAREX

OVERVIEW

Are you developing a 2D or 3D X-ray inspection system? Looking for fast time to market and ease of integration? This Microfocus Subsystem offers a matched and optimized imaging chain for exactly this purpose - with the high reliability and performance you know and trust from Varex Industrial.

The Microfocus Subsystem combines a proprietary image correction library with a fully characterized 180kV microfocus source and choice of digital detector. For the initial release, Varex has characterized the 1512N, 1616DXT, and the XRD 4343CT digital detectors to work optimally with the Closed Microfocus Source and image correction software. However, characterization and incorporation of any Varex Industrial detector within the subsystem is possible. Central to the Subsystem is Varex Cone Beam Software Toolkit (CST) enhancing the capabilities of the microfocus source and detector. The toolkit provides ready-to-use corrections based on a standard configuration, panel specific corrections for lag and resolution enhancement and system specific corrections for scatter, beam hardening and system geometry.

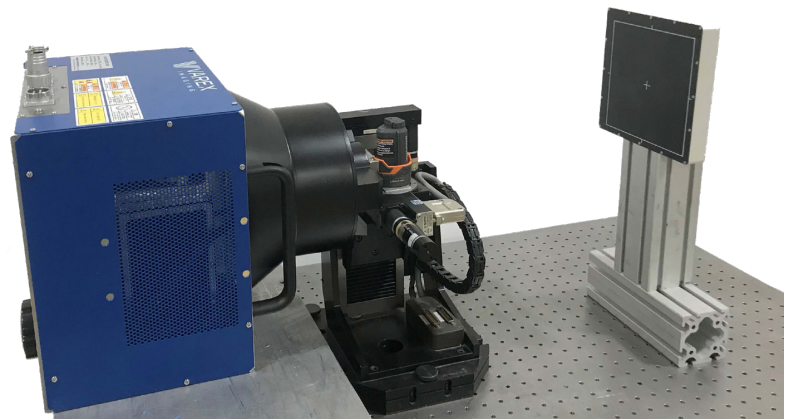
From one source and easy to integrate - the Varex Industrial components create a Microfocus Subsystem optimized to industrial users' needs: high performance, reliability, and best cost of ownership. Interested? Discuss your options with any of Varex's highly qualified and experienced sales and engineering personnel.

FEATURES AND BENEFITS

- Easy to integrate 180kV Closed Microfocus Source
- High resolution detectors to meet spatial resolution requirements and large format detectors to allow for large magnification or large FOV requirements.
- Optimized software for each panel and source
- Pre-determined image corrections quickly enable high-fidelity imaging whether it is 2D or 3D

APPLICATIONS¹

- Electronics Inspection
- Battery Inspection
- Small Castings and Additive -Manufacturing
- Component Inspection



¹ System manufacturers are responsible for qualifying and validating their products for their intended uses and meeting all applicable regulatory requirements.

CST SOFTWARE TOOLKIT

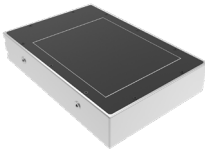
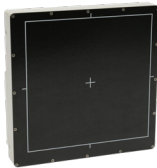
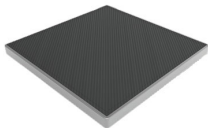
Lag	Corrects for detector image lag
Resolution Enhancement Algorithm (REA)	Removes the scintillator light spread function based on the measured MTF of the detector
Scatter Correction	2D and 3D VSharp™ remove the scattered X-rays from the acquired image increasing contrast thus improving overall image quality.
Beam Hardening	By characterizing the Microfocus' Source X-ray spectrum and knowing the object material, beam hardening artifacts are removed leading to more uniform CT numbers and increased image fidelity.



180 KV MICROFOCUS X-RAY TUBE

Tube Voltage (kV)	40-180
Tube Current (μA)	10-500
Maximum Power (W)	90
Focal Spot @90W (μm)	200
Focal Spot @4W (μm)	20
Cone Angle	60°
Window	Beryllium 0.5 mm
Focal spot location to exit window (mm)	19.8



	1512N	1616DXT	4343CT
Specification/Detector			
Technology	CMOS	a-Si	a-Si
Active Area (cm)	14.5 x 11.5	16.3 x 16.3	43 x 43
Energy Range (kV)	12-225	40-150	20-225
Pixel Size (μm)	74.8	127	150
Active Matrix Size	1944 x 1536	1280 x 1280	2880 x 2880
Maximum Frame Rate (fps @ 1x1 binning, full Field of View)	26 CameraLink	2.4 GigE	15 Frame Grabber w/optical Data Transfer

Smaller and larger detectors are available based on imaging requirements for field of view. The detectors above are matched to the approximate maximum scannable part size for CT in offset mode.

Varex Imaging Corporation

USA

HEADQUARTERS
Salt Lake City, UT
P: +1-801-972-5000

For a complete listing of our global offices,
visit www.vareximaging.com

©2021 Varex Imaging Corporation. All Rights reserved. Production of any of the material contained herein in any format or media without the express written permission of Varex Imaging Corporation is prohibited.