

# NX411.5LW RADIOSCOPIC INSPECTION SYSTEM



National X-Ray Corp. continuously researches and integrates the latest technology in X-ray image detection systems to produce high performance inspection systems that match the specific needs of the customer application. Easily integrated into the Non-Destructive lab, or implemented directly on the production floor, this ergonomic, simple to operate and highly capable X-ray System yields immediate results. Along with the NXC 'IMPS III' series of image processors and equipped with other optional control software packages, this fully configurable system fulfills the requirements of today's SPC/Inspection demands. Digital panels, Digital line arrays and Digital image intensifier systems, along with a wide variety of x-ray systems and manipulator sub-systems, make this system the ideal Non-Destructive Testing system.

## Features

- ◆ Basic system includes advanced analog or digital image intensifier systems coupled to high resolution, no-burn camera modules
- ◆ Ultra-compact overall design minimizes floor-space requirements
- ◆ X-Ray energies ranging from 80kV to 225kV depending on application needs
- ◆ Wide dynamic operating range
- ◆ Large loading door for fast, simple test part loading
- ◆ Heavy Duty four-axis test part manipulator eliminates most test part repositioning
- ◆ Basic system requires only standard electrical supply
- ◆ Wide range of optional sub-systems available that include Gulmay & Comet
- ◆ Advanced Image Processing "IMPS III"
- ◆ Image archiving, LAN ready, internet mail compatible, printing ready
- ◆ Digital imaging (film-less) in various formats (a-Si Panels, CMOS detectors, Linear Detectors)
- ◆ American Designed, Build and parts readily available from local vendors

# NX411.5LW System Specifications

## Application Range

- Penetration of up to 6" of Al, or 1.5" Fe (160kV)
- Test Sample weights up to 20 lbs
- Sample sizes up to 12" x 12" x 18"H
- ASTM E-155, MIL standards & others

## Inspection Enclosure

The NX411.5LW x-ray system is manufactured in compliance with all federal, state and local radiation safety regulations (CFR 1020.40). A sliding part-loading door and a tool-accessed maintenance door are provided for ease of use and are fully safety interlocked. When opened, either or both door actions disable x-ray production. The part-loading door contains a lead-glass (Pb) window to allow the operator to view the interior of the enclosure during inspection routines.

## Dimensional Data (approximate):

- Enclosure only: 38"W x 34"D x 72"H (w/out I.I Housing)
- Parts Access Window: 13"W x 25"H
- Maintenance Access Door: 25" W x 25" H
- Control Console:
  - Single bay: 24" W x 27" D x 74" H
  - Optional - Double Bay: 46" W x 27" D x 74" H
  - Writing Surface: Add 19" depth
- Approximate Weight of entire system: 3,500 lbs

## Manipulator

4-Axis type including:

- X-Axis: +/- 6" (12" Ttl)
- Y-Axis: 18"
- Z-Axis: 20"
- Rotation: 360° CW/CCW
- Capacity: 20 lbs

## Control Console

The control console contains all necessary components for system control:

- Microprocessor-based X-ray Controller
- Operator Interface for Imaging and Manipulation
- Writing Surface
- Single Bay (As Shown) or Dual bay
- System Control Electronics

## X-ray System

- 160kV or 225kV conventional or micro-focus - depending on App.
- System Shown: Kevex® 125kV Micro-Focus X-Ray System

*National X-Ray Corp. reserves the right to change products specifications without prior notice, as part of an ongoing production improvement program.*

National X-Ray Corp.  
4181 Tanners Creek Drive  
Flowery Branch, GA 30542  
PH: 678.960-0080  
FAX: 678.960-0080

E-mail: [info@nationalx-ray.com](mailto:info@nationalx-ray.com)

Web: [www.nationalx-ray.com](http://www.nationalx-ray.com)



## Imaging System

The imaging system is matched to your particular application requirements and could include:

- Digital or Analog Image Intensifiers
- Digital Panel Technology (a-Si, CMOS, etc.)
- Direct View Digital Systems
- Linear Detector Technology

## Options

- Image Processing and/or System Control Module
- Full SPC Database Capability
- Image Archiving
- PC Network Capability
- X/Y Image Intensifier X/Y Shutters
- Tubehead Shutter
- Laser Alignment
- Interior Viewing CCTV Camera

## Utilities

- 230 VAC ±10%, 60 Hz, 40A, 4-Wire (L1, L2, Neutral, Ground)



The interior of the NX411.5LW Manipulator System as seen from the Maintenance access door.

Distributor:

**National  
X-Ray Corp.  
Products &  
Services**

**STANDARD  
CABINET SYSTEMS**

**CUSTOM SYSTEMS  
DIGITAL**

**X-RAY IMAGE  
DETECTORS**

**CONSTANT  
POTENTIAL X-RAY  
SYSTEMS**

**STANDARD  
CABINET SYSTEMS**

**MICRO-FOCUS  
X-RAY SOURCES**

**WELD INSPECTION  
SYSTEMS**

**IMAGE  
PROCESSING &  
SYSTEM CONTROL  
SOLUTIONS**

**COMPUTED  
FILMLESS  
RADIOGRAPHY  
SYSTEMS**

**COMPLETE  
NATIONWIDE  
FIELD & FACTORY  
LEVEL SERVICE**