

The Leaders in Portable X-Ray Systems

Nautilus NDT DR System

The first Diver-deployed
Subsea Digital Radiography system



Diver-Held Digital Radiography System for Subsea Inspection

- Complete, turn-key System
- Ultra-portable, fully battery operated
- Instant, High-resolution images
- High dose-sensitive Detector → improved penetration
- Maximum working depth: ~300 ft (100 meters)
- Controlled via tablet from above or below water
- Contains Safe, collimated and shielded X-Ray device

Subsea Pipeline with Concrete Weight Coat

System Overview

Tablet under water:



Tablet above water:

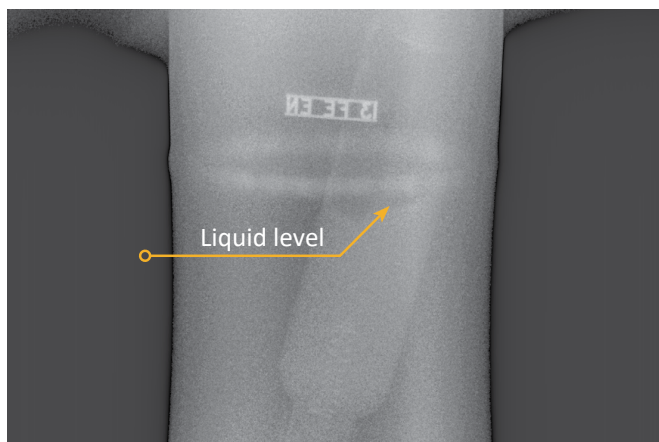


Component	Quantity	Weight in air	Buoyancy in seawater	Buoyancy in freshwater
Detector Housing	1	27.7 lbs. (12.6kg)**	14 lbs. NEG (6.4kg)**	14.4 lbs. NEG (6.5kg)**
Controller & X-Ray Housing	1	45 lbs. (20.4kg)	11.4 lbs. NEG (5.1kg)	12.2 lbs. NEG (5.5kg)
Tablet Under Water	1	14.7 lbs. (6.7kg)	2.4 lbs. NEG (1.1kg)	2.7 lbs. NEG (1.2kg)

* All values are approximate (cables not included) and are subject to change

** All values refer to the NOVO 15WNH Detector

X-Ray



4.5" Pipe, 6mmx2 Wall thickness, behind 20cm of water



8" Pipe, 2mmx2 Wall thickness, Contact (minimum water)

Components

Detector Options

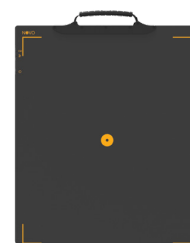
- High Dose-sensitivity - Lower Exposure times, higher penetration
- Internally shielded - long life span
- Low internal scattering - higher image quality



NOVO 12SFNH
2.6 lbs. (1.2kg)



NOVO 15WNH
5.3 lbs. (2.4kg)



NOVO 22WNH
9.4 lbs. (4.3kg)

Detector Model	NOVO 12SFNH	NOVO 15WNH	NOVO 22WNH
Detector Imaging Area	6.75" x 10.1" (17.2cm x 25.8cm)	9.1" x 11.2" (23.1cm x 28.4cm)	14.0" x 16.8" (35.6cm x 42.7cm)
Active Area (Imaging Area / Detector Size)	80% Active Area	74% Active Area	85% Active Area
Detector Weight (Including Battery)	2.6 lbs. (1.2kg)	5.3 lbs. (2.4kg)	9.4 lbs. (4.3kg)
Detector Load Proof	440 lbs. (200kg)	660 lbs. (300kg)	660 lbs. (300kg)
Detector Drop Test	31.5" (80cm)	20" (50cm)	20" (50cm)
Detector Thickness	0.6" (15mm)	0.6" (15.6mm)	0.6" (15.6mm)
Bit Depth	16 bit latest generation		
Life Span	Over 100K rem*		

* over 100k Rem of direct exposure on the Detector

Components

Rugged Android Tablet

- 8" Screen
- 1000 NIT Ultra Brightness Display
- NOVO Touch Android Software
- 6+ hours of Operation
- Customized buttons for underwater operation



NOVO Touch Software

All-in-one proprietary software developed in-house, offering a wide range of tools & features while providing the best user experience and functionality.

-  **The Genie Enhancement Feature** - Allows taking a single image, enhancing both easy and hard to penetrate areas on the same image, with just one touch!
Improved version - 4 times faster!
- DICONDE Support
- Easy Reporting
- Visual Database
- Measurements & Annotations
- Touch Interface (above water) - Navigation Buttons for underwater
- 1600% Zoom

Technology Partner - Sexton

Sexton's experienced team of engineers creates custom underwater products for a variety of industries worldwide, through every stage of development, building, and testing.



Patented: US 12,078,602 B1

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