

K/22697

OCT 5 2012

**510(k) Summary**

**510(k) Submitter:**

JOB Corporation  
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Postal code 222-0033, Japan  
Tel: 81-45-473-0113  
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Date Prepared: August 16, 2012  
Contact: Hiroya Obana, Senior Manager

**Trade/Proprietary name:** PORTA 100HF

**Common/usual name:** Portable general purpose diagnostic X-ray unit

**Classification name:** Mobile X-ray system, Product Code IZL

**Equivalent Legally Marketed Device:**

This product is similar in function to the Mikasa X-Ray Co., LTD.'s MinXray HF100H+ (K052721.)

**Intended Use:**

PORTA 100HF is intended for use by a qualified/trained physician or technician on both adult and pediatric subjects for taking diagnostic X-rays.

**Description of the Device:**

PORTA 100HF is an X-ray unit which operates from AC100-120V/15A or AC200-240V/10A. The device consists of the control panel with the kV and mAs selectors (a rotary switch system) and display for radiographic operations, and the APR switch with 8 memory settings (kV/mAs) to store the exposure data. The device also consists of the X-ray tube, the collimator, power code, and the hand switch, comprising the mono-tank type of a portable X-ray unit. The unit utilizes a high frequency inverter designed to be mounted on a stand. The device can be used with conventional X-ray film or digital imaging media. The usual safety precautions regarding X-rays must be observed by the operator.

**Nonclinical Tests for a Determination of Substantial Equivalence:**

PORTA 100HF has been tested for electrical safety and electromagnetic compatibility (IEC 60601-1-2, CISPR11, IEC 60601-2-7, IEC 60601-2-54, IEC 60601-1-3, IEC 60601-2-28, and IEC 60601-1:2005.) The device also complies with Underwriters Laboratories Standards for Safety (UL2601-1.) The software validation and verification testing was also performed. The results of nonclinical testing indicate that the PORTA 100HF is as safe and effective as the predicate device.

**Substantial Equivalence Chart:**

<b>Characteristics</b>	<b>(Mikasa X-Ray Co., LTD.) MinXray HF 100H+ (K052721)</b>	<b>(JOB Corporation) PORTA 100HF</b>
<b>Intended Use</b>	Intended use by a qualified/technician on both adult and pediatric subjects for taking diagnostic X-rays	Same
<b>Physical Characteristics</b>		
<b>Size/weight</b>	406mmx222mmx241mm 18.6Kgs	160mmx161mmx291mm 9.2Kgs
<b>Energy Source (Input Voltage)</b>	AC100-140V or AC200-260V	AC100-120V/15A or AC200-240V/10A
<b>Mounting Method</b>	Unit is usually mounted to MinXray XGS MKIII portable stand	Unit is mounted to a commercially available portable stand
<b>Technical Characteristics</b>		
<b>User Interface</b>	Up-down pushbuttons for kVp selections and exposure time selections with LED indicators and mAs indicators	Up and down Rotary switch for kV and mAs value with 7 segment LED
<b>Exposure times</b>	0.03-2.00 sec. 0.01 increments	0.01-2.50 second 32 steps
<b>Exposure switch</b>	Dual-stage deadman type	Dual stage, deadman type with curled cable.
<b>Controls</b>	Software based	Software based
<b>Construction</b>	Monobloc HF generator, Medical full bridge inverter system	Monobloc HF generator, Medical full bridge inverter system
<b>High Voltage Adjustment</b>	High frequency (60kHz) inverter	High frequency inverter
<b>Line Voltage Adjustment</b>	Automatic, dynamic	Automatic, dynamic
<b>Tube Potential (kV)</b>	40-100kV (2kVstep)	40-100kV (2kV step).
<b>kV step</b>	31(2kV-step)	31(2kV-step)
<b>Tube current</b>	30mA (40-60kV) 25mA (62-80kV) 20mA (82-100kV)	30mA (40-66kV) 20mA (68kV-100kV)
<b>X-ray tube</b>	Toshiba D-124S	Toshiba D-124
<b>Anode heat Storage</b>	20,000HU	20,000HU
<b>Focal Spot Size</b>	1.2mm	1.2mm
<b>mAs</b>	0.6-120mAs	0.3mAs-50mAs
<b>Total Filtration</b>	3.2mm AL equivalent	2.5mm AL. eq. at 100kV

<b>Collimator</b>	Continuously adjustable (30 sec.) light beam type with central X-ray indicator	Complete with 30 sec. timer and cross indication line.
<b>Source to Skin Distance (SSD)</b>	300mm	216mm
<b>KvP</b>	100KvP	100KvP
<b>Performance Standard</b>	21CFR 1020.30 UL 2601	21CFR 1020.30 UL 2601-1
<b>Electrical Safety</b>	IEC 60601-1 IEC 60601-1-2	IEC 60601-1:2005 IEC 60601-1-3 IEC 60601-2-28 IEC 60601-1-2 CISPR11 IEC 60601-2-7 IEC 60601-2-54
<b>X-ray Radiography</b>	Conventional X-ray film or digital imaging media	Conventional X-ray film or digital imaging media

**Conclusion:**

The PORTA 100HF is intended for the same indications for use as the predicate device and the results of the nonclinical testing demonstrate that the PORTA 100HF is as safe and effective as the predicate device. It is the conclusion of JOB Corporation that the PORTA 100HF is as safe and effective as the predicate device and has few technological differences, thus rendering it substantially equivalent to the predicate device.



Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Room – WO66-G609  
Silver Spring, MD 20993-0002

JOB Corporation  
% Mr. Takahiro Haruyama  
President  
Globizz Corporation  
1411 West 190<sup>th</sup> Street, Suite 120  
GARDENA CA 90248

OCT 5 2012

Re: K122697  
Trade/Device Name: PORTA 100HF  
Regulation Number: 21 CFR 892.1750  
Regulation Name: Computed tomography x-ray system  
Regulatory Class: II  
Product Code: IZL  
Dated: August 27, 2012  
Received: September 4, 2012

Dear Mr. Haruyama:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into class II (Special Controls), it may be subject to such additional controls. Existing major regulations affecting your device can be found in Title 21, Code of Federal Regulations (CFR), Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Parts 801 and 809); medical device reporting (reporting of

medical device-related adverse events) (21 CFR 803); and good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820). This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Parts 801 and 809), please contact the Office of *In Vitro* Diagnostic Device Evaluation and Safety at (301) 796-5450. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely Yours,



Janine M. Morris  
Director  
Division of Radiological Health  
Office of In Vitro Diagnostics  
and Radiological Health  
Center for Devices and Radiological Health

Enclosure

## Indications for Use Form

510(k) Number (if known): \_\_\_\_\_

Device Name: PORTA 100HF

Indications for Use:

PORTA 100HF is intended for use by a qualified/trained physician or technician on both adult and pediatric subjects for taking diagnostic X-rays.

Prescription Use   x   AND/OR Over-The-Counter Use \_\_\_\_\_  
(Part 21 CFR 801 Subpart D) (21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER  
PAGE OF NEEDED)

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Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)



Division Sign-Off  
Office of In Vitro Diagnostic Device  
Evaluation and Safety

510(k) K122697

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